The European Public-Firm Audit Market:

Some exploratory insights

Joachim Gassen

TRR 266 Accounting for Transparency

Humboldt-Universität zu Berlin

gassen@wiwi.hu-berlin.de

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Abstract

Building on a sample of European publicly-listed clients and their audit fees I explore the market share of Big 4 auditing firm across time, countries and industries. I further assess the audit fee premium of Big 4 Auditing firms.

Table 1: Descriptive Statistics

	N	Mean	Std. dev.	Min.	25 %	Median	75 %	Max.
Audit fees	42,313	1.057	4.565	0.000	0.041	0.135	0.473	330.0
Assets	42,313	11,282.094	92,313.816	0.001	31.605	174.905	1,143.705	2,488,491.0
Revenues	42,313	2,161.241	10,427.672	0.000	15.106	89.804	563.992	365,634.6
Market Capitalization	42,313	2,285.312	10,333.478	0.000	22.230	116.105	725.368	441,075.4
Big 4	42,313	0.667	0.471	0.000	0.000	1.000	1.000	1.0

Notes: The data is obtained from Audit Analytics EU as provided by WRDS. The sample covers the periods 2009 to 2020 and 4,889 unique clients form 12 countries. Countries with less than 1,000 client-fiscal year observations are excluded. For audits involving multiple audit firms audit fees are aggregated at the client-fiscal year level so that *Audit fees* represents the audit fees that the client incurred during a fiscal year. *Assets* and *Market Capitalization* are client values and measured at the fiscal year end. *Revenues* reresents client net sales during the fiscal year. All values are measured in Mio. Euro. *Big 4* is a binary variable taking the value of one whenever a Big 4 auditing firm (KPMG, PWC, EY or Deloitte) is involved in the audit.
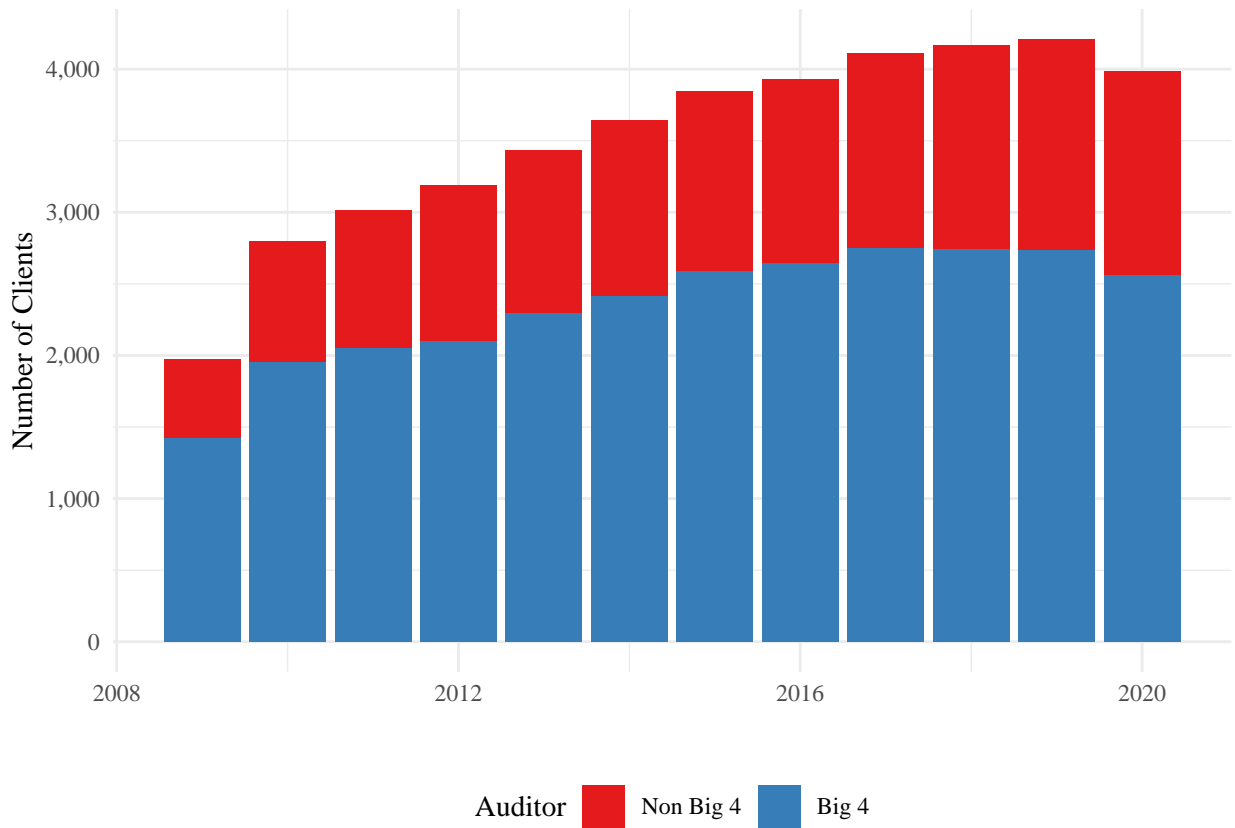
Figure 1: Number of Clients by Year
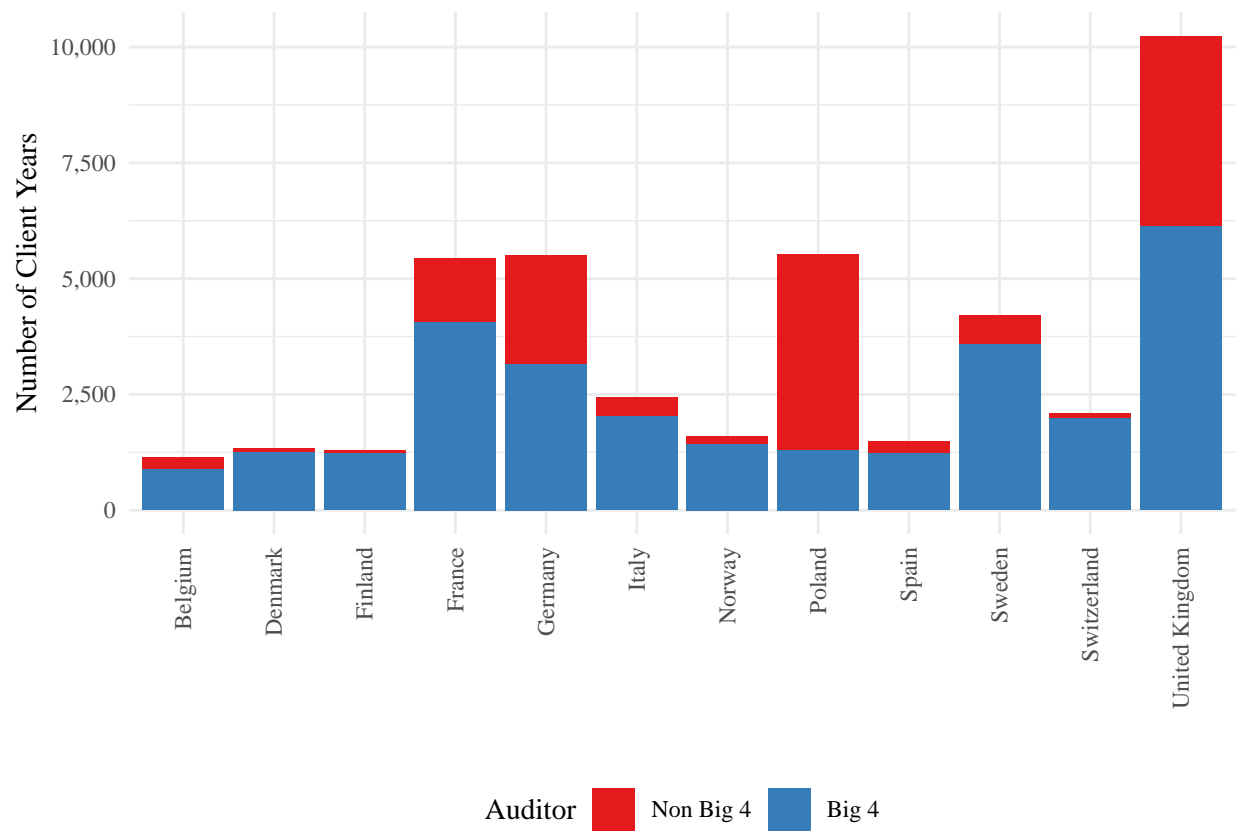
Figure 2: Number of Client Years by Country

