AUDIT ANALYTICS.

Trends in the European Audit Market

MAY 2019

A Review of the Audit Environment in Europe

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About Audit Analytics

Audit Analytics is an independent research and data provider of audit, regulatory, and disclosure intelligence. Founded in 2003, we offer 70+ unique comprehensive databases of normalized qualitative data, such as financial restatements, internal control assessments, and the textual aspects of disclosures including audit opinions, late filings, and SEC comment letters.

Through an easy-to-use online interface, Audit Analytics enables the accounting, investment, regulatory, and academic communities to analyze auditor market intelligence, public company disclosure trends, and risk indicators.

Audit Analytics is used by over 300 universities around the world for archival research, classroom use, and applied learning.

Audit Analytics Europe

With the addition of our Europe databases, Audit Analytics is looking forward to building out our core offering of audit and company intelligence products.

Similar to our market-leading products built around the United States and Canada data, we monitor disclosures such as audit fees, audit opinions, and auditor changes to provide a comprehensive view of auditor-company relationships and trends.

By the end of 2019, we aim to have historical data for Europe back to 2010, covering audit fees, audit opinions, auditor tenure, auditor changes, and key audit matters for all companies with equity securities listed on a regulated exchange in the EEA and Switzerland.

We track and database EEA auditor transparency reports and the entities disclosed in them – namely, Public Interest Entities (PIEs) – in one comprehensive database.

Our Mission

We believe transparent financial reporting contributes to the healthy functioning of capital markets. Data, when classified and analyzed, increases transparency, enriches debate, and influences decisions.

Our mission is to provide high quality data to corporate gatekeepers and stakeholders. Grounded in a commitment to the accounting profession, our goal is to enable critical decision making with unique, accurate, and organized data.

As a trusted source for research, Audit Analytics is used to simplify complex data, discover trends, and empower professionals around the world.

Looking at Europe and the momentous changes in regulation, we see a tremendous need to compile data from across the continent into one place, normalized for comparability. We aim to support the work done by academics, regulators, and professionals in assessing, monitoring, and evaluating the impact of changes in the audit market across the globe.

Our Value

Our products are used to minimize risk, make informed decisions, perform efficient analysis, and uncover actionable insights. What sets us apart? Our data is specifically extracted, databased, and analyzed by our expert team of researchers.

As an independent research provider, we are customer-focused and build to suit our customer's needs.

We are dedicated to the audit and accounting profession, and that includes the observers and stakeholders surrounding it. We have long been a sponsor of major academic conferences around the world, from AAA to CAAA, ISAR, and EAA. We aim to add to the accounting literature by providing high quality databases for archival research.

Data Collection

With nearly 20 years of experience collecting data related to auditors and financial reporting, Audit Analytics has become the trusted source for a wide variety of professionals and academics. Over 1,000 scholarly articles have either used our data or cited our research, and we work with the leading global professional firms and regulators to support their risk management, compliance, and business development teams.

Audit Analytics Europe provides auditor and audit-related information on companies with equity securities listed on a European exchange (including Switzerland), and – in a more limited way – for all EEA Public Interest Entities. Our core offerings include:

Audit Fees	Auditor Changes
Audit Opinions	Auditor Engagements

Key Audit Matters Transparency Reports

The information in these databases comes from three sources:

- 1. Annual Reports (and their equivalents, such as a Document de Référence in France)
- 2. Auditor Transparency Reports
- 3. Press Releases and other company-issued filings (such as shareholder meeting documents)

Collecting this European data is rather complex, as there is no single source of standardized reporting forms on which we can base our data collection process.

In the United States there is EDGAR, and Canada has SEDAR. Those central repositories allow us to automate queues and processes in significant ways in order to streamline research workflows and – crucially – ensure comprehensive coverage. But we do not have a similar source for all EEA + Swiss exchange-listed companies.

There are three fundamental aspects to the Europe Product that make up the backbone and foundation of the entire project, namely Entities, Annual Reports and other filings, and Auditors.

For Entities, we monitor exchange composition and new listings at least quarterly, with special attention to more than 40 large, mid, and small-cap indexes that we track across all the regulated exchanges in EEA Member States. We have processes and procedures to efficiently collect and database all annual reports, so that company audit fees, opinions, and key audit matters are available in our database usually within days of the annual report's release.

We monitor hundreds of auditor websites for transparency report disclosures, databasing, and uploading the reports so that they are all available in one place.

Highlights of Audit Analytics Europe

- 45,000+ Audit Fee records from 8,000+ companies
- 43,000+ Audit Opinion records from 8,500+ companies
- 2,500 Auditor Change records from 2,000+ companies
- 22,000 Key Audit Matter records from 4,000 companies
- 150,000+ Transparency Report records from 41,000+ entities and 1,000+ audit firms

About this Report

In this report, we provide a series of vignettes about the audit market across Europe. These vignettes are based on our analysts' own research on the data we collect. This report is not meant to be a comprehensive or authoritative investigation of the audit market. Instead, we aim to provide insights into changes in the market place and, of course, how such analysis could be simplified and empowered by using Audit Analytics.

Three-Year Review of the Audit Environment in Europe

Introduction

In 2016, significant reforms of the European audit market took effect. For public interest entities (PIEs) and their audit firms, the major changes to the landscape include the EU regulation (pertaining specifically to PIEs) and for a listed companies, revised ISA standards relating to the auditor's report that require the disclosure of key audit matters. The goals of these reforms were to enhance transparency, communication, quality, and competition.

