

Characteristics of Emerging Growth Companies and Their Audit Firms
as of November 15, 2018¹

Kelly Poy
Office of Economic and Risk Analysis
Public Company Accounting Oversight Board

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

Patrick Kastein
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 and their audit firms. 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 Joon-Suk Lee (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 other PCAOB staff.

SUMMARY

This white paper provides general information about certain characteristics of emerging growth companies ("EGCs") and the registered public accounting firms ("firms") that audit them. The information is derived from the most recent available U.S. Securities and Exchange Commission ("SEC") filings and data from third-party vendors through this white paper's measurement date of November 15, 2018.

The white paper includes the following key observations as of November 15, 2018:

- There were 1,855 companies that self-identified as EGCs and filed audited financial statements with the SEC, including an audit report signed by a firm in the 18 months preceding the measurement date.
- There were 909 EGCs (or 49%) with common equity securities listed on a U.S. national securities exchange ("exchange-listed"). These EGCs represented 19% of the 4,699 exchange-listed companies and approximately 1% of total market capitalization of exchange-listed companies.
- 664 EGCs (or 36%) reported no revenue or self-identified as shell companies in periodic filings, or both.
- The audit reports for the EGCs in this white paper were issued by 255 registered audit firms headquartered in 32 countries including the United States.
- 219 firms (or 86%) audited both EGC and non-EGC issuer clients while 36 firms (or 14%) did not audit issuers other than EGCs.
- Almost 80% of the firms that audited EGCs have been registered with the PCAOB for 10 years or more.
- Among the 1,134 EGCs providing management reports on ICFR, 489 (or 43%) reported at least one material weakness.
- Non-listed EGCs received an audit report with a going concern paragraph at a significantly higher rate (69%) than exchange-listed EGCs (16%).

CONTENTS

I. BACKGROUND & METHODOLOGY	4
BACKGROUND	4
METHODOLOGY	5
II. NOVEMBER 2018 EGC POPULATION.....	9
III. CHARACTERISTICS OF EGCS	11
PERIODIC REPORTING	11
MARKET CAPITALIZATION	12
INDUSTRY	12
ASSETS AND REVENUE	14
IV. SHELL COMPANIES AND LIMITED OPERATIONS AMONG EGCS.....	15
V. CHARACTERISTICS OF PUBLIC ACCOUNTING FIRMS THAT AUDIT EGCS	16
VI. ICFR AND AUDIT RELATED INFORMATION.....	19
<i>INTERNAL CONTROL OVER FINANCIAL REPORTING.....</i>	19
<i>GOING CONCERN PARAGRAPHS IN AUDIT REPORTS OF EGCS.....</i>	19
<i>AUDITOR TENURE.....</i>	21
<i>AUDIT FEES.....</i>	22
APPENDIX A: COMPARISON OF KEY ASPECTS OF THE METHODOLOGIES USED FOR THE NOVEMBER 15, 2017 WHITE PAPER AND NOVEMBER 15, 2018 WHITE PAPER.	23
APPENDIX B: CHARACTERISTICS OF EGCS	24
APPENDIX C: CHARACTERISTICS OF FIRMS THAT AUDIT EGCS	27

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.² 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.³ 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 and the firms that audit their financial statements to inform the analysis contained in PCAOB rulemaking releases regarding the impact of applying new standards to the audits of EGCs. In an expansion from previous versions, this white paper includes additional information about firms that audit EGCs.

Unless the context requires otherwise, references in this white paper to “the measurement date” mean the most recent measurement date, November 15, 2018. PCAOB staff anticipates updating the white paper annually, as audited financial statements are typically filed on an annual cycle. The analysis presented in future white papers will be based on the most recent data available as of a November 15 measurement date.

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 limit 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”).⁴ The annual revenue limit was initially set at

² 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.

³ 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 of the issuer (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.

⁴ See Section 3(a)(80) of the Securities Exchange Act of 1934 (“Exchange Act”) and Section 101(d) of the JOBS Act.

\$1.0 billion and is required to be indexed for inflation every five years to reflect the change in the Consumer Price Index. Effective April 12, 2017, the limit was adjusted to \$1.07 billion.⁵ EGC data as of any measurement date reflects the revenue limit in effect on that date.

A company retains its EGC status until the earliest of:

- (i) the last day of the fiscal year during which it had total annual gross revenues that equal or exceed the revenue limit;⁶
- (ii) the date on which it 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);⁷
- (iii) the date on which it has, during the previous 3-year period issued more than \$1 billion in non-convertible debt; or
- (iv) the last day of the fiscal year following the fifth anniversary of the date of the first sale of common equity securities pursuant to an effective registration statement under the Securities Act of 1933.

We refer to criteria (i), (ii) and (iii) above as "EGC eligibility limits" and criterion (iv) as the "five-year cut-off."

Methodology

The objective of the methodology for this white paper is to capture the population of self-identified EGCs actively filing audited financial statements with the SEC as of the measurement date.

We identified companies that filed Exchange Act annual reports and registration statements (e.g., Forms 10-K, 20-F, 40-F, etc.), and Securities Act registration statements (e.g., forms S-1, S-3, etc.) with the SEC in the 18 months preceding the measurement date. In instances where a company had more than one filing during the period, the most recent annual report was selected. If no annual report was filed in the period, the most recent registration statement was selected.

We reviewed these filings to determine whether the company identified itself as an EGC. We first reviewed the cover page of the forms to determine whether the company checked the box identifying that it was an EGC. If the box was not checked, or if the company used an older version of the form (with no check box for EGC status), we conducted a keyword search of the form to determine whether the company disclosed that it was an EGC.⁸ This process resulted in the initial population of EGCs as of the measurement date.