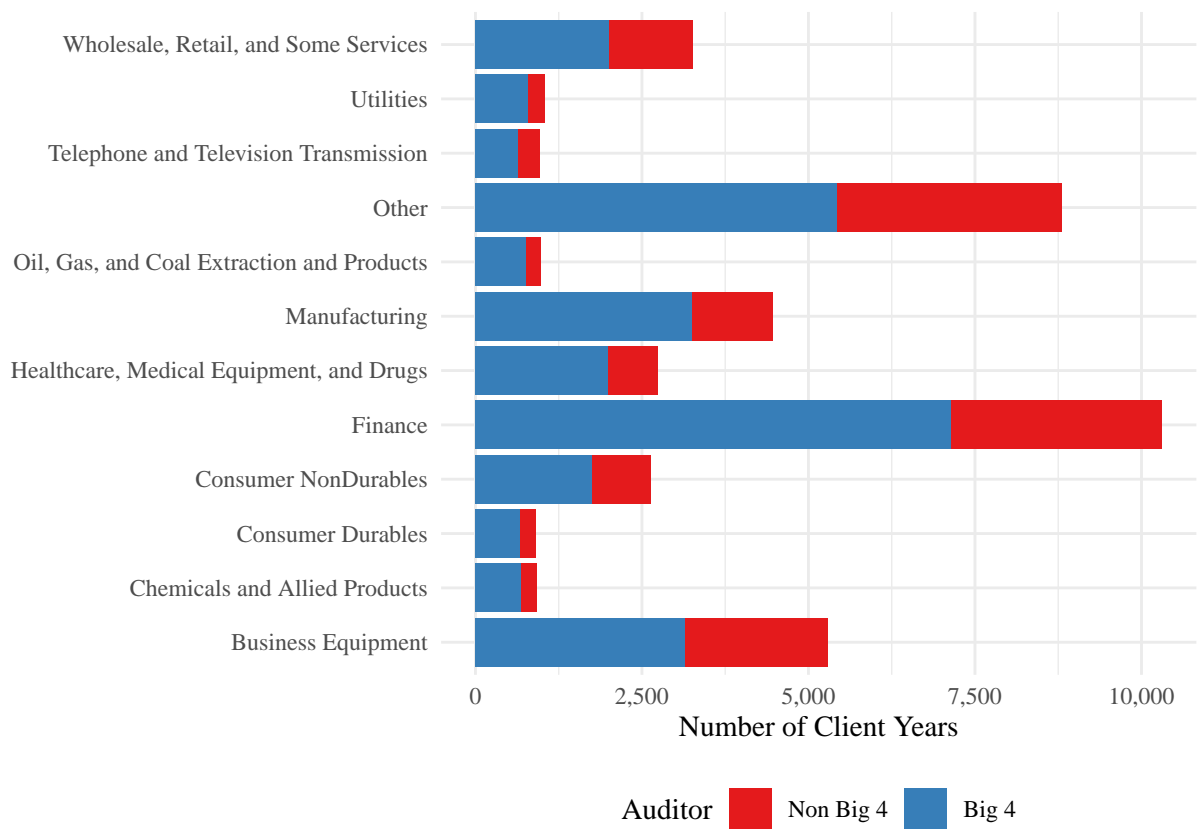**Figure 3: Number of Client Years by Industry**
