STUDY

Comparative study of audit fees in Spain and the most relevant **European Union countries**

CONVENIO ICAC-ASEPUC (2019-2020)



ación Española ofesores Universitarios de Contabilidad



icac Instituto de Contabilidad y Auditoría de Cuentas

By virtue of the agreements reached with the Spanish Association of University Professors of Accounting (ASEPUC), the Instituto de Contabilidad y Auditoría de Cuentas (ICAC) is publishing this Study.

This Study meets the requirements of specific relevance for the disclosure of aspects affecting the application of auditing regulations and the exercise of the powers attributed to the ICAC, as well as the maximum timeliness of the study objectives, both in nature and scope.

The ICAC does not guarantee the accuracy of the data included in the Study, which are different from those provided to the authors for the study.

In order to facilitate the dissemination of these works, they are made public and are available on the website www.icac.gob.es/categorias-publicaciones

The opinions expressed in this study reflect the authors' criteria exclusively and should not be attributed to the Instituto de Contabilidad y Auditoría de Cuentas.

© ICAC. Reproduction of the contents of this publication is authorized, provided the source is acknowledged.

Comparative study of audit fees in Spain and the most relevant European Union countries

Director: Vicente Condor López

José Ángel Ansón Lapeña Pilar Blasco Burriel Vicente Ceamanos Llorens Alicia Costa Toda Jorge Olmo Vera

Zaragoza, September, 2022

*ICAC-ASEPUC Agreement (2019-2022)

Online publication NIPO: 095-22-021-X Published by: Instituto de Contabilidad y Auditoría de Cuentas (ICAC). Ministry of Economic Affairs and Digital Transformation Calle de las Huertas, 26 28014 Madrid Instituto de Contabilidad y Auditoría de Cuentas (ICAC)

COMPARATIVE STUDY OF AUDIT FEES IN SPAIN AND MAIN EU COUNTRIES

ABSTRACT

The main objective of this report is to characterize the audit market in the EU taking into account the audit fees and non-audit fees services. For this purpose, we study the current situation of the audit market and analyze the evolution of the audit fees and non-audit fees. In this line we want to check whether the latest regulatory changes have affected in the fees charged audit market in the EU. We also analyze to what extent there are common patterns between main EU countries, focusing on the differences in the audit costs or along the several economic sectors activity. In addition, in this report we also review the Audit Fees Regulation by main EU countries and principal academic contributions in this topic.

This research focus on a sample of European listed companies. Taking as reference the variable audit fees divided by total assets, we find different patterns among countries depending on the GDP. We also point out differences between activity sectors. In particular the healthcare, technology and industrial sectors have the highest value of the ratio of audit fees respect the asset. On the other hand, fees for non-auditing services (NAS) have been reduced since the approval of EU Regulation 537/2014.

KEYWORDS: Audit fees, non-audit fees, NAS, EU Regulation 537/2014, European Union.

ESTUDIO COMPARATIVO DE LOS HONORARIOS DE AUDITORÍA, EN ESPAÑA Y PAÍSES MÁS RELEVANTES DE LA UE

RESUMEN

El presente trabajo pretende caracterizar el mercado de auditoría en la UE desde la perspectiva de los honorarios que percibe el auditor legal por los servicios prestados a las sociedades, tanto de auditoría como de otra naturaleza, y analizar su evolución temporal para comprobar si tras los últimos cambios normativos implantados en la UE se detectan modificaciones en los mismos. A la par, analizamos en qué medida existe un patrón de costes de auditoría a nivel de los principales países comunitarios, evaluando si existen disparidades entre países y/o entre los segmentos de actividad analizados.

Junto a ello, se presenta una detallada revisión de la regulación vigente en materia de honorarios en los principales países de la UE y de los principales trabajos que se han abordado en la materia.