⁵ See SEC Release 33-10332, *Inflation Adjustments and Other Technical Amendments Under Titles I and III of the JOBS Act* (Mar. 31, 2017).

⁶ \$1 billion or more in annual revenues prior to April 12, 2017, or \$1.07 billion or more in annual revenues thereafter.

⁷ See Exchange Act Rule 12b-2, 17 CFR 240.12b-2.

⁸ We used keyword searches to identify phrases such as "emerging growth company" or "EGC" to determine whether the company self-identified as an EGC. Companies that used phrases such as "... we are no longer an emerging growth company" or "... we no longer qualify as an emerging growth company" were not considered EGCs.

We excluded from the initial population:

- a. Companies whose annual reports and registration statements did not include an audit report signed by a firm in the 18 months preceding the measurement date (i.e., companies whose filings included unaudited financial statements or audit reports signed more than 18 months before the measurement date);
- b. Companies that, as of the most recent measurement date, had (i) terminated their Exchange Act registration, (ii) had their Exchange Act registration revoked, or (iii) withdrawn their Exchange Act registration statement before effectiveness, and, in each case, did not subsequently file audited financial statements with the SEC; and
- c. Companies that no longer qualify as EGCs due to (i) reporting \$1 billion or more in annual revenues prior to April 12, 2017, or \$1.07 billion or more in annual revenues thereafter; (ii) identifying themselves in a periodic filing as a “large accelerated filer;” (iii) issuing more than \$1 billion in non-convertible debt during the three years ended as of the most recent fiscal year end prior to the measurement date; or (iv) meeting the five-year cut-off.⁹

Financial information and filer status are obtained from commercial vendors and derived from the most recent annual financial statements filed with the SEC prior to the measurement date. The commercial vendor data is supplemented with manually collected data from SEC filings, when necessary. Information on the registered audit firms is obtained from Form 2 and Form AP filed with the PCAOB.

Limitations of the Methodology

Self-identification data may understate or overstate the population of EGCs if companies fail to self-identify or self-identify erroneously. In addition, the population will be overstated if there are companies that no longer qualify as EGCs but are not excluded from the population (for example, because of a lack of known information about exceeding an EGC eligibility limit). Accordingly, the actual 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.

⁹ The five-year cut-off is derived by (i) identifying the last day of the company’s fiscal year and (ii) estimating the date of its first sale of common equity securities under an effective registration statement. Because data on the date of the first such sale is not readily available, we 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 after the company first self-identified as an EGC. Use of these proxies may understate the population of EGCs presented in this white paper if the first sale of common equity securities does not occur during the same fiscal year as the proxy event.

Differences in the Methodology Compared to Previous White Papers

This white paper reflects a change in methodology to identify the initial population of companies that self-identified as an EGC as of the measurement date. Specifically, we are using the check box on the cover page of Securities Act and Exchange Act forms described above to identify the initial population of EGCs as of the measurement date.¹⁰

The prior methodology was based on a one-time disclosure of EGC status in the body of an SEC filing. Under the prior methodology, the population at each measurement date (after the first measurement) was comprised of self-identified EGCs from prior measurement dates plus new companies added as they self-identified in the current period. Companies remained in this cumulative EGC population until they exceeded one of the EGC eligibility limits, the five-year cut-off, or terminated their registration with the SEC.

The check box on the SEC forms provides an ongoing affirmation (as well as the initial identification) of a company's EGC status. This makes it an appropriate starting point to identify companies that notify the SEC and the public that they are EGCs on or before the measurement date. Appendix A provides a summary of key differences between the methodology for this white paper and the methodology used to identify the EGC population in the November 15, 2017 white paper. Given the changes made to the methodology in this white paper, we are unable to make comparisons to certain information presented in previous white papers.

Analysis as of Measurement Date

For the current measurement date, we identified 1,855 companies that filed audited annual financial statements with the SEC in the 18 months prior to November 15, 2018 and self-identified as EGCs.

In various cross sectional analyses in this white paper, the population of EGCs 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" EGCs)¹¹ and those that do not ("non-listed" EGCs).¹²

To compare the exchange-listed EGC population with the broader public equity market, the white paper also presents a benchmark derived from commercial vendor data on other exchange-listed companies (Table B.1 of Appendix B). The benchmark population is limited to

¹⁰ See SEC Release 33-10332, for a description of the modifications to the cover page of specific SEC forms.

¹¹ Exchange-listed company information as of the measurement date is 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 November 15, 2018, EGCs 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 American.

¹² Non-listed EGCs include companies whose securities are traded over-the-counter or have no public market.

exchange-listed companies that are not registered investment companies or EGCs and have filed audited financial statements with the SEC, including an audit report signed by a firm in the 18 months preceding the measurement date.¹³ From a total population of 4,699 exchange-listed companies, the 909 exchange-listed EGCs are excluded to allow for comparison of companies that are EGCs to those that are not. Using this methodology, we identified 3,790 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 EGCs and non-listed EGCs.

The white paper does not present a similar benchmark population or data on market capitalization for non-listed EGCs. 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 EGCs.

The remainder of this white paper is organized as follows: Section II provides a brief reconciliation between the EGC populations in the November 2017 and November 2018 white papers. Sections III and IV provide characteristics of EGCs. Section V provides characteristics of the audit firms that issued audit reports on EGCs. Section VI includes information related to internal control over financial reporting ("ICFR") and audit related information of EGCs. Appendix A highlights the key differences in the methodology used in the November 15, 2017 white paper and the November 15, 2018 white paper. Appendix B provides additional information about the population of EGCs. Appendix C provides additional information about the firms that audit EGCs.