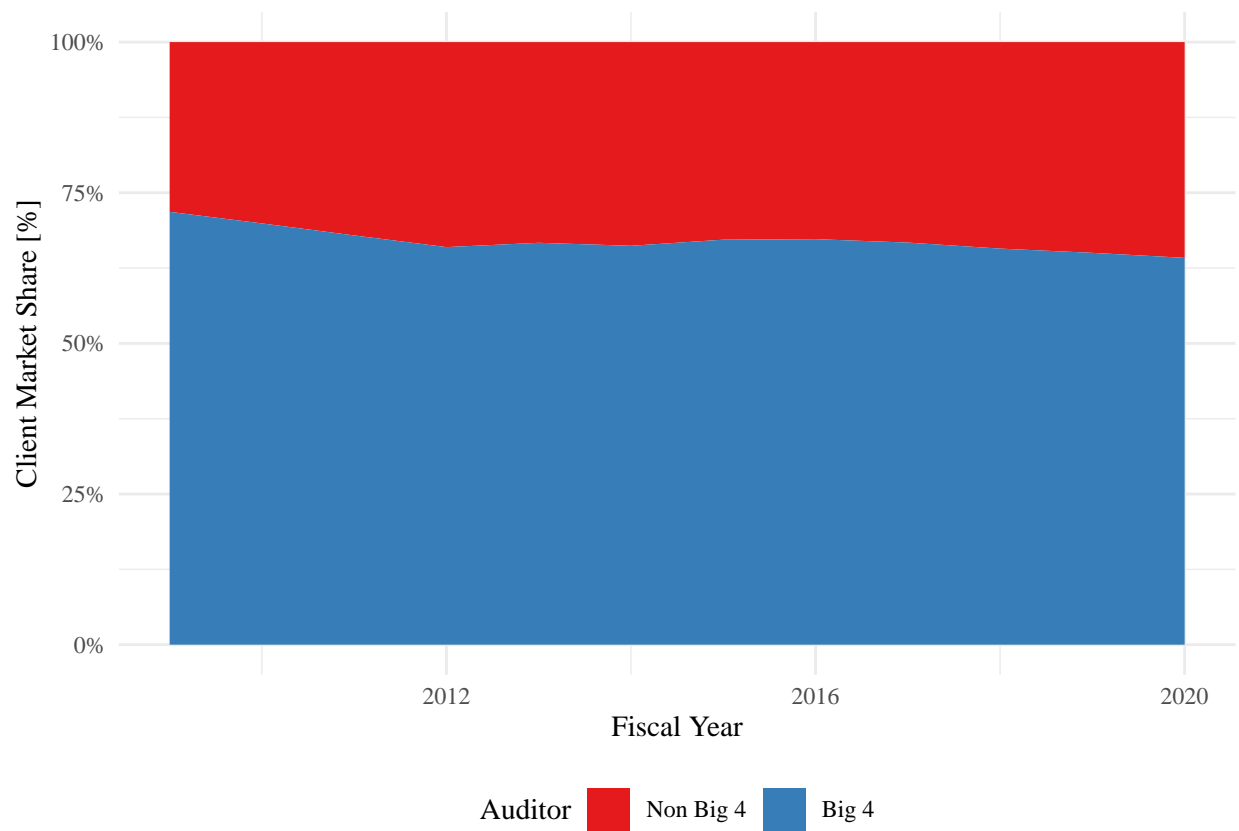
Figure 4: Relative Client Market Share Over Time