Regulation (EU) No 537/2014 pertains specifically to PIEs and their audit firms, and includes the following:

- Mandatory audit firm rotation
- Prohibited non-audit services
- Non-audit services fee cap

At the same time, ISA 701 "Communicating Key Audit Matters in the Independent Auditor's Report", also took effect in 2016. This standard primarily applies to the audits of listed companies.

Over the past three years, therefore, the audit regulatory environment has changed dramatically, and many stakeholders are curious to understand the impact these changes have had, and whether the intended goals of the regulations are coming to fruition.

Now that some time has passed since many of the changes have come into effect, we can begin to analyze the effects and impacts of the regulation in a quantitative and data-supported way. Our comprehensive, normalized databases of auditor opinions, fees, changes, tenure, and KAM disclosures – containing data from both before and after the implementation of the audit reforms – can support such efforts.

Already, stakeholders and observers have begun to utilize Audit Analytics data for just that purpose. For example, in April 2019, a major study of the audit market was commissioned and published by the European Parliament. Conducted by a team of researchers led by Marleen Willekens, EU Statutory Audit Reform: Impact on costs, concentration and competition¹, made extensive use of the Audit Analytics databases as they analyzed the impact of the EU Audit Reform on audit fees and the audit market.

¹ http://www.europarl.europa.eu/RegData/etudes/STUD/2019/631057/IPOL_STU(2019)631057_EN.pdf

In 2018, the Competition & Markets Authority ("CMA") of the United Kingdom used Audit Analytics to assess the state of play in the UK audit market. Using information collected by Audit Analytics on the external auditor, fees paid to the external auditor and other commercial details for companies listed on the London Stock Exchange and other European financial market indices, the CMA released their final paper, Statutory audit services market study,² in April 2019.

The Financial Reporting Council ("FRC") of the UK also used Audit Analytics data in its "Developments in Audit" study of October 2018.³

In this report, we present a series of vignettes looking at various slices and snippets of the market. Starting with Market Concentration and Rotation, we move into audit fees, then key audit matters, and, lastly, some overviews of the European market and our data.

Market Concentration and Rotation

When the European Union recently enacted sweeping regulation of the auditor market, requiring, among other things, auditor rotation at least every 20 years, one of the stated goals was to increase competition in the market.

The hope was two-pronged: first, that more frequent changes would de facto increase competition; second, that the dominance of a small handful of firms might lessen due to the increased churn and competition.

Many stakeholders are intently monitoring the market now that the major provisions of the regulation are coming into play. In the following analyses, we look at different aspects of market concentration – auditor market share, tenure, and changes.

Trends in Auditor Market Concentration in Select European Countries

With an eye towards establishing a baseline to compare future developments against, this analysis looks at the market share from 2014 to 2017 among companies listed on select European exchanges.⁴ Our findings show that market concentration, as measured by the percent of the number of clients audited by the Big Four, varies greatly between different countries.

Nordic & Baltic Countries

First, let's look at the seven exchanges composing the Nasdaq Nordic (Sweden, Finland, Denmark, and Iceland) and Nasdaq Baltic (Estonia, Latvia, and Lithuania), and the Oslo Bors (Norway).

² https://assets.publishing.service.gov.uk/media/5cb89b2bed915d74fed24206/CMA_final_audit_market_report_A.pdf

³ https://www.frc.org.uk/auditors/report-on-developments-in-audit

⁴ It is important to note that not all of these companies are subject to the rules; only companies headquartered in the EEA must comply. E.g., a company listed on Euronext Paris but headquartered in the Cayman Islands would be exempt.

The market concentration in these countries is heavily skewed towards the Big Four, averaging 89% over the period under review. However, since 2014 there has been a slight downward trend in market share of the Big Four, from 90% to 88%.



Auditor Market Share | NASDAQ NORDIC + OSLO BØRS

Euronext Paris

Next, let's look at the Euronext Paris exchange. Here, we see a very different state of affairs. In 2017, the Big Four shared the market equally with all other firms. In France, Mazars is actually in the top four by client count.

Auditor Market Share | EURONEXT PARIS



While the difference could partly be cultural, the joint audit requirements in France certainly contribute.



Auditor Market Share | FRANCE

London Stock Exchange

When looking at the London Stock Exchange, the market is less concentrated than in the Nordic and Baltic countries, but more so than in Paris. (For purposes of this analysis, we exclude the companies listed on the Alternative Investment Market, or AIM.) From 2014 to 2017, the share of the Big Four remains right around 78% of the market.

Auditor Market Share | LONDON STOCK EXCHANGE



Borsa Italiana

The trend in Italy is closer to that in the Nordic countries than to France or the UK. The Big Four, again, have a commanding share of this market, averaging 83% by client count. After a decrease from 2014, the concentration has increased since 2015.



Auditor Market Share | BORSA ITALIANA

XETRA

Germany presents something of a middle ground between the scenarios previously described. The market is not completely flat between the Big Four and the rest, nor is it as concentrated as in Italy and the Nordic countries.

While the Big Four averaged about 61% of the market over the past four years, there is an evident downward trend – from 64% in 2014 to 60% in 2017.



Auditor Market Share | XETRA

Market Concentration of PIEs – An Analysis of Transparency Report Data

Audit Analytics collects all EEA and member-state defined Public Interest Entities ("PIEs") disclosed by audit firms in their annual Transparency Reports.



Reports (TRs) across all five regions peaked in 2015, from 212 down to 182 in 2017. The number of auditors publishing TRs remained relatively consistent over this four-year period except in France.