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.

¹³ 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), Qs. 20 and 21.

II. NOVEMBER 2018 EGC POPULATION

We identified 1,855 EGCs using the methodology described in Section I. Table 1 provides a reconciliation between the population of EGCs in the white paper on Characteristics of Emerging Growth Companies as of November 15, 2017 and the most recent measurement date.

Table 1: Comparison of the November 2018 EGC population to November 2017 population

EGC Filers at November 15, 2017 (previous methodology)¹⁴	1,946
- Annual filing but did not self-identify ¹⁵	(338)
- Terminated SEC Registration	(97)
- No annual SEC filing in the past 18 months	(142)
- Exceeded EGC eligibility limits or five-year cut-off ¹⁶	(75)
Continue to self-identify as of November 15, 2018	1,294
+ Newly Identified EGCs	561
# EGCs at November 15, 2018	1,855

Changes in the populations of EGCs are affected by EGCs entering the population and EGCs leaving the population and the change to the methodology described in Section I. As seen in Table 1, approximately two-thirds (1,294) of the 1,946 EGC filers as of November 15, 2017 continued to self-identify as EGCs as of the measurement date for this white paper.

In addition to the companies that continued to self-identify as EGCs, there were 561 newly identified EGCs. The majority of these EGCs were identified through disclosures in Securities Act registration statements (357), Exchange Act registration statements (49) and Exchange Act periodic reports (95).¹⁷ In addition, approximately ten percent (or 60 EGCs) were due to the change in methodology (see #4 and #5 in Appendix A for additional information).

As seen in Table 2, we identified 909 exchange-listed EGCs and 946 non-listed EGCs as of the measurement date. The exchange-listed EGCs had a combined market capitalization

¹⁴ “EGC Filers” was a term used in previous white papers that referred to companies that self-identified as EGCs in at least one SEC filing since 2012 and had filed audited financial statements with the SEC in the 18 months preceding the measurement date. This term is no longer used as companies with no audited financials in the 18 months preceding the measurement date are excluded from the population.

¹⁵ The 338 companies that did not self-identify as EGCs included both companies using the updated form that did not check the box for EGC status and companies still using the old forms with no check box for EGC status that did not disclose they are EGCs.

¹⁶ The 75 companies that exceeded EGC eligibility limits or five-year cut-off comprised 63 large accelerated filers, 11 companies that reported more than \$1.07 billion in revenue and 1 company that met the five-year cut-off.

¹⁷ The EGCs identified through disclosures in registration statements (Securities Act or Exchange Act) include companies that subsequently filed periodic reports, and companies that filed periodic reports before they self-identified in a registration statement. As a result the number of EGCs that self-identified in a registration statement (406) is larger than the number of EGCs that have not yet filed periodic reports (259) in Table 3.

of approximately \$567 billion. Of the 909 exchange-listed EGCs, 232 were new to the population.

Table 2: Market capitalization of exchange-listed companies

	Companies	Market Cap (\$B)
Non-Listed EGCs	946	n/a
Exchange-Listed EGCs	909	567.4
Other Exchange-Listed Companies	3,790	38,081.3

Source: Standard & Poor's

III. CHARACTERISTICS OF EGCS

Periodic Reporting

The population of EGCs 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 Table 3, as of November 15, 2018, approximately 86% of the 1,855 EGCs have filed periodic reports. The remaining 14% (or 259) have filed audited financial statements in registration statements but have not yet filed periodic reports. Table 3 covers the full filing history of EGCs. Unless stated otherwise, “# companies” in all other tables refers to EGCs that filed a periodic report with audited financial statements, including an audit report signed by a firm in the 18 months preceding the measurement date. As a result the “# companies” in other tables may not agree with Table 3.

Table 3: First year of periodic reporting as of November 15, 2018

	Year of First Periodic Reporting	Number of EGCs	%
	2018	312	
	2017	267	
	2016	206	
	2015	242	
	2014	233	
	2013	123	
	2012	50	
	2012 or later	1,433	77%
	2011 or prior	163	9%
EGCs that have filed periodic reports		1,596	86%
EGCs that have not yet filed periodic reports		259	14%
Total EGCs		1,855	100%

Source: Audit Analytics and Strategic Insight

Market Capitalization

There are 909 exchange-listed EGCs (49% of the total population) and they had a combined market capitalization of \$567 billion as of the measurement date. Market capitalization for individual companies ranged from \$3 million to \$11.8 billion. As shown in Table 4, almost 80% of the exchange-listed EGCs have a market capitalization greater than \$75 million.

Table 4: Market capitalization

Category	EGCs	Max Market Cap (\$M)	Min Market Cap (\$M)	Average Market Cap (\$M)	Median Market Cap (\$M)	Total Market Cap (\$B)
\$700M or more ¹⁸	215 (24%)	11,805	705	1,911	1,274	410.94
\$75M to less than \$700M	488 (54%)	694	77	305	266	148.81
Less than \$75M	206 (23%)	75	3	37	37	7.66
EGCs with market capitalization	909 (100%)					567.41
EGCs without market capitalization	946					