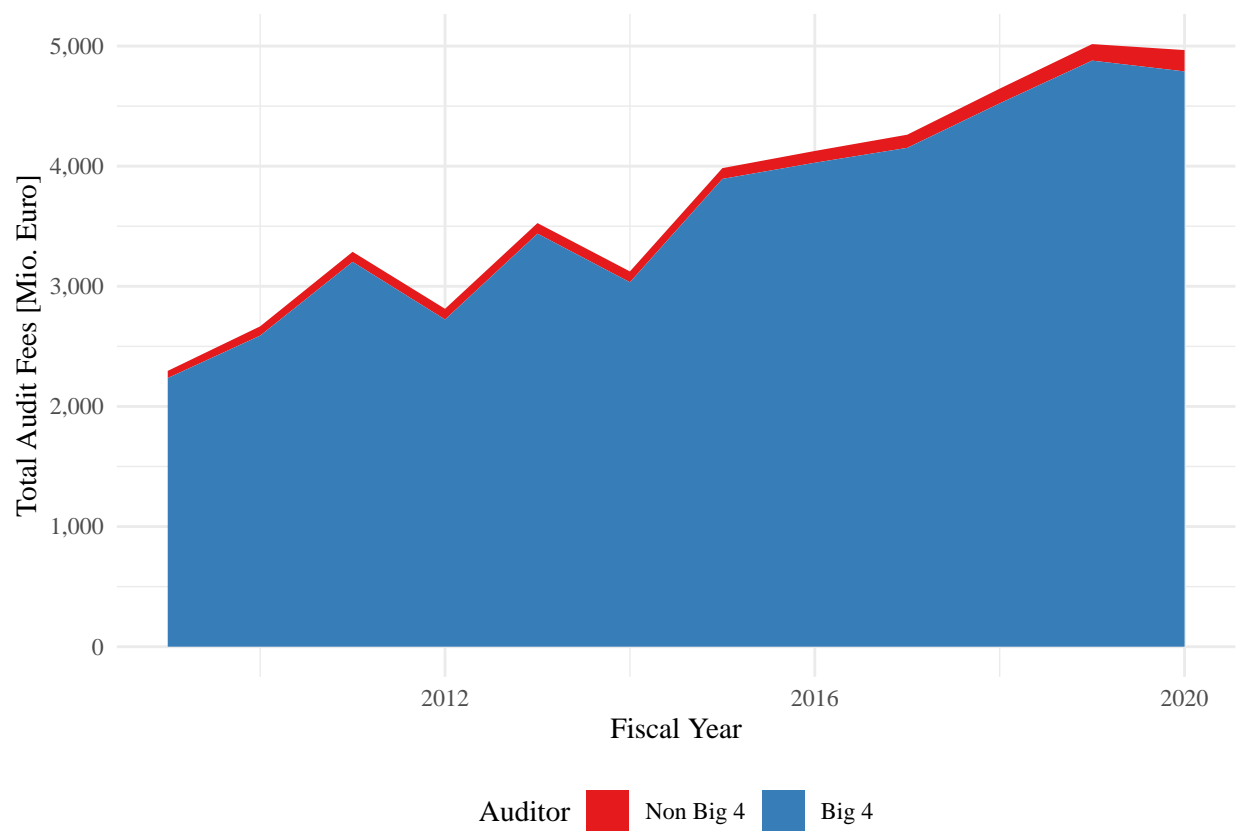**Figure 5: Absolute Fee Market Share Over Time**