Auditor Market Share | United Kingdom

 $^{\rm 5}$ Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, and Sweden

The previous graph illustrates auditor market share among auditors who audit PIEs. The data shows that fewer firms are controlling more of the market.



Auditor Market Share | France

In the UK and France, only a small fraction of audit firms audit 90% of the PIE market and that remains consistent throughout the four-year period. The number of firms that audited the remaining 10% in France changed year-to-year, but in the UK remained steady.

In the regions examined, the number of PIEs slightly fluctuates from year-to-year, except in Germany where a significant increase is seen from 2015 to 2016, which correlates to the implementation of the 2014 EU Directive. Despite this spike, note that 2014 and 2015 are strikingly similar as are 2016 and 2017, illustrating that the market share remains consistent before and after the change in regulations.



Auditor Market Share | Germany

PIE audits are more evenly dispersed in the Netherlands, where more than half of the auditing firms audit 90% of the PIEs. Conversely, in the Baltic and Nordic region, PIE audits are less evenly dispersed where only a third of audit firms audit 90% of the market.



Auditor Market Share | Netherlands



Auditor Market Share | Baltics + Nordic

Let's dive a little deeper into our market concentration data and talk about the Big Four as a percentage of the total PIE market in these regions.

Most notably, because of the dual audit requirement in France, the Big Four shares the PIE market with other firms at around a 60/40 ratio consistently in all five years. Interestingly, Mazars shares a significant portion of the PIE market in France.

In the UK, amid highlypublicized talk about breaking up the auditing and consulting business of the Big Four, or possibly requiring join audits to increase competition and improve audit quality, the percent of the Big Four PIE market share grew significantly, going from 71.5% in 2014 to 79% in 2017.

In Germany, the market share of the Big Four appears to have jumped significantly in 2016 and then decreased in 2017. There are several possible explanations for this. First, it could be that the smaller firms did not adopt the new regulations early like the Big Four did so 2016 numbers are slightly skewed. Another possibility is that smaller firms did not audit the additional categories of PIEs, namely, credit institutions and insurance undertakings either before or after the change in regulations.

Auditor Market Share | France



Auditor Market Share | United Kingdom



Auditor Market Share | Germany



In the Netherlands and the Baltics and Nordic regions, the Big Four claimed close to 90% of the market in all four years.



Auditor Market Share | Baltics + Nordic



In conclusion, the data shows that although the number of PIEs fluctuates, overall the market share has remained consistent within each of the examined regions from 2014-2017.

Three Ways to Measure Market Concentration: A Comparison Between the UK and Germany

When considering the concentration of the audit market – that is, how competitive the market is between audit firms – there is more than one way to measure control of the market beyond the number of clients an audit firm has.

Here we look at three different metrics of audit market concentration, namely: the number of clients audited, the total market capitalization audited, and the total audit fees audited. We compare these metrics between two European audit markets: companies listed on the main market of London Stock Exchange, and companies listed in Germany, particularly on the XETRA venue.

For both markets, we base our analysis on the audit firm that signed the fiscal 2017 audit opinion and the corresponding audit fees. Market capitalization is matched as closely as possible to the fiscal year end of each company.

London Stock Exchange

First let's look at client counts.

Client Count | LSE

Auditor	# of Clients	%	Cumulative %	-
PwC	242	23.6%	23.6%	Together the Big Four
KPMG	225	22.0%	45.6%	Together, the Big Four audit just under 80% of t
Deloitte	176	17.2%	62.7%	LSE market
EY	164	16.0%	78.7%	
BDO	78	7.6%	86.3%	
Grant Thornton	41	4.0%	90.3%	
30 other firms	99	9.7%	100.0%	

The Big Four firms audit nearly 80% of all the companies listed on the London Stock Exchange (not including AIM). Together with BDO and Grant Thornton, the top six firms audit 90% and 30 other firms audit the remaining 10%.

Turning to market capitalization, the concentration at the top is extreme.

Market Cap | LSE

Auditor	Total Market Cap	%	Cumulative %
PwC	1,059,571	40.8%	40.8%
EY	580,075	22.4%	63.2%
KPMG	530,484	20.4%	83.6%
Deloitte	390,882	15.1%	98.7%
32 other firms	33,477	1.3%	100.0%

Amounts shown in millions GBP

In this case, the Big Four audit 99% of the total market capitalization of the London Stock Exchange.

Lastly, we look at audit and audit-related fees.

Audit Fees | LSE

Auditor	Fotal Audit Fee s	%	Cumulative %
PwC	458,247	38.0%	38.0%
KPMG	292,335	24.2%	62.2%
EY	247,149	20.5%	82.7%
Deloitte	190,233	15.8%	98.4%
32 other firms	18,888	1.6%	100.0%

Amounts shown in thousands GBP

When considering audit fees, the market is more concentrated than by client count, but a little less concentrated than when looking at market cap.

The Big Four account for 98% of all audit and related fees paid by companies on the London Stock Exchange.

German Stock Exchange

For comparison, let's look at companies listed in Germany, starting with client counts.