Source: Standard & Poor's

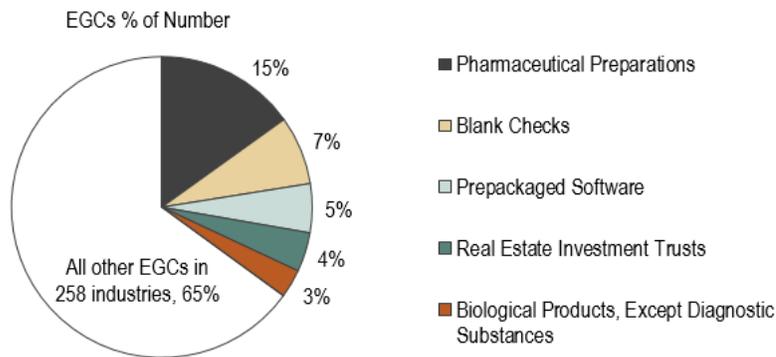
Industry

EGCs operate in 263 industries based on Standard Industrial Classification ("SIC") codes in SEC filings. Overall, the five most common SIC codes reported by EGCs as of the measurement date are: (i) pharmaceutical preparations; (ii) blank check companies;¹⁹ (iii) prepackaged software; (iv) real estate investment trusts; and (v) biological products, except diagnostic substances. The proportion of EGCs reporting the five most common SIC codes is summarized in Figure 1. Sixty-five percent of EGCs did not report being in these top five industries, including 62% of EGCs that reported other SIC codes and 3% that did not report a SIC code in their SEC filings.

¹⁸ EGCs are grouped by market capitalization and not public float. Market capitalization is calculated by multiplying the closing price as of the measurement date by the total shares outstanding. Public float, used to determine filer status, is the number of shares excluding shares held by company insiders. As a result a company is likely to have a market capitalization greater than its public float.

¹⁹ The classification of "blank check company" requires, among other things, that the company be 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.

Figure 1: Top five industries, by number, reported by EGCs as of the measurement date

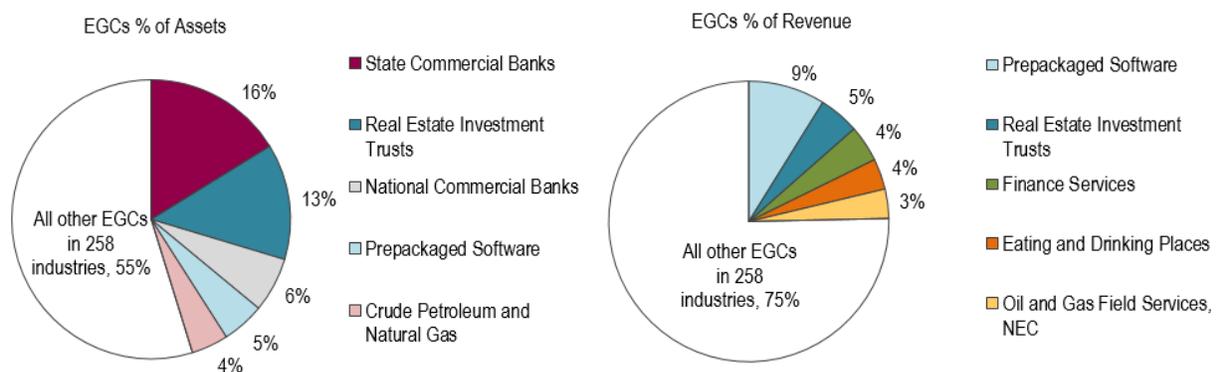


Source: Audit Analytics

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

The five SIC codes with the highest total assets as a percentage of the total assets for the EGC population as of the measurement date are: (i) state commercial banks; (ii) real estate investment trusts; (iii) national commercial banks; (iv) prepackaged software; and (v) crude petroleum and natural gas. Total assets of EGCs reporting these five SIC codes represent approximately 45% of the total assets of EGCs. Figure 2 provides a summary of this information as well as an analogous summary by revenue. See Table B.3 and Table B.4 in Appendix B for more detailed industry data for EGCs, exchange-listed EGCs, non-listed EGCs, and other exchange-listed companies.

Figure 2: Top five industries, by assets and revenue, reported by EGCs as of the measurement date



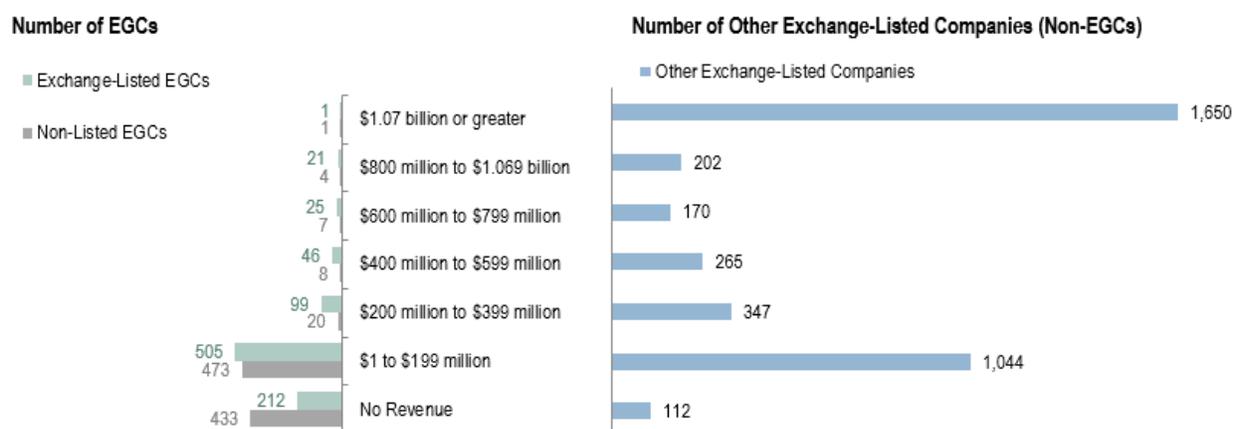
Source: Audit Analytics and Standard & Poor's

Assets and Revenue

The assets reported by EGCs ranged from zero to approximately \$18.7 billion. The average assets were approximately \$330 million, while the median was \$39.5 million.