Los estudios empíricos realizados sobre una muestra de entidades cotizadas europeas ponen de manifiesto que atendiendo a la variable "honorarios de auditoría entre activo total" sí pueden identificarse distintos patrones de tarifación entre países en función de su nivel de PIB y también entre sectores de actividad, destacando el sector sanitario, tecnológico e industrial como los que mayores honorarios de auditoría soportan en relación a su activo total. Por otro lado, los honorarios por otros servicios distintos a la auditoría (NAS, "Non auditing services"), se han visto reducidos a partir de la aprobación del Reglamento UE 537/2014.

PALABRAS CLAVE: Honorarios de Auditoría, otros servicios, Reglamento UE 537/2014, Unión Europea

CONTECT

AB	STRACT	5
RE	SUMEN	5
I.	INTRODUCTION	9
II.	LIMITATIONS ON FEES AND NON-AUDIT SERVICES (NAS) IN THE EUROPEAN REFORM AND ITS IMPLEMENTATION IN THE MEMBER COUNTRIES	11
	 Audit fees and NAS in the European reform 1.1. Fee limitations 1.2. Restrictions on the provision of NAS 	11 11 12
	 Regulation of fees and NAS in the main EU countries	15 18 18 21 22
III.	LITERATURE REVIEW	27
	1. Situation in Europe of the audit, fees, and NAS provision market	27
	2. Empirical work on audit fee drivers	30
IV.	EMPIRICAL ANALYSIS	33
	1. Characteristics of the database and selection of the sample	33
	2. Methodology	36
	 Current situation of audit fees in Europe	37404245
	4. Evolution of audit fees	47
	5. Audit Fees by Sector	49
	6. Analysis of NAS	56
CO	NCLUSIONS	61
Rev	iew of local regulations in force in the main EU countries	61
Emj	pirical studies on fees in the main EU countries	62
BIB	LIOGRAPHY	65
AP	PENDIX	70

TABLES AND GRAPHS INDEX

Table II.1. Services prohibited to PIE in the EU Regulation 537/2014	13
Table II.2. Summary of the European Regulation on Fees and NAS provision	15
Table II.3. Local regulatory review: items analyzed	17
Table II.4. Comparative analysis of local fee regulations	18
Table II.5. Extensions of non-PIE fee limits	20
Table II.6. "Whitelist" in Polish local regulations	23
Table II.7. Whitelist in the UK regulations	25
Table III.1. Explanatory variables of fees in the empirical literature (Widmann et al.2021)	30
Table IV.1.1. Sample Composition	34
Table IV.1.2. Variables analyzed	35
Graph IV.3.1. Comparison of fees and number of audits performed by country 2020	37
Table IV.3.1. Audit fees: Totals, averages, and number of audits performed by countryin 2020 and 2021. GDP by country	38
Graph IV.3.2. Comparison of fees and number of audits performed by country 2020	39
Gráfico IV.3.3. Comparison of fees and number of audits performed by country 2021	40
Gráfico IV.3.4. Comparison between average audit fees with respect to GDP 2021	41
Gráfico IV.3.5. Comparison between average audit fees with respect to GDP 2020	41
Table IV.3.2. Ratios "Audit fees/total assets" by country in 2020 and 2021. GDP by country	43
Graph IV.3.6. Comparison of average fees/assets in relation to GDP 2021	44
Graph IV.3.7. Comparison of average fees/assets in relation to GDP 2020	44
Gráfico IV.3.8. Dendrogram cluster analysis based on the average fees/assets of 2020 in the EU (average linkage of groups)	46
Table IV.4.1. Evolution of variable audit fees/total assets of the audited firm	47
Graph IV.4.1. Audit fees in the main EU countries	47
Table IV.4.2. Pearson correlations. GDP with respect to country averages	48
Table IV.4.3. Pearson correlations. GDP with respect to firms' fees	49
Table IV.5.1. Weight of the sectors by country in the sample	49
Table IV.5.2. Audit fees to segmented assets ratio	50
Graph IV.5.1. Audit fees by sector and country	50
Graph IV.5.2. Audit fees by sector and country	51
Graph IV.5.3. Audit Fee Ratio: Basic Materials Sector	51