Client Count	Germany			
Auditor	# of Clients	%	Cumulative %	-
PwC	97	18.7%	18.7%	Together, the Big Four
KPMG	89	17.1%	35.8%	audit just under 60% of the
EY	84	16.2%	51.9%	market in Germany
Deloitte	33	6.3%	58.3%	
Ebner Stolz	25	4.8%	63.1%	
BDO	24	4.6%	67.7%	
Baker Tilly	19	3.7%	71.3%	
Grant Thornton	16	3.1%	74.4%	
Mazars	12	2.3%	76.7%	-
82 other firms	121	23.3%	100.0%	

Client Count I Compony

Compared to the London Stock Exchange, Germany is less concentrated. The top nine firms by client count account for less than 80% of the total market, and no single firm has more than 20% of the market. Meanwhile, 82 other firms compete over the remaining 23% of the market.

When we look at market capitalization, however, a very different picture emerges.

KPMG audits nearly 50% of the market capitalization alone, and the Big Four audit 97% of the total, audit fees tell a similar story.

KPMG actually has more than 50% of the total audit and audit-related fees paid in 2017. And the Big Four have 97% of the total.

Market Cap | Germany

Total Market Cap	%	Cumulative %
953,537	47.9%	47.9%
575,402	28.9%	76.9%
251,810	12.7%	89.5%
154,505	7.8%	97.3%
21,917	1.1%	98.4%
31,962	1.6%	100.0%
	953,537 575,402 251,810 154,505 21,917	953,53747.9%575,40228.9%251,81012.7%154,5057.8%21,9171.1%

Amounts shown in millions EUR

Audit Fees | Germany

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Auditor	Total Audit Fees	%	Cumulative %
KPMG	424,668	52.9%	52.9%
PwC	242,909	30.3%	83.2%
EY	80,640	10.0%	93.2%
Deloitte	28,075	3.5%	96.7%
BDO	4,833	0.6%	97.3%
Ebner Stolz	4,761	0.6%	97.9%
Grant Thornton	3,737	0.5%	98.4%
84 other firms	13,025	1.6%	100.0%

Amounts shown in thousands EUR

Auditor Changes and Tenure

Auditor Tenure Among Nordic Indices

Here we look at the longest auditor tenures of the companies in the top Nordic indices. This includes a review of 109 companies, with only one having a joint audit.

As shown, nine of these companies, or 8%, have an auditor tenure of over 25 years. This is contrasted to 57% of the companies with an auditor relationship of ten years or less. Twenty-six percent of the companies have an auditor relationship spanning between 11-20 years, and 9% have engaged their auditor between 21-25 years.

PricewaterhouseCoopers has audited Kone Oyj (KNEBV: NASDAQ OMX Helsinki), a Finnish company included in the OMX H25, since 1957 – the longest auditor tenure among companies in the Nordic indices. Other companies with tenures over 25 years are listed in the table below.





Note: Percentages are rounded

Longest Auditor Tenure Among Nordic Indices

Company	Ticker	Exchange	Market Index	Auditor	Auditor Since Year*	Auditor Tenure (Years)
KONE Oyj	KNEBV	NASDAQ OMX Helsinki	OMX H25	PwC	1957	62
Jyske Bank A/S	JYSK	NASDAQ OMX Copenhagen	OMX C25	Deloitte	1967	52
Icelandair Group hf	ICEAIR	NASDAQ OMX Iceland	OMXI8	KPMG	1974	45
Kesko Oyj	KESKOA	NASDAQ OMX Helsinki	OMX H25	PwC	1976	43
Novo Nordisk A/S	NOVO B	NASDAQ OMX Copenhagen	OMX C25	PwC	1982	37
Autoliv Inc	ALV	NASDAQ OMX Stockholm	OMX S30	EY	1984	35
Demant AS	DEMANT	NASDAQ OMX Copenhagen	OMX C25	Deloitte	1984	35
Nokia Oyj	NOKIA	NASDAQ OMX Helsinki	OMX H25	PwC	1987	32
Telefonaktiebolaget L M Ericsson	ERIC A	NASDAQ OMX Stockholm	OMX S30	PwC	1993	26

* The since dates may incorporate information received from email communications from the company. For example, for Jyske Bank A/S and William Demant Holding A/S, we obtained earlier since dates from direct company communications than dates provided in the Annual Reports. The since dates represent earliest known appointment and do not take IPO dates into account.

These companies could soon be up for rotation in 2020, according to the EU transition rules on Mandatory Firm Rotation. However, all the EU Nordic countries adopted the option to permit an extension of the audit engagement following a tender or, in some countries, a dual audit.

Auditor Changes and Audit Fees in Poland

A third of large and mid- cap Polish companies changed their audit firm from 2016 to 2017, and most of those that did saw their audit fees increase significantly.

The European Union passed regulation that requires companies to put their audit out to tender every ten years and rotate their auditor at least every 20. Individual countries were allowed to set stricter limits and

Poland enacted one of the strictest, requiring firms to rotate after five years.

Looking at the WIG 20 and the mWIG 40 – the two major indexes of the Warsaw Stock Exchange – we found that 16 companies changed their audit firm from 2016 to 2017. The first table on the right lists these 16 companies, as well as their previously dismissed and recently engaged auditor.

EY lost one client and gained eight, for a net increase of seven. The other Big Four gained some but lost more. BDO was the only firm with no loss and one gain.

The amount of audit + audit related fees increased by an average of 50% from 2016 to 2017 for those companies that changed auditors. In aggregate, (total audit + audit related for all 16 companies), fees increased by 32%.