The annual revenue reported by EGCs ranged from no revenue to approximately \$1.2 billion. The average revenue was approximately \$81 million, while the median was \$1.9 million. The distribution of revenue among EGCs and exchange-listed companies is shown in Figure 3.

Figure 3: Distribution of revenue reported by EGCs and exchange-listed companies



Source: Standard & Poor's

Additional information summarizing the distribution of revenue and assets reported by EGCs, exchange-listed EGCs, non-listed EGCs, and other exchange-listed companies is presented in Table B.5 and Table B.6 in Appendix B.

IV. SHELL COMPANIES AND LIMITED OPERATIONS AMONG EGCs

A total of 660 EGCs reported no revenue, self-identified as shell companies in periodic filings, or both.²⁰ Table 5 and Table 6 show that these two attributes are less common among exchange-listed EGCs as compared to non-listed EGCs. The tables also show that these attributes are even less common among other exchange-listed companies.

Table 5 below presents data on the proportion of companies that reported no 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 5: Reporting of no revenue

	(1) All EGCs	(2) Non-listed EGCs	(3) Exchange- Listed EGCs	(4) Other Exchange- Listed (Non-EGCs)
# companies	1,855	946	909	3,790
# reporting no revenue	645	433	212	112
% reporting no revenue	35%	45%	23%	3%

Source: Audit Analytics

Table 6 presents shell company disclosure by companies that have filed periodic reports, some of which also reported no revenue.

Table 6: Shell company disclosure in periodic reports

	(1) All EGCs	(2) Non-listed EGCs	(3) Exchange- Listed EGCs	(4) Other Exchange- Listed (Non-EGCs)
Total # companies that filed periodic reports	1,592	737	855	3,784
# with shell company disclosure in periodic reports	180	126	54	2
% with shell company disclosure in periodic reports	11%	17%	6%	0%

Source: Audit Analytics

²⁰ 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.

V. CHARACTERISTICS OF PUBLIC ACCOUNTING FIRMS THAT AUDIT EGCs

This section provides summary information about the firms that audited the financial statements of the 1,855 EGCs as of the measurement date. As shown in Table 7, the audit reports for the EGCs in this white paper were issued by 255 firms, of which 219 performed audits for both EGC and non-EGC issuers while 36 performed audits only for EGC issuers during the measurement period. These 36 firms audited only 3% of the EGC population.

Table 7: Firms that audit only EGC issuers and firms that audit both EGCs and non-EGC issuers (during current measurement period)

Firm Category	Firms	% of Firms	EGCs	% of EGCs
Audits EGC Issuers Only	36	14%	60	3%
Audits EGC and Non-EGC Issuers	219	86%	1,795	97%
Total	255	100%	1,855	100%

Source: Audit Analytics

These firms have headquarters in 32 jurisdictions. More than 60% (159) of the firms that audit EGCs were headquartered in the United States. Table 8 displays the jurisdictions where four or more firms that audit EGCs are headquartered and the market capitalization of their exchange-listed EGC audit clients. Of the firms based outside the United States, China-based firms audit EGCs with the largest aggregate market capitalization. The five firms headquartered in China issued audit reports for 45 exchange-listed EGCs that had a combined market capitalization of approximately \$39.3 billion. See Table C.1 in Appendix C for a list of all jurisdictions where the headquarters of the firms that audit EGCs are located.

Table 8: Jurisdictions of firms that audit EGCs

Jurisdiction	Firms	All EGCs	Exchange-Listed EGCs	Market Capitalization of Exchange-Listed EGCs (\$ Millions)
United States	159	1,551	736	434,340
Canada	19	82	33	25,881
Israel	7	43	28	3,648
United Kingdom	6	17	14	17,310
China	5	53	45	39,344
Australia	5	11	3	119
India	5	8	3	1,297
Hong Kong	4	15	2	173
All other countries	45	75	45	45,299
Total	255	1,855	909	567,412

Source: PCAOB Form 2, Audit Analytics and Standard & Poor's

The majority of firms that audit EGCs have been registered with the PCAOB for more than 10 years, as shown in Table 9.

Table 9: Number of years firms have been registered with the PCAOB

Years Registered with the PCAOB	# Firms	% of Firms
Less than 4 years	23	9%
At least 4 years and less than 7 years	13	5%
At least 7 years and less than 10 years	19	7%
10 or more years	200	78%
Total Firms	255	100%

Source: PCAOB Form 1

As shown in Table 10, 224 of the firms that audited EGCs have been inspected by the PCAOB at least once and 31 firms have not been inspected as of the measurement date. All 31 are subject to inspections at least once every three years, and 9 firms which perform audits of 47 EGCs, are headquartered in jurisdictions where the PCAOB is currently denied access to conduct inspections.²¹

Table 10: PCAOB Inspections

PCAOB Inspections	All EGC Auditors	Audits EGCs Only	Audits EGCs and Non-EGCs
Not yet Inspected	31	11	20
Previously Inspected	224	25	199
Total Firms	255	36	219

Source: PCAOB and Audit Analytics

Forms AP were filed with the PCAOB for 1,646 audits of EGCs as of the measurement date.²² As shown in Table 11, firms that filed 207 of the Forms AP identified that at least one other accounting firm participated in the firm's audit of the EGC. The number of other accounting firms participating in the firm's audit ranged from one to nine. Firms disclosed in 66 Forms AP that other accounting firms participating in the firm's audit accounted for at least 20% of the total audit hours.²³

²¹ More information on the non-U.S. jurisdictions where the PCAOB is denied access to conduct inspections and the issuers (EGC and non-EGC) that are clients of PCAOB-registered firms in these jurisdictions can be found at <https://pcaobus.org/International/Inspections/Pages/IssuerClientsWithoutAccess.aspx>

²² Firms are required to file Form AP and disclose, among other things, if one or more other accounting firms participated in the firm's audit. More information on PCAOB Rule 3211 and Form AP can be found at <https://pcaobus.org/Rules/Pages/Rule-3210-3211.aspx>.