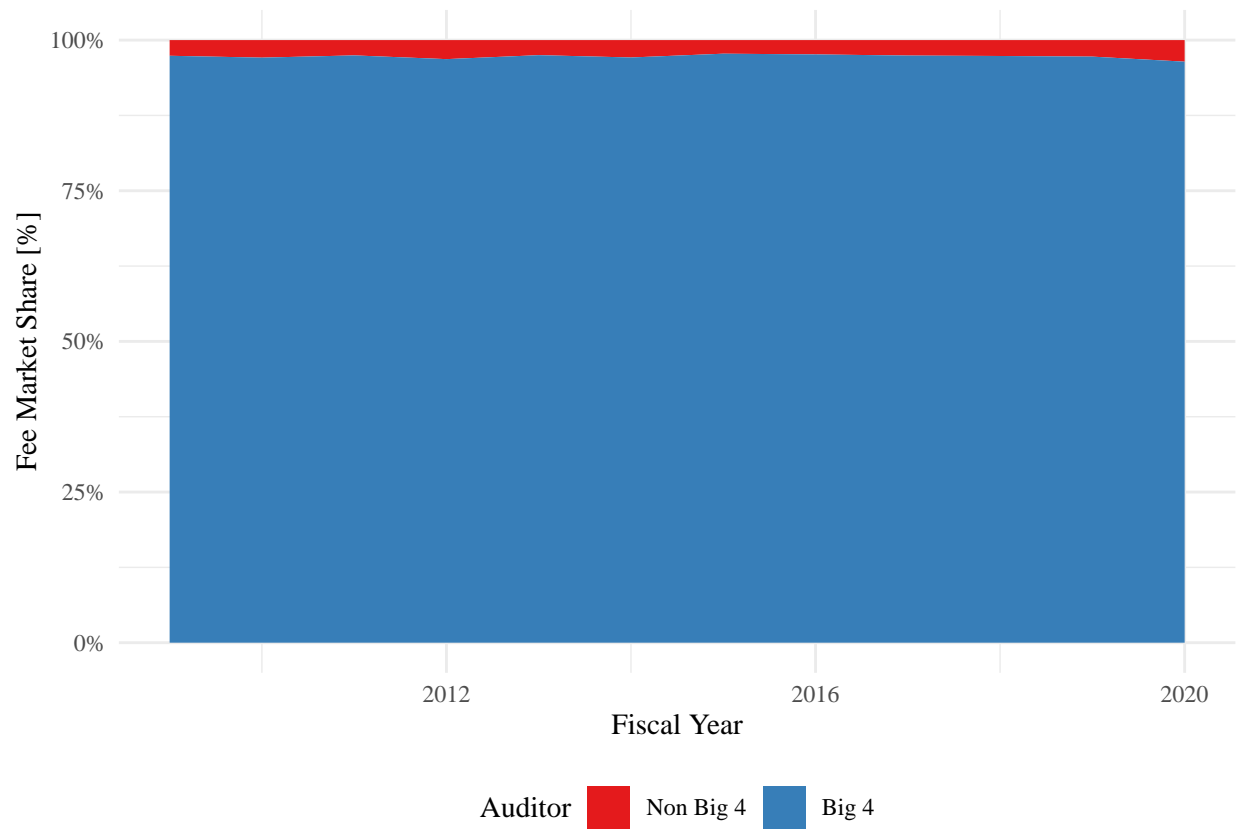
Figure 6: Relative Fee Market Share Over Time