As shown in the second table, three-quarters (12/16) of the companies that changed auditors saw an increase in fees, by an average of 70% (with a couple outliers pulling up the average). Four saw their fees decrease; in their case by an average of -11%. Fiscal 2017 Auditor Changes among WIG20 and mWIG40

Company	2017 Auditor	2016 Auditor	Tenure (years)
Alior Bank SA	r KPMG	✓ PwC	3
Bank Handlowy w Warszawie SA	r KPMG	✓ PwC	4
Benefit Systems SA	r PwC	🖌 Grant Thornton	7
Budimex SA	r ey	🖌 Deloitte	5
CCC SA	r ey	✓ PwC	8
Comarch SA	r BDO	🖌 Deloitte	11
Energa SA	KPMG	✓ PwC	2
Eurocash SA	r ey	🖌 KPMG	10
Getin Noble Bank SA	r ey	✓ Deloitte	5
Grupa Azoty SA	r ey	🖌 KPMG	5
Kruk SA	KPMG	✓ EY	3
LPP SA	r ey	🖌 Grant Thornton	9
Pfleiderer Group SA	🔨 Deloitte	✓ KPMG	13
Polska Grupa Energetyczna SA	r ey	🖌 KPMG	3
Polski Koncern Naftowy ORLEN SA	r Deloitte	✓ KPMG	12
TAURON Polska Energia SA	r ey	🖌 Deloitte	4

Note: Amrest Holdings SE (EAT) changed its auditor from PwC to BDO, but over 90% of its 2017 audit fee went to PwC, its prior auditor, so for the purposes of this analysis we did not include it.

Audit + Audit Related Fees for Companies w. Auditor Change

Company	2017	2016	% Change	+/-
Alior Bank SA	1,557,300	1,535,000	1%	+
Bank Handlowy w Warszawie SA	970,000	858,000	13%	+
Benefit Systems SA	346,000	91,000	280%	+
Budimex SA	525,000	633,000	-17%	-
CCC SA	500,000	400,000	25%	+
Comarch SA	205,000	215,000	-5%	-
Energa SA	883,000	529,000	67%	+
Eurocash SA	751,000	830,000	-10%	-
Getin Noble Bank SA	1,226,000	826,000	48%	+
Grupa Azoty SA	1,300,000	1,466,000	-11%	-
Kruk SA	1,461,000	1,110,000	32%	+
LPP SA	234,000	140,000	67%	+
Pfleiderer Group SA	416,700	271,659	53%	+
Polska Grupa Energetyczna SA	4,145,000	1,340,000	209%	+
Polski Koncern Naftowy ORLEN SA	5,300,000	4,800,000	10%	+
TAURON Polska Energia SA	1,583,000	1,190,000	33%	+
Total	21,403,000	16,234,659	32%	

Note: All fees are presented in the reported currency. Most companies report in Zloty, some report in Euros.

This seems striking. Auditor rotation rules in the European Union require companies in the "public interest" to change their auditor. If companies find themselves faced with significant increases in audit fees when it comes time to rotate, this could pose challenges to the new regulation.

But what about the companies that didn't change their auditor? What do we see with their audit fees? Much the same, surprisingly.

Of the 42 companies that did not change their auditor, nearly two-thirds saw an increase in audit fees – not far off the proportion of those that did change audit firm. However, their fees only increased by an average of 34% compared to the 70% increase for the companies that changed.

Even more surprising, when we consider non-audit fees, the companies that kept the same audit firm actually saw higher overall increases in their total fees than those that changed audit firm.

Although the companies that changed auditor saw a larger aggregate increase in audit + audit-related fees compared to those companies without an auditor change, the change companies saw a much larger decrease in their non-audit fees. That decrease in non-audit fees actually

Cumulative Year-Over-Year Change in Fees (All Companies						
Audit +						
	Audit Related	Non-Audit	Total Fees			
New Auditor	32%	-47%	14%			
Same Auditor	19%	-4%	15%			

outweighed the increase in audit fees. Companies that changed their auditor saw an aggregate increase of 14% in total fees, while companies that did not change their auditor experienced a 15% increase.

Auditor Changes and Tenure

Implications of the CMA's Call for a Joint Audit Among the FTSE 350

The Competition and Markets Authority (UK) released a report⁶ regarding its study of the audit market in the United Kingdom. In the report, the CMA made some drastic recommendations that will lead to major changes in the audit market landscape in the UK.

Among the recommendations was one in particular that jolted followers of the market: a call for joint audits.

"The aim of the joint audit remedy in the medium term is to improve the resilience of the audit market. Increasing the number of credible audit firms will also lead to stronger competition in the provision of large company audit, leading ultimately to better audit quality. This will be achieved by breaking down the barriers that prevent challenger firms from auditing large companies."

"This remedy requires FTSE 350 companies to be jointly audited by at least two audit firms, with at least one being a non-Big Four firm."

The implications of such a requirement are far-ranging, but perhaps the first and most important question revolves around the cost: how much more expensive would it be to hire two auditors rather than one?

Given that (admittedly brief) overview of the context, we will provide some figures from more recent financial statements using our European Audit Fees database to compare the cost per €1 million in revenue between the SBF 120 listed on Euronext Paris and the FTSE 100 listed on the London Stock Exchange.

Population and Examples

We looked at fiscal 2017 audit fees for the SBF 120 of the Euronext Paris (which includes all members of the CAC 40) and the FTSE 100 of the London Stock Exchange. Our population consisted of 119 companies listed in Paris and 100 listed in London.

SBF 120

Not all of the SBF 120 are headquartered in France, and not all are subject to the joint audit requirements that French companies must comply with.

Of the 119 companies from the SBF 120, 110 are headquartered in France, 3 in the Netherlands, 3 in Luxembourg, and then one each in Belgium, the UK, and Switzerland. All 110 French companies (and none of the others) had joint audits in 2017.