²³ Firms may disclose on Form AP the percentage of total audit hours of the other accounting firm participants as a single measure or within a range. In instances where a firm disclosed total audit hours as a range (e.g. 5% to less than 10% of total audit hours), the lower end of the range is presented in Table 11.

Table 11: Disclosure of Other Independent Accounting Firm in Forms AP

Indicated Other Audit Participant	EGCs	
Yes		207
20% or More of Total Audit Hours	66	
Less than 20% of Total Audit Hours	141	
No		1,439
Total EGCs Filing Form AP		1,646

Source: PCAOB Form AP

VI. ICFR AND AUDIT RELATED INFORMATION

This section includes information related to internal control over financial reporting and the most recent audits of the EGCs.

Internal Control over Financial Reporting

Management of SEC reporting companies, including EGCs, is generally required to report on the effectiveness of internal control over financial reporting starting with the second annual report filed by the company.²⁴ Among the 1,855 EGCs, 1,592 (86%) filed a periodic report, and 1,134 (61%) provided a management report on ICFR in their most recent annual filing. Of those companies that provided a management report on ICFR, approximately 43% reported at least one material weakness. Non-listed EGCs reported material weaknesses at higher rates (67%) than exchange-listed EGCs (16%). Table 12 shows that other exchange-listed companies reported material weaknesses at even lower rates (7%) than the exchange-listed EGCs.

Table 12: Material weakness in ICFR

	(1) All EGCs	(2) Non-Listed EGCs	(3) Exchange-Listed EGCs	(4) Other Exchange-Listed (Non-EGCs)
# companies	1,592	737	855	3,784
# with management reports on ICFR	1,134	602	532	3,721
# with material weakness reported by management	489	406	83	259
% of ICFR reports with material weakness	43%	67%	16%	7%

Source: Audit Analytics

While auditor attestation on the effectiveness of ICFR is not required for EGCs, 23 EGCs, or 1% of EGCs, voluntarily provided an audit report on ICFR. None of the audit reports on ICFR disclosed material weaknesses. Among the 23 EGCs:

- 17 were exchange listed,
- 11 were audited by firms required to be inspected on an annual basis by the PCAOB.

Going Concern Paragraphs in Audit Reports of EGCs

The most recent audit report of 655 EGCs included an explanatory paragraph expressing substantial doubt about the company's ability to continue as a going concern ("going concern paragraph"). As shown in Table 13, non-listed EGCs received an audit report with a going concern paragraph at a substantially higher rate (69%) than exchange-listed EGCs (16%). In addition, EGCs received an audit report with a going concern paragraph (41%) at a substantially higher rate than other exchange-listed companies (4%).

²⁴ 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.

Table 13: Rate of going concern paragraphs

	(1) All EGCs	(2) Non-Listed EGCs	(3) Exchange- Listed EGCs	(4) Other Exchange- Listed (Non-EGCs)
# companies	1,592	737	855	3,784
# with going concern paragraphs	655	514	141	134
% with going concern paragraphs	41%	70%	16%	4%

Source: Audit Analytics

The data in Table 14 shows that 51% of the EGCs with going concern paragraphs in their audit report reported no revenue. Only 24% of other exchange-listed companies with going concern paragraphs reported no revenue.

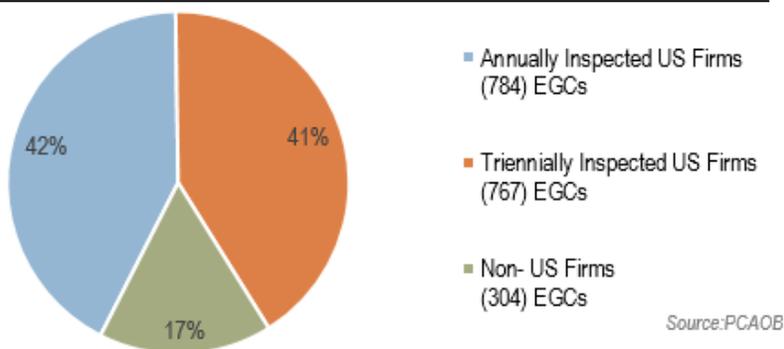
Table 14: Going concern paragraphs and revenue information

	(1) All EGCs	(2) Non-Listed EGCs	(3) Exchange- Listed EGCs	(4) Other Exchange- Listed (Non-EGCs)
# with no revenue with going concern paragraphs	337 (51%)	275 (54%)	62 (44%)	32 (24%)
# with revenue >0 with going concern paragraphs	318 (49%)	239 (46%)	79 (56%)	102 (76%)
# of companies with going concern paragraphs	655 (100%)	514 (100%)	141 (100%)	134 (100%)

Source: Audit Analytics

As seen in Figure 4, US firms audited 1,551 EGCs, split almost evenly between firms required to be inspected on an annual basis by the PCAOB (784)²⁵ and firms located in the United States that are required to be inspected at least once every three years (767).²⁶ Of the remaining 304 EGCs, audited by non-U.S. firms, 213 are audited by affiliates of annually inspected firms, with only 5% of EGCs audited by other non-US firms.