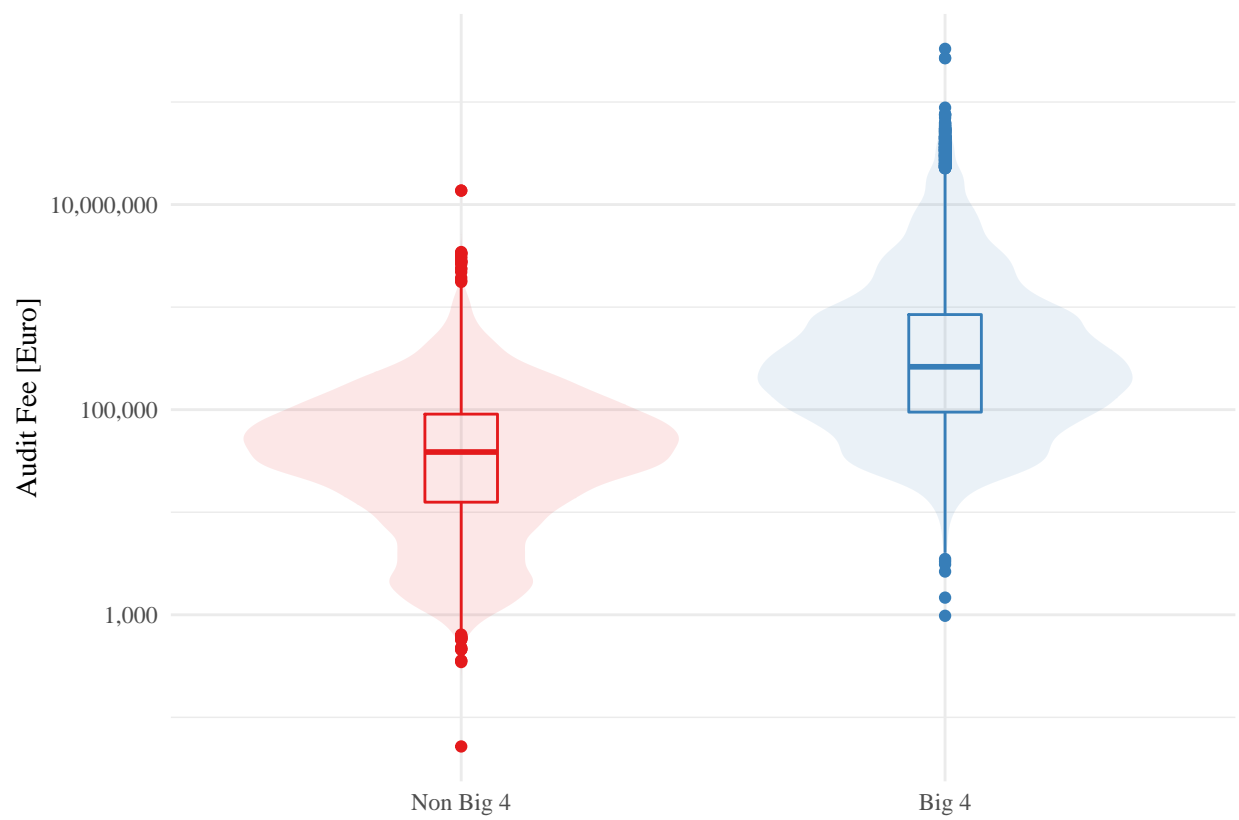
Figure 7: Audit Fees by Auditor Type