FTSE 100

Likewise, not all the FTSE 100 companies are headquartered in the UK, but this does not affect whether any of them might have a joint audit. As a matter of fact, none of the FTSE 100 use a dual audit arrangement.

Some Examples

					2017	Audit Fees per
	Revenue	Audit		2017	Revenue	€1 Million in
Company	Quartile	Туре	Exchange	Audit Fees	(in thousands)	Revenue
Severn Trent PLC [SVT]	1st	Single	London Stock Exchange	818,684	1,915,721	427
Maisons du Monde France SA [MDM]	1st	Joint	Euronext Paris	499,000	1,039,012	480
easyJet PLC [EZJ]	2nd	Single	London Stock Exchange	449,301	5,669,058	79
Legrand SA [LR]	2nd	Joint	Euronext Paris	4,387,761	5,520,800	795
Reckitt Benckiser Group PLC [RB.]	3rd	Single	London Stock Exchange	7,496,854	13,076,331	573
Plastic Omnium [POM]	3rd	Joint	Euronext Paris	4,084,000	6,768,477	603
Glencore PLC [GLEN]	4th	Single	London Stock Exchange	17,387,727	170,131,457	102
Carrefour [CA]	4th	Joint	Euronext Paris	13,669,000	80,491,000	170

Note: All figures are in Euros. Pounds were converted to Euros based on the balance sheet date of the individual companies.

Methodology

Audit fees and revenue figures were reported by these companies in either Euros, Pounds, or US Dollars. To perform this analysis, we converted all figures to EUR based on the exchange rate as of the date on the balance sheet for individual companies.

Next, we split the 219 companies into four equal buckets based on quartiles of revenue.

Quartile Revenue Range

4th	> €20.4B
3rd	€6.4B to €20.4B
2nd	€2.2B to €6.4B
1st	<€2.2B

The 4th quartile represents companies in the top 25% of revenue, the 3rd quartile is companies with revenue between the 50% and 75% percentiles, and so on. This is based on the assumption that fees are not strictly linear to revenue and that, in rough sketch, companies of a similar size will have similar audit fees.

Then we took the fiscal 2017 audit fees for each company. For purposes of this analysis, we excluded auditrelated figures due, in some part, to variations in fee disclosure patterns in France and the UK. (Most of the rest of Europe follows the standard Audit, Audit-Related, Tax, and Other paradigm common around the globe, but France and the UK both have not.

For a simple way to compare the magnitude of audit fees between companies, we calculated the cost of the audit per ≤ 1 million in revenue. Among all companies in our 4th quartile of revenue, the average cost of an audit was ≤ 492 per ≤ 1 million in revenue. So, a typical company with revenue of ≤ 25 billion would be expected to have an audit fee of around ≤ 12.3 million (492 x 25,000).

Lastly, we trimmed the data by excluding the five largest and smallest outliers.

Comparison of Fees Between Single and Joint Audit

In the following chart, we show a comparison of the cost of an audit per million euros of revenue between companies audited by one auditor versus those that use a joint audit.



Single Audit Fees vs. Joint Audit Fees

Note: All figures are in Euros. Pounds were converted to Euros based on the balance sheet date of the individual companies.

As one can see, at the top of the market – companies in the fourth quartile of revenue, i.e., greater than \notin 20.4 billion – the cost of a joint audit is essentially equal to the cost of an audit using only one auditor. A joint audit costs about \notin 492 per million euros of revenue, compared to \notin 491 for a single audit.

In the middle market, however, it appears that joint audits begin to cost more. A joint audit in the third quartile costs about 28% more than a single audit and about 10% more, on average, in the second quartile. In the bottom quarter of the market – companies with revenue up to €2.2 billion – the cost of a joint audit is 28% more than a single audit.

Comparing Non-Audit Service Fees Between the EU and US

In the major EU audit reform of 2014⁷, one of the stipulations includes a cap on fees for permitted nonaudit services (NAS). Going forward, fees for non-audit services cannot exceed 70% of the average of the entity's audit fees over the past three years.

TITLE II CONDITIONS FOR CARRYING OUT STATUTORY AUDIT OF PUBLIC INTEREST ENTITIES Article 4 Audit fees

2. When the statutory auditor or the audit firm provides to the audited entity, its parent undertaking or its controlled undertakings, for a period of three or more consecutive financial years, non-audit services other than those referred to in Article 5(1) of this Regulation, the total fees for such services shall be limited to no more than 70 % of the average of the fees paid in the last three consecutive financial years for the statutory audit(s) of the audited entity and, where applicable, of its parent undertaking, of its controlled undertakings and of the consolidated financial statements of that group of undertakings.

We compared fiscal 2014 non-audit fees to a three-year average of audit fees for 2012-2014 for each of the Russell 3000 companies. The vast majority of companies fell under the cap.

In this analysis, we look at fiscal 2017 audit fees for both US and EU companies and compare how their nonaudit fees stack up against the 70% fee cap. To do so, we looked at the S&P 1500 (comprising the large-cap



⁷ https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32014R0537&from=EN

For purposes of this analysis, we combined audit and audit-related fees, with the remainder of the company's total fees counting as NAS fees. Further, where a company had a joint-audit, we combined the fees for both audit firms.

In both the US and across Europe, the vast majority of companies fall below the 70% fee cap, with the largest chunk of companies having non-audit fees fall in the 0%-10% range.