Figure 4: EGCs audited by annually and triennially inspected firms



Auditor Tenure

Table 15 presents auditor tenure as disclosed in the most recent audit report included in the relevant SEC filings of the EGCs. Sixty-one percent of the EGCs had been with their current auditor for five years or less and 9% of the EGCs had been audited by the same firm for 11 or more years.²⁷

Table 15: Auditor Tenure

Auditor Tenure	# EGCs	%
1 to 5 Years	1,126	61%
6 to 10 Years	311	17%
11 or more Years	169	9%
Disclosed auditor tenure	1,606	87%
Did not disclose auditor tenure	249	13%
Total	1,855	100%

Source: Audit Analytics

²⁵ These are firms that have issued audit reports for more than 100 issuer audit clients in a given year and therefore are required to be inspected annually by the PCAOB.

²⁶ These are firms that have issued audit 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.

²⁷ Under AS 3101, the auditor's relationship with the company, for the purpose of determining auditor tenure, is not affected by the company's status as a public company. As a result, the company's relationship with the auditor may predate its SEC reporting history.

Audit Fees

As seen in Table 16, 1,594 EGCs (86%) disclosed audit fees in an SEC filing.²⁸ Audit fees disclosed by EGCs for their most recent fiscal year end ranged from \$800 to \$6.3 million. The median fees reported by exchange-listed EGCs (\$0.44 million) was significantly greater than the median fees reported by non-listed EGCs (\$0.03 million).

Table 16: Audit Fees (USD)

	(1) All EGCs	(2) Non-listed EGCs	(3) Exchange-Listed EGCs	(4) Other Exchange-Listed (Non-EGCs)
# companies that disclosed audit fees	1,594	716	878	3,775
Median	\$160,000	\$36,610	\$447,577	\$1,422,000
Minimum	\$800	\$800	\$9,724	\$20,000
Maximum	\$6,286,000	\$3,556,000	\$6,286,000	\$95,800,000
Average	\$419,638	\$138,083	\$649,244	\$3,333,269

Source: Audit Analytics

²⁸ Audit fees were included only if they were for the same fiscal year as the most recent audit report. Issuers that had not disclosed audit fees as of the measurement date are excluded.

APPENDIX A: Comparison of key aspects of the methodologies used for the November 15, 2017 White Paper and November 15, 2018 White Paper.

Given the changes made to the methodology in this white paper, we are unable to make comparisons to certain information presented in previous white papers.

	Methodology as of November 15, 2017	Methodology as of November 15, 2018
1	EGCs identified using commercial vendor data.	PCAOB staff reviewed relevant SEC filings for EGC checkbox responses on the cover page, and disclosure of EGC status in the body of the filing.
2	Included companies that self-identified at least once since December 8, 2011 in 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.	Includes companies that self-identified in Securities Act registration statements, Exchange Act registration statements, and Exchange Act annual reports filed with the SEC that included an audit report signed by a firm in the 18 months preceding the measurement date.
3	A company in this cumulative EGC population remained for each measurement date until it ceased to be a SEC registrant or it exceeded one or more of the EGC eligibility criteria or the five-year cut-off. Newly identified EGCs were added to the population.	Population determined as of the measurement date, not cumulatively. Companies that self-identified as an EGC and terminated their SEC registration or exceeded at least one EGC eligibility criteria or the five-year cut-off before the measurement date are excluded from the population.
4	EGCs with audited financials in the 18 months preceding the measurement date were characterized as "EGC Filers" and EGCs with no filings within 18 months were characterized as "Inactive EGCs" and excluded from analysis (but included in the total population of EGCs)	No distinction between "Inactive EGCs" and "EGC Filers." Companies whose annual reports and registration statements did not include an audit report signed by a firm in the 18 months preceding the measurement date are excluded from the population. 27 "Inactive EGCs" from the November 15, 2017 paper are included in the count of "Newly Identified EGCs" in Table 1.
5	Companies that self-identified as EGCs, that sold common equity securities pursuant to an effective registration statement prior to December 8, 2011 are excluded. The five-year cut-off is only applied to the remaining population.	The new methodology includes companies that self-identified as an EGC in a periodic filing or registration statement with audited financial statements, including an audit report signed by a firm in the 18 months preceding the measurement date and have not subsequently exceed any of the EGC eligibility criteria or the five-year cut-off.

APPENDIX B: Characteristics of EGCs

Table B.1: Filer status from periodic reports²⁹

	(1) All EGCs	(2) Non-Listed EGCs	(3) Exchange- Listed EGCs	(4) Other Exchange Listed (Non-EGCs)
Large accelerated filer	0	0	0	2,104
Accelerated filer	327	24	303	959
Non-accelerated filers	1,265	713	552	721
Total companies that filed periodic reports within 18 months of the measurement date	1,592	737	855	3,784
Companies that did not file periodic reports	263	209	54	6
Total companies	1,855	946	909	3,790

Source: Audit Analytics

²⁹ The data on large accelerated filer, accelerated filer, and non-accelerated filer status is derived from periodic reports, 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 B.1 as "non-accelerated filers" are those that filed periodic reports and did not identify themselves as "large accelerated filers" or "accelerated filers."