Graph IV.5.4. Audit Fee Ratio: Energy Sector	52
Graph IV.5.5. Audit Fee Ratio: Financial Sector	53
Graph IV.5.6. Audit Fee Ratio: Healthcare Sector	53
Graph IV.5.7. Audit Fee Ratio: Industrial Sector	54
Graph IV.5.8. Audit fees ratio: Real Estate Sector	54
Graph IV.5.9. Ratio of audit fees: Technology Sector	55
Graph IV.5.10. Ratio of audit fees: Public services	56
Table IV.5.3. Audit fees by sector of activity	56
Table IV.6.1. Evolution of the ratio "NAS Fees/Audit Fees"	57
Graph IV.6.1. Evolution of the ratio "NAS Fees/Audit Fees"	57
Graph IV.6.2. Evolution of aggregate audit and NAS fees	58
Graph IV.6.3. NAS invoiced by country	59
Graph IV.6.4. NAS Ratio/Total fees billed by the Statutory Auditor	59
Graph IV.6.5. Comparison of NAS in relation to the country's GDP 2021	60
Graph IV.6.6. NAS comparison in relation to the country's GDP 2020	60
Cluster Analysis Clustering History	70

I. INTRODUCTION

This paper presents a comparative study of audit fees in Spain and the most relevant countries of the European Union (EU), i.e., we try to characterize the audit market in the EU from the perspective of the fees received by firms for the services they provide to companies –both audit and others– and we analyze their evolution over time to check whether, after the latest regulatory changes implemented in the EU, changes in them are detected.

In 2014, Directive 2014/56 (European Commission, 2014a), applicable to audits of all companies, and EU Regulation 537/2014 (European Commission, 2014b), applicable to Public Interest Entities (PIEs), were approved at the European level, with the main objective of strengthening confidence in the integrity of financial statements and improving audit quality. This European regulation is the result of a long debate arising from concerns not only about the competence and independence of professionals in the sector but also about the high concentration of the audit market, which is dominated by the Big 4 audit firms and whose size has reached such a magnitude that they present a "systemic risk." To try to correct this high concentration to some extent and also to improve the independence of auditors, the EU has studied various measures such as joint audits, in which medium-sized companies can participate to dynamize the market, mandatory rotation of auditors/ audit firms accompanied by the obligation of a tender or encouraging the development of a single European market for the provision of audit services (European Commission, 2010).

This is a problem that, despite the regulatory progress made, is not over. The Report from the Commission to the European Parliament, the Council, the European Central Bank, and the European Systemic Risk Board on the evolution of the EU market for statutory audit services to EIP (European Commission, 2021), or the initiatives in the United Kingdom, as set out among other documents in the "White Paper for Audit Reform of the Department for Business, Energy and Industrial Strategy (BEIS)" (BEIS, 2021), are good proof of this. The BEIS document proposes reforms, which can be described as radical, such as a 22-point plan for the operational separation in global firms of the audit business from the rest of their businesses.

In terms of services that auditors can provide and fees charged, the reforms contained in Directive 2014/56 and EU Regulation 537/2014 –hereinafter the Directive and the Regulation–, whose transposition in Spain was materialized in the Audit Act (LAC) of 2015¹, aim, among other aspects, to reinforce the principle of auditor independence by introducing safeguard mechanisms such as, in most countries, the establishment of a series of services prohibited to the statutory auditor of the entity or the establishment of limits on the receipt of fees for other services from the audit client, to avoid financial dependence.

There is therefore a recognition by regulators that the fees charged are a key element that may affect the auditor's independence, as well as those that may be received for non-audit services (the so-called "Non-Auditing Services (NAS)") and possible compensation practices between them.

Focusing on these issues, in our study we try to characterize the audit market in the EU from the perspective of the fees received by firms for the services they provide to companies, both audit and non-audit services, and analyze their evolution over time to see if, after the latest regulatory changes implemented in the EU, changes in these fees have been detected. At the same time, we analyze to what extent there is a pattern of audit costs at the level of the main EU countries, assessing whether there are disparities between countries and/or between the segments of activity analyzed².

¹ The Real Decreto 2/2021, of January 12, which approves the Regulations of the Audit Law, reinforces in our country the contents of the European reforms.