It's important to note that this is a simplified analysis. The actual rules of the 70% fee cap are very complicated. One of the major complications is that, typically, the cap only applies to the Member State affiliate firm (e.g., KPMG Germany), and not to the other firms in the network. This analysis is based on the fees for the firm network as a whole.

Further, this analysis only compares 2017 audit and non-audit fees. The cap is based on an average of the past three years' audit fees. All that is to say, it is unlikely that many – if any – of the companies that fall above the 70% range in the analysis above are actually non-compliant with the regulation. Nevertheless, this analysis gives a rough picture of the relationship between audit and non-audit fees between the US and a wide range of European countries.

A Comparison of Audit Fees in the US and Europe

When considered as a percentage of revenue – a common metric in the industry – European companies paid noticeably less in audit fees for fiscal 2017 than did their US counterparts.

In order to perform this analysis, we compared the Russell 1000 to what we will call the "EU 1000". To make this composite index, we began with about 2,000 companies from the major large, mid, and small-cap indices from across 21 European countries. We then limited both groups to those with fiscal 2017 revenue of at least \$10 million in US dollars. Then, from the European group, we removed the companies – about 100 – that are also listed in the USA on either the NYSE or Nasdaq. That left us with over 900 companies on European exchanges to compare to approximately 950 Russell 1000 companies on US exchanges.

Comparison of Revenues

(in millions USD)		
	EU 1000	Russell 1000
# Companies	920	948
Average Revenue	\$10,531	\$13,590
Median Revenue	\$1,681	\$4,840

As you can see, of the Russell 1000, average and median revenue was \$13.6 and \$4.8 billion, respectively. While average and median revenue for the EU 1000 was \$10.5 and \$1.7 billion, respectively. In other words, the EU companies skewed smaller than the Russell 1000 companies.

Therefore, in order to compare apples to apples, we grouped the two sets of companies into four groups of similarly-sized companies.

To do this, we first split the Russell 1000 into four equal buckets, i.e. quartiles, based on revenue. Doing so revealed that about a quarter of the Russell 1000 had revenue between \$10 million and \$2.1 billion; a quarter between \$2.1 billion and \$4.8 billion; another quarter up to \$11.9 billion, and another quarter of the companies had revenue over \$11.9 billion.

Then, we split up the European companies into the same buckets. That gave us the following distribution, visualized in a histogram:



Finally, we looked at the average fees as a percentage of revenue for each of the four buckets across both the Russell 1000 and the EU 1000 companies.

What we see is that, on average the European companies pay noticeably less in audit fees than the Russell 1000, even when comparing companies of a similar size. But this difference is more dramatic at the lower end of the spectrum. The top companies in Europe pay about 0.04% of revenue compared to 0.05% at the top of the Russell 1000. At the bottom end of the range, European companies pay 0.19% of revenue compared to 0.25% of revenue in the United States.

(in millions USD)		
	EU 1000	Russell 1000
\$10 to 2,084	0.19%	0.25%
\$2,084 to 4,840	0.07%	0.14%
\$4,840 to 11,889	0.05%	0.09%
> \$11,889	0.04%	0.05%

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Average Audit Fees as a Percentage of Revenue

Key Audit Matters (KAMs)

Overview of European KAM Disclosures

The disclosure of Key Audit Matters (KAMs) has been required for over a year now, and there is a lot of data available to be analyzed. In this analysis, we look at the KAM disclosures of more than 1,200 companies over the past three years and discuss some interesting trends that we see in the data.

KAMs are required under ISA 701 for fiscal years ending on or after December 15, 2016. Therefore, fiscal 2017 is the first full year of Key Audit Matter disclosures.

Population	Overview		
Fiscal Year	# of Opinions	# of KAMs	Average # of KAMs
2016	869	2,665	3.1
2017	1,103	3,300	3.0
2018	335	908	2.7
Total	2,307	6,873	3.0

Population Overview

For this analysis, we looked at over 2,300 audit opinions of 1,201 large, mid, and small- cap companies listed on 47 indexes across 31 European countries.

Reviewing the KAMs of audit opinions disclosed since 2016, the average number of KAMs per audit opinion is around three.

Global Six

Audit Firm	Average # of KAMs*
Ernst & Young	3.1
PricewaterhouseCoopers	3.1
Deloitte & Touche	3.0
BDO	2.9
KPMG	2.8
Grant Thornton	2.6

*2017 Audit Opinions only

Big Four vs. Non-Big Four

Audit Firm	Average # of KAMs*
Big Four	3.0
Non-Big Four	2.7
*2017 Audit Opiniana anlu	

*2017 Audit Opinions only

Key Takeaways

Breaking down the KAM disclosures of companies audited by the Global Six audit firms for fiscal 2017 only – the first full year of data – we see that there are slight differences in the average number of KAMs disclosed among audit firms, ranging from 2.6 (Grant Thornton) to 3.1 (both EY and PwC).

When comparing the Big Four vs. other audit firms – again for 2017 only – we see a similar difference. The Big Four average around three KAMs per disclosure, while all other firms average slightly less than three. The most common topic addressed in 3,300 KAMs disclosed by 1,100 companies in fiscal 2017 were Asset Impairment and Recoverability, comprising 20% of all KAMs. Revenue and Other Income and Valuation of Investments follow at 16% and 11%, respectively.