Table B.2: Top five industries reported by EGCs and exchange-listed companies by number

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

SIC industry description (code)	(1) All EGCs	(2) Non-Listed EGCs	(3) Exchange- Listed EGCs	(4) Other Exchange- Listed (Non-EGCs)
Pharmaceutical Preparations (2834)	281 (15%)	66 (7%)	215 (24%)	209 (6%)
Blank Check Companies (6770)	138 (7%)	81 (9%)	57 (6%)	
Prepackaged Software (7372)	97 (5%)	52 (5%)	45 (5%)	99 (3%)
Real Estate Investment Trusts (6798)	78 (4%)	51 (5%)		184 (5%)
Biological Products, Except Diagnostic Substances (2836)	57 (3%)		49 (5%)	
Management Consulting Services (8742)		29 (3%)		
State Commercial Banks (6022)			39 (4%)	159 (4%)
Crude Petroleum and Natural Gas (1311)				111 (3%)
Total in Top 5 (for each column presented)	651 (35%)	279 (29%)	405 (45%)	762 (20%)
Not in Top 5	1,204 (65%)	667 (71%)	504 (55%)	3,028 (80%)
Total Companies	1,855 (100%)	946 (100%)	909 (100%)	3,790 (100%)

Source: Audit Analytics

Table B.3: Top five industries reported by EGCs 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 EGCs	(2) Non-Listed EGCs	(3) Exchange- Listed EGCs	(4) Other Exchange- Listed (Non-EGCs)
State Commercial Banks (6022)	16%		20%	6%
Real Estate Investment Trusts (6798)	13%	23%	11%	
National Commercial Banks (6021)	6%	5%	7%	17%
Prepackaged Software (7372)	5%	6%	5%	
Crude Petroleum and Natural Gas (1311)	4%	6%		
Commercial Banks, NEC (6029)		8%		21%
Pharmaceutical Preparations (2834)			5%	
Life Insurance (6311)				6%
Security Brokers, Dealers, and Flotation Companies (6211)				4%
Total in Top 5	45%	48%	47%	56%
Not in Top 5	55%	52%	53%	44%
Total Companies	100%	100%	100%	100%

Source: Audit Analytics and Standard & Poor's

Table B.4: Top five industries reported by EGCs 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 EGCs	(2) Non-Listed EGCs	(3) Exchange- Listed EGCs	(4) Other Exchange- Listed (Non-EGCs)
Prepackaged Software (7372)	9%	10%	9%	
Real Estate Investment Trusts (6798)	5%	10%	3%	
Finance Services (6199)	4%		5%	
Eating and Drinking Places (5812)	4%	8%		
Oil and Gas Field Services, NEC (1389)	3%		4%	
Pharmaceutical Preparations (2834)		6%		
Crude Petroleum and Natural Gas (1311)		5%		5%
State Commercial Banks (6022)			3%	
Petroleum Refining (2911)				7%
Motor Vehicles and Passenger Car Bodies (3711)				4%
Telephone Communications, Except Radiotelephone (4813)				4%
Variety Stores (5331)				4%
Total in Top 5	25%	39%	24%	24%
Not in Top 5	75%	61%	76%	76%
Total Companies	100%	100%	100%	100%

Source: Audit Analytics and Standard & Poor's

Table B.5: Reported assets (Millions USD)

	(1) All EGCs	(2) Non-Listed EGCs	(3) Exchange- Listed EGCs	(4) Other Exchange- Listed (Non-EGCs)
Minimum	0.0	0.0	0.0	0.3
Maximum	18,683.6	10,996.0	18,683.6	2,830,228.9
Average	329.5	149.8	507.8	22,485.6
Median	39.5	0.9	137.2	1,651.7

Source: Standard & Poor's

Table B.6: Reported revenue (Millions USD)

	(1) All EGCs	(2) Non-Listed EGCs	(3) Exchange- Listed EGC	(4) Other Exchange- Listed (Non-EGCs)
Minimum	0.0	0.0	0.0	0.0
Maximum	1,250.0	1,250.0	1,106.8	496,785.0
Average	80.8	31.4	129.7	5,797.0
Median	1.9	0.0	33.4	759.5

Source: Standard & Poor's

APPENDIX C: Characteristics of firms that audit EGCs

Table C.1: Count of firms and EGC market capitalization by jurisdiction

Jurisdiction	Firms	All EGCs	#Exchange-Listed EGCs	Market Capitalization of Exchange-Listed EGCs (\$ Millions)
United States	159	1,551	736	434,340
Canada	19	82	33	25,881
Israel	7	43	28	3,648
United Kingdom	6	17	14	17,310
China	5	53	45	39,344
Australia	5	11	3	119
India	5	8	3	1,297
Hong Kong	4	15	2	173
Brazil	3	6	6	12,591
Germany	3	6	5	4,587
Argentina	3	5	4	4,986
Netherlands	3	4	4	5,526
Switzerland	3	3	3	1,228
Taiwan	3	3	2	348
Greece	2	8	3	330
Malaysia	2	6	-	-
Norway	2	4	3	1,884
Denmark	2	4	2	2,807
France	2	3	2	1,291
Belgium	2	3	2	1,064
Singapore	2	3	1	6,442
South Africa	2	2	2	494
Ireland	2	2	2	286
Pakistan	1	3	-	-
Bermuda	1	2	1	61
Nigeria	1	2	-	-
Luxembourg	1	1	1	809
Sweden	1	1	1	314
Japan	1	1	1	252
Turkey	1	1	-	-
Russia	1	1	-	-
Peru	1	1	-	-
Total	255	1,855	909	567,412

Source: PCAOB Form 2 and Standard & Poor's