Figure 8: Audit Fees by Firm Size

Table 2: Correlations
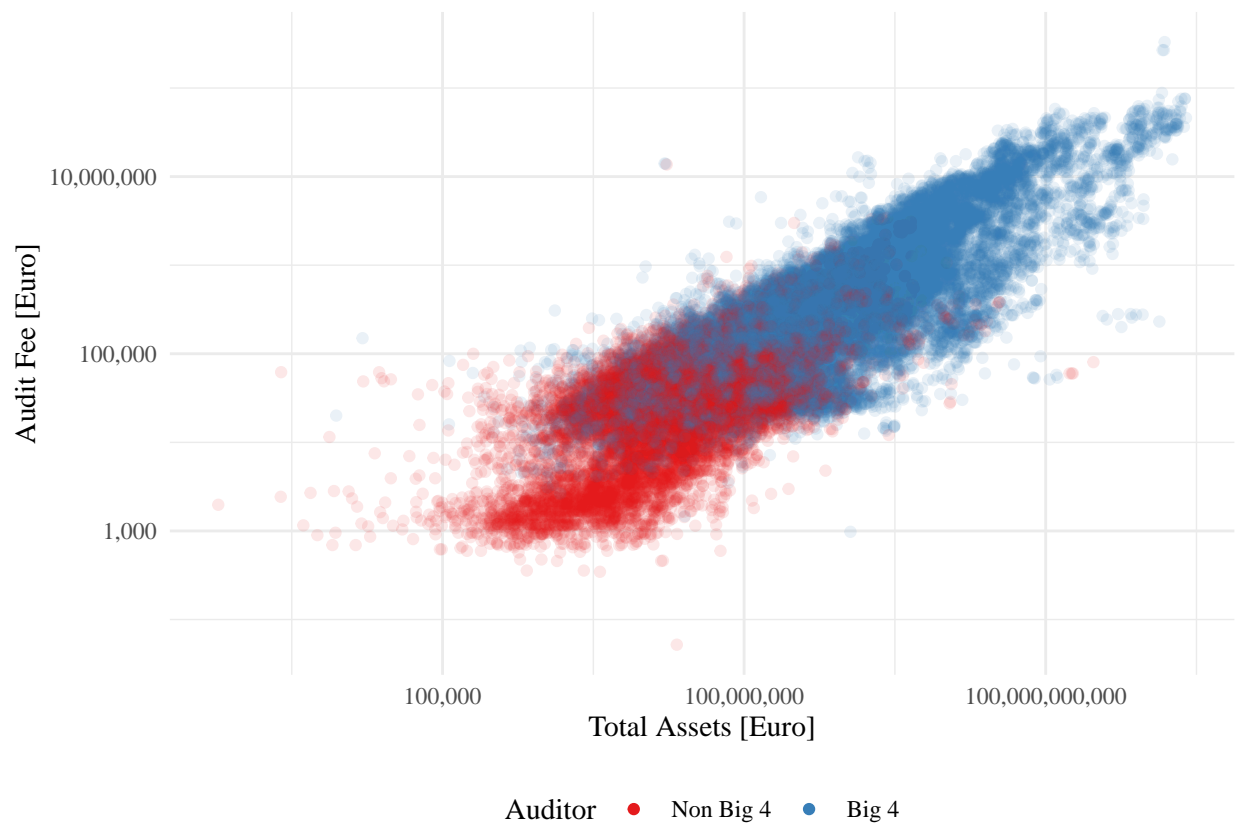
	A	B	C	D	E
A: Ln(Audit fees)		**0.84**	**0.82**	**0.81**	**0.55**
B: Ln(Assets)	**0.83**		**0.86**	**0.89**	**0.53**
C: Ln(Revenues)	**0.84**	**0.88**		**0.80**	**0.48**
D: Ln(Market Capitalization)	**0.78**	**0.90**	**0.83**		**0.54**
E: Big 4	**0.56**	**0.56**	**0.51**	**0.55**	

Notes: This table reports Pearson correlations above and Spearman correlations below the diagonal. Number of observations: 42,313. Correlations with significance levels below 5% appear in bold print.

Table 3: Audit Fee Premium Regressions

	Dependent variable: Ln(Audit fees)			
	(1)	(2)	(3)	(4)
Big 4	0.578***	0.454***	0.234***	0.233***
	(0.013)	(0.012)	(0.018)	(0.018)
Ln(Assets)	0.553***	0.237***	0.306***	0.263***
	(0.002)	(0.004)	(0.014)	(0.015)
Ln(Revenues)		0.214***		0.065***
		(0.003)		(0.007)
Ln(Market Capitalization)		0.157***		-0.013
		(0.004)		(0.008)
Constant	0.921***	0.215***		
	(0.038)	(0.038)		
Estimator	ols	ols	ols	ols
Fixed effects	None	None	Client, Year	Client, Year
Std. errors clustered	No	No	Client, Year	Client, Year
Observations	42,313	42,313	42,313	42,313
R^2	0.722	0.763	0.183	0.195
Adjusted R^2	0.722	0.763	0.076	0.090

Notes: This table presents the results of four OLS regressions regressing audit fees on various sets of covariates. The sample and all variables are as defined in Table 1. Standard errors are presented in parentheses below the coefficients. */**/*** indicate two-sided significance levels below 10/5/1 %, respectively.