² The topic addressed shows a high level of interest in the scientific community, as shown by the recent work of Audit Analytics (2022) and Bunget et al. (2021), discussed below.

The proposed study is structured in five parts, the first three presenting the research context, the review of the local regulations in force, and the relevant literature, respectively. The fourth part includes the presentation of the research methodology and the development of the proposed empirical studies on the characterization of the audit market in the EU from the perspective of the fees charged by firms. Finally, the conclusions drawn from the work carried out are indicated.

II. LIMITATIONS ON FEES AND NON-AUDIT SERVICES (NAS) IN THE EUROPEAN REFORM AND ITS IMPLEMENTATION IN THE MEMBER COUNTRIES

1. Audit fees and NAS in the European reform

1.1. Fee limitations

The European audit reform, embodied as noted in Directive 2014/56 and EU Regulation 537/2014, sought to strengthen the quality of audits and regain users' confidence in the audited financial information, especially in Public Interest Entities (PIEs). To this end, the aim was to reinforce transparency, open up and dynamize the audit market, achieve greater harmonization and convergence in auditing standards in member countries and, of course, reinforce independence. In relation to this last aspect, the European regulations themselves recognize that the provision of additional services unrelated to the audit, the amount of the fees received from the audited entity, or the structure of the fees may threaten the auditor's independence. Therefore, among other measures, restrictions on the provision of non-audit services are extended by creating a blacklist of prohibited services, a limit on the amount of fees for NAS, and another limit for concentration or financial dependence on a client, as well as introducing fee disclosure requirements.

Although the restrictions on NAS and fees are mainly set out in the European Regulation, which is directly applicable without the need for transposition into national legislation, it is true that the Regulation leaves some options open when it comes to its implementation in the member states. In addition, although these restrictions derived from the Regulation are aimed at PIEs and their auditors, we have been interested in knowing to what extent similar restrictions have been extended to other entities not classified as PIEs in the transposition of the reform to each of the member states.

Before reviewing the state of affairs in the main EU countries analyzed, it is worth recalling the provisions of the EU Directive and Regulation on fees and restrictions on the NAS provision.

Regarding the first aspect, Article 25 of the Directive requires member states to regulate the fees set for statutory audits so that they are not influenced or determined by the provision of additional services to the audited entity and cannot be based on any type of contingency.

Along the same lines, Article 4.1 of the EU Regulation establishes a general principle: "fees for carrying out statutory audits of public interest entities may not be contingent," meaning that such a circumstance occurs when the remuneration is calculated according to a pre-established formula based on the results of a transaction or the work performed, for example.

The rest of the limitations related to fees are found in the EU Regulation and therefore apply only to PIEs, and the Directive does not contain any additional restrictions.

In this regard, Article 4.3 of the EU Regulation establishes an important limitation to avoid concentration or financial dependence on a single client to ensure that the total fees paid by a PIE in each of the last three consecutive financial years do not exceed 15 % of the total fees obtained by the statutory auditor or audit firm. If they exceed 15 %, the statutory auditor shall disclose this to the audit committee, which shall discuss with the audit committee the threats to its independence and the safeguards taken to mitigate them. The audit committee shall consider whether the audit engagement should be subject to a quality control review by another statutory auditor or audit firm before the audit report is issued.

If the fees paid by such PIE remain higher than 15 % of the total fees received by such statutory auditor or audit firm or, as the case may be, the group auditor performing the statutory audit, the audit committee shall decide, based on objective reasons, whether the statutory auditor or audit firm or the group auditor of such entity may continue to perform the statutory audit for an additional period which shall in no case exceed two years.

Additionally, Article 4. 2 of the EU Regulation introduces another limitation referring to the fees that may be received for the provision of NAS to PIEs when this type of services has been provided during a consecutive period of three years, with respect to which it is established that the total fees received for non-audit services in the PIE, may not exceed 70 % of the average fees paid in the last three consecutive years for the statutory audit or audits of the audited entity and, where applicable, of its parent company, of the companies it controls and of the consolidated financial statements of said group of companies. Fees for non-audit services required by national or European legislation are excluded from this calculation.

However, by way of exception, the EU Regulation allows member states to provide that a competent authority may allow a statutory auditor or audit firm to be exempted from this 70 % limitation at the request of the auditor concerned and for a period not exceeding two financial years. It also empowers member states to apply more stringent requirements than those developed in Article 4 of the Regulation.

The limitation above of not exceeding the percentage of 70 %, obtained from the comparison between the fees derived from the provision of non-audit services and those corresponding to the performance of the audit of accounts, is motivated by the fact of considering that the proportion between audit fees and fees for other services may affect, as has been pointed out, the auditor's independence in the performance of his audit work, to the point of leading to the establishment of a percentage as from which it is understood that the lack of independence occurs in any case³.

Another novel aspect of the European reform, which aims to make the relationship between the statutory auditor and the audited entity more transparent, is the requirement to disclose the fees paid for the audit and NAS in the notes to the individual and consolidated financial statements. This requirement is set out in Article 18.1(b) of Directive 2013/34/EU of 26 June, which states that PIEs and large companies shall provide information in the notes to the financial statements on the total fees for the financial year charged for the statutory audit, as well as the total fees for other assurance and tax advisory services and other non-audit services, and this, where applicable, for each statutory auditor or audit firm⁴.

However, Article 18.3 of the Directive 2013/34/EU qualifies that member states may allow that the above breakdown is not required in the individual financial statements of the company, provided that such information is included in the consolidated financial statements of the group to which the company belongs.

1.2. Restrictions on the provision of NAS

As has been pointed out, the European reform underlines and clarifies the incompatibility for the statutory auditor of providing the company with additional services not related to the audit (for example, tax, legal, human resources, consulting, etc.), as they constitute a clear threat to the auditor's independence.

³ BOICAC 110/2017 Consultation 2. Rubio Herrera (2016) refers to this limitation as "disproportionate fees for different services" or "captive" fees due to the possible effects that this situation may generate on the objective judgment required by the audit of accounts.

⁴ It is precisely this disclosed breakdown that allows us to carry out the empirical analyses presented throughout this paper.

Table II.1. Services prohibited to PIE in the EU Regulation 537/2014

SERVICES		DETAILS OF PROHIBITED SERVICES						
a)	Tax services related to:	 the preparation of tax forms the taxation of labor income customs duties the search for public subsidies and tax incentives, unless the legislation requires support in respect of these services to the statutory auditor or audit firm assistance in connection with tax audits by the tax authorities, unless the law requires the statutory auditor or audit firm to provide support in respect of such services calculation of direct and indirect taxes and deferred payment of taxes tax advice 						
b)	Services involving	any intervention in the management or decision-making of the audited entity.						
c)	Accounting servi	ces and preparation of accounting records and financial statements.						
d)	Payroll-related se	ervices.						
e)		plementation of internal control or risk management procedures related to the preparation and/ cial information or the design or implementation of computerized financial information systems.						
f)	Valuation service services.	\mathbf{s} , including valuations performed in connection with actuarial services or litigation assistance						
g)	Legal services related to:	 the provision of general advice negotiations on behalf of the audited entity the defense of the client's interests in the resolution of disputes 						
h)	Services related to	the internal audit function of the audited entity.						
i)	i) Services related to the financing, capital structure, and allocation and investment strategy of the audited en- tity, except for the provision of verification services in relation to financial statements, such as the issuance of compliance letters in relation to prospectuses issued by the audited entity.							
j)	j) The promotion, trading, or underwriting of shares of the audited entity.							
k)	 k) Human resources services related to: 1. management positions that may have a significant influence on the preparation of the accounting records or financial statements that are the subject of the statutory audit, such services include: seeking or selecting candidates for such positions or checking the references of candidates for such positions 2. the structuring of the organizational design, and 3. cost control. 							

In this regard, Article 5 of the EU Regulation states: "Neither the statutory auditor nor audit firm carrying out the statutory audit of a PIE, nor the members of the network of which the statutory auditor or audit firm is a member, may provide within the Union, directly or indirectly, to the audited entity, its parent undertaking or the undertakings it controls, the prohibited non-audit services during the period between the beginning of the audited period and the issuance of the audit report."⁵ Prohibited non-audit services are understood to be those listed in Table II.1.

In addition to this "blacklist," some options allow discretion to the member states. They refer to the possibility of allowing the provision of the tax services detailed in points 1, 4, 5, 6, and 7) of Table II.1

⁵ For type e) services, services for the design and implementation of internal control procedures and computerized financial information systems, it is extended to one year earlier.

and valuation, provided that the following requirements are met and on which the audit committee should formulate appropriate guidelines:

- a. They do not have a direct effect or have a relatively insignificant effect, separately or in the aggregate, on the audited financial statements;
- b. The estimate of the effect on the audited financial statements is fully documented and explained in the supplementary report to the audit committee; and
- c. The statutory auditors or audit firms respect the principles of independence.

Consequently, as we gathered in Condor, Ansón, and Costa (2018), the services that an auditor may provide to the EIP of which it is a statutory auditor are limited to those that are not strictly prohibited, also taking into account that member countries were empowered, under the EU Regulation itself, to prohibit other services in addition to those listed above - if they consider them a threat to independence - and even to establish stricter rules governing the conditions under which the statutory auditor may provide the admitted services.

In any case, the provision of permitted services will be subject to the express authorization of the company's Audit Committee after evaluating the threats identified and safeguards applied by the auditor and must of course respect the limitations imposed on fees referred to above.

In summary, from the above, we can conclude that the options open to member states in the application of the EU Regulation are limited to the following aspects only:

- 1. allowing certain tax and valuation services, subject to the conditions above.
- 2. Extending the list of prohibited services.
- 3. To establish stricter rules regulating the conditions under which the statutory auditor may provide the admitted services.

From all the above, we can highlight the main aspects of the European reform regarding fees and the provision of NAS, as shown in Table II.2 below.

	EU Regulation (PIE)	Directives (not PIE)			
Fee Fixing	Non-contingent (Art. 4.1 Rgto)	Non-contingent			
Fee limits	Concentration: not to exceed 15% of the total fees of the au- ditor (Art. 4.3 Rgto).NAS fees: may not exceed 70% of the average of the audit fees for the last three financial years (Art. 4.2 Rgto).				
Exceptions:	Audit Committee may allow exceeding 15% limit for a maximum period of 2 years (Art. 4.3.2 Rgto).	Not established			
	Member States may apply stricter requirements (Art. 4.4 Rgto).				
Disclosure of information	 PIEs and large companies: requirement to disclose audit and NAS fees in the notes. Member States may allow disclosure not to be required in the company's financial statements as long as it is included in the consolidated accounts (Art. 18.3 Directive 2013/34/EU). 				
NAS provision	 Prohibited NAS list (Art. 5 Rgto). Deadline: audited financial year up to the reporting date + previous financial year for services of design and implementation of internal control procedures and computerized financial information systems. Not detailed. Deadline: Year audited up to the reporting date + previous financial year for services of design and implementation of internal control procedures and computerized financial information systems. 				
Exceptions	 Exceptions Member states may: prohibit additional services. permit the provision of certain tax and valuation services, provided that the requirements are met. establish stricter rules governing the conditions under which permitted NAS may be provided. 				

The following section presents the results of the comparative analysis of the regulatory adaptations that have been made to this reform in the main EU countries, highlighting the extent to which the exceptions or extensions allowed by the EU Regulation have been adopted and whether the local regulations applicable to non-PIEs fully or partially contemplate the limitations imposed on PIEs.

2. Regulation of fees and NAS in the main EU countries

As mentioned in the introduction, one of the objectives set for our work was to carry out a comparison of the regulations in force in the field in question (fees and NAS provision) in the main EU countries, in addition to the United Kingdom and the United States, due to the relevance of the latter countries.

The first challenge we faced was to obtain the reference regulations applicable in each country, translate them when they were not available in English and ensure that the team's interpretation of them was correct. Three sources of information were used in order of relevance in terms of their con-

tribution: contacts with auditors working in the countries under analysis, collaboration with national regulatory bodies⁶, and personal contacts with university professors from the Erasmus network.

With all this, we believe that the exhaustive regulatory review, adjusted to the regulations in force in each country at the date of preparation of the study (June/July 2022), guarantees a high degree of reliability and contrast of the conclusions drawn from its analysis.

The items analyzed focus on the objectives set for this report: limitations on fees and NAS provision in the main EU countries, assessing whether the local regulations in force have expressly regulated the exceptions contemplated in the EU Regulation for PIE and, if applicable, whether such local regulations have extended the limitations and restrictions to non-PIE⁷.

Specifically, the regulatory review has been systematized according to the items shown in Table II.3, which should be interpreted in the sense indicated therein.

⁶ Obtained from the Accountancy Europe Report (2021). This interesting document, in addition to collecting data on the regulatory bodies in each country, shows that the organization of public oversight of audit activity in Europe is still very diverse. The main differences are detected in the creation or not of an advisory committee, the source of funding of public oversight bodies, the activities delegated to professional bodies, and the level of transparency of the work of public oversight bodies.

⁷ In any case, the reader must take into account that the definition of PIE, large company and SME presents differences between countries, an aspect that has not been considered in our comparative analysis

Table II.3. Local regulatory review: items analyzed

1. Contingent Fees			
1.1. Is there an explicit local requirement that audit fees should not be "influenced" by the provision of non-audit services?	We reviewed whether or not the non-contingent nature of audit fees is explicitly mentioned in the regulations in force in each country.		
1.2. Does the local contingent fee legislation apply only to PIEs?	Does the "non-contingent fee" rule apply exclusively to PIEs, or is it generalized to all types of audited companies?		
1.3. Does the local legislation contain stricter provisions on contingent fees than the European contingent fee standard? Any other stricter requirements?	We checked whether any local legislation on contingent fees contains any stricter requirements or nuances than those established by the EU regulation.		
2. Limits to fees			
2.1. Does the local legislation include the possibility for a competent authority to allow the audit firm to exceed 70% in accordance with Article 4.2.3?	We checked whether the local legislation allows a com- petent authority to allow the audit firm to exceed 70%, which is included in the EU Regulation itself.		
2.2. Does the local legislation contain stricter provisions regarding the 15% limit according to Article 4.3.2?	We checked whether the local legislation contains any stricter provisions in relation to the 15% limit covered by the EU Regulation.		
2.3. Does the local legislation regarding the % limit apply only to PIEs?	Does the fee limitation apply exclusively to PIEs, or is it generalized to all types of audited companies?		
2.4. Does the local legislation contain stricter provisions than the Regulation on the limits? Any other stricter requirements?	We checked whether any local legislation contains stricter requirements or nuances related to fee limits than those established by the EU reform.		
3. Breakdown of information on fees			
3.1. Is there an explicit local requirement on the disclo- sure of audit fees?	We verified whether the local regulations contain any mention, similar or different to that established by Directive 2013/34/EU on fee disclosure.		
3.2. Does the local legislation allow not to include the breakdown of fees if they are included in the consolidated ACs of the group, in accordance with Article 18.3?	Does the local legislation contemplate the option allowed to member states by Article 18.3 of Directive 2013/34/ EU?		
3.3. Does the local legislation only apply the disclosure of information to PIEs and large companies?	Does the fee disclosure obligation apply exclusively to PIEs and large companies, or is it generalized to all types of audited companies?		
3.4. Does the local legislation contain stricter provisions on fee disclosure than the Regulation? Any other stricter requirements?	We checked whether any local regulations contain stricter requirements or nuances than those established by the EU regarding fee disclosure.		
4. Prohibition of Non-Audit Services (NAS)			
4.1. Does local legislation extend Article 5 to non-PEIs, other than those belonging to the group chain of an EIP, detailing the prohibited services?	We reviewed whether the local legislation extends the prohibition on the provision of NAS to all types of audit- ed companies, detailing the prohibited services.		
4.2. Does the local legislation contain a "whitelist" of per- mitted NAS?	Does the local legislation contain a "whitelist" of permit- ted NAS?		
4.3. Does the local legislation describe prohibited services other than those listed in Article 5 of the Regulation?	Has the option allowed member states to extend the list of prohibited services been used in the local legislation?		
4.4. Does the local legislation authorize the provision of the services listed in Article 5.3 as being of minor importance?	Has the option allowed member states to permit certain tax and valuation services to be used in the local legislation?		
4.5. Does the local legislation contain stricter provisions regarding the period within which prohibited services are not allowed to be provided?	We checked whether in relation to the period within which prohibited services are not allowed to be provided, stricter rules have been established in the local regulations.		

	Germany	Austria	Belgium	Denmark	Spain	Finland	France	Ireland	Italy	Netherlands	Poland	Portugal	Czech Republic	Romania	Sweden
1. Cor	1. Contingent Fees														
1.1.	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
1.2.	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
1.3.	NO	NO	NO	NO	YES(*)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2. Fee	limits														
2.1.	NO	YES	YES	YES(*)	NO	YES	YES	YES	NO	NO	YES	YES	NO	NO	YES
2.2.	NO	YES(*)	NO	NO	YES(*)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.3.	NO (*)	NO(*)	NO(*)	YES	NO(*)	YES	YES	YES	NO(*)	YES	NO(*)	YES	YES	YES	YES
2.4.	YES(*)	YES	YES(*)	NO	YES	NO	NO	NO	YES	YES	YES	YES	NO	NO	NO
3. Fee	information	n breakdow	'n												
3.1.	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
3.2.	YES	YES	YES	YES	NO	NO	YES	YES	YES	YES	NO	NO	YES	YES	NO
3.3.	YES	YES	NO	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES	YES
3.4.	NO	NO	YES	NO	YES	YES	NO	NO	NO	NO	YES	YES	NO	NO	YES
4. Pro	hibition on	Non Audit	Services (N	JAS)											
4.1.	YES(*)	YES(*)	YES	YES(*)	YES(*)	NO	NO	NO	YES(*)	NO	NO	NO	NO	NO	NO
4.2.	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO
4.3.	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES(*)	YES(*)	NO	NO	NO	NO
4.4.	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO	YES	YES	YES
4.5.	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO

Table II.4. Comparative analysis of local fee regulations

(*) Comments are provided in the text of the paper.

The results of the thorough review are summarized in Table II.4. The main conclusions are presented below, grouped according to the four groups of items differentiated in the tables.

2.1. Contingent Fees

The first aspect analyzed was to verify whether local regulations have explicitly included the non-contingent nature of statutory audit fees and their setting in such a way that they are not influenced or determined by the provision of additional services.

As shown in Table II.4, in the transposition of the Directive that has been carried out in all the countries included in this study, this requirement has been expressly included in their local regulations. Moreover, the requirement is applied across the board to all statutory audits carried out (both PIEs and non-PIEs).

On the other hand, almost all local regulations have limited themselves to transcribing the provisions of Article 25 of the Directive without adding any additional nuances or restrictions. However, it should be noted that the Spanish regulations provide a more detailed definition of what is meant by contingent fees.

Along the same lines, the regulations in force in the United Kingdom and the USA indicate the non-contingent nature of audit fees for all types of companies.

2.2. Limits on fees

As noted in section 1.1 of this paper, Article 4 of the EU Regulation, applicable only to PIEs, contains two important limitations related to fees and empowers member states to apply stricter requirements.

The first of these, contained in Article 4.2, imposes a limit on fees received for non-audit services,

which may not exceed 70 % of the average audit fee paid in the last three financial years in the PIE. However, member states are allowed to provide that a competent authority may, at the request of the auditor concerned and for a period not exceeding two years, allow exceptions to this limitation.

Consequently, the Regulation does not in itself allow the 70 % limit to be exceeded locally, but the local regulations applicable in