Торіс	# of KAMs*	% of Total*
Asset Impairment and Recoverability	655	20%
Revenue and Other Income	533	16%
Valuation of Investments (including Fair Value)	363	11%
Income Taxes	293	9%
Business Combinations	162	5%
Inventory	152	5%
Contingent Liabilities (including Litigation & Restructuring	g 142	4%
Pension and Other Post-Retirement Benefits	110	3%
Accounts Receivable	97	3%
Liabilities and Provisions	85	3%
*2017 Audit Opinions only		

Classification

Drilling down into a more granular breakdown of the Asset Impairment and Recoverability topic, we see that 15% of the 3,300 KAMs disclosed by 1,100 companies in 2017 related to the impairment or recoverability of goodwill and other intangible assets.

Topic Breakdown

Asset Impairment and Recoverability	# of KAMs*
Impairment - Goodwill	250
Impairment - Goodwill and intangible assets	167
Impairment - Property, plant, and equipment	101
Impairment - Other intangible assets	83
Impairment - Investments	40
Impairment - Land and stores under construction	14
*2017 Audit Opinions and	

*2017 Audit Opinions only

Lastly, we present the percentage of companies in select industries that cited particular issues in at least one of their KAMs. (Industries are based on the SIC top-level divisions.)

Classification by Industry

Торіс	Finance, Insurance, And Real Estate	Manufacturing	Retail Trade	Services	Wholesale Trade
Asset Impairment and Recoverability	22%	79%	69%	76%	56%
Revenue and Other Income	40%	45%	37%	65%	32%
Valuation of Investments (including Fair Value)	74%	8%	6%	10%	3%
Income Taxes	12%	42%	24%	32%	32%
Business Combinations	6%	21%	14%	23%	21%
Inventory	3%	19%	71%	3%	56%
Contingent Liabilities (including Litigation & Restructuri	8%	19%	4%	10%	9%
Pension and Other Post-Retirement Benefits	4%	13%	14%	10%	3%
Accounts Receivable	6%	7%	12%	9%	15%
Liabilities and Provisions	6%	9%	12%	9%	3%

Note: Amounts reflect the percentage of companies by industry*

*2017 Audit Opinions only

General Considerations

Overview of European Stock Exchanges

Using Fiscal 2017 audit opinions, we look at some high-level statistics using other Audit Analytics Europe databases.

First, let's look at the fiscal year ends of European companies.



Fiscal Year Ends

Unsurprisingly, 78% of companies listed on a European exchange have a fiscal year end in December. 6% of the companies have their fiscal year end in March, followed by 4% in both June and September. The remaining 8% of fiscal year ends are evenly spread across the other eight months.

Next, we will look at how long it takes companies in various countries to issue their annual financial statements. The following chart, again based on 2017 audit opinions, shows the average number of days (by country of exchange) between the companies' fiscal year ends and the signature date on their audit opinions.



Average Number of Days between Fiscal Year End and Opinion Signature Date

As you can see, the range varies greatly between countries. In Finland, auditors sign the opinion, on average, in less than two months (52 days). In Cyprus and Latvia, at the other extreme, auditors take an average of 120 and 112 days, respectively, to sign the opinion.

Now, let's look at where companies are headquartered relative to the exchange on which they are listed. In the table below, we show the percentage of companies that are headquartered in the same country as the exchange they are listed on.

Austria	95%	Germany	94%	Norway	85%
Belgium	94%	Greece	99%	Poland	97%
Bulgaria	98%	Hungary	100%	Portugal	98%
Croatia	100%	Iceland	100%	Romania	100%
Cyprus	95%	Ireland	97%	Slovakia	100%
zech Republic	93%	Italy	98%	Slovenia	95%
Denmark	94%	Latvia	100%	Spain	99%
Estonia	100%	Lithuania	100%	Sweden	96%
Finland	99%	Luxembourg	81%	Switzerland	88%
France	97%	Malta	100%	United Kingdom	79%
		Netherlands	87%		

In nine countries, 100% of the companies listed on the exchange are headquartered in the same country. In all but five countries, over 90% of the companies listed on the exchange are headquartered in that country. 85% of companies listed on the Oslo Bors are headquartered in Norway, 81% of companies listed on the Bourse de Luxembourg are headquartered in Luxembourg, and only 79% of companies listed on the London Stock Exchange are headquartered in the United Kingdom (not including the Crown Dependencies).

Summary

In this publication, we presented some insights into trends and developments in the audit market across Europe. Although we do not present any formal conclusions, we attempted to show how large databases of normalized information covering many years and many countries might be used to perform in-depth analyses and archival research related to the market; in particular, towards understanding the impact of regulation.

We believe there is real demand for an independent, comprehensive source of audit and audit-related data in this market. Already we have seen major stakeholders and observers put it into action, including regulators, practitioners, and scholars.

Contact Us

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U.S. Databases

Auditor Changes Auditor Ratification Auditor Engagements Audit Fees Audit Opinions Bank Holding Companies Bankruptcies Bankruptcies Benefit Plans Broker Dealers Changes in Accounting Estimates Director & Officer Changes Disclosure Controls Financial Restatements Insurance Companies

Canada Databases

Auditor Changes Auditor Engagements Audit Fees Audit Opinions Controls Financial Restatements Internal Controls IPOs Late Filings Litigation Out of Period Adjustments PCAOB Inspection Reports Private Funds Non-Profit Single Audits Registered Investment Advisers SEC Comment Letters Shareholder Activism Stock Transfer Agents Tax Footnotes

Europe Databases

Auditor Changes Auditor Engagements & Tenure Audit Fees Audit Opinions Key Audit Matters (KAMs) Transparency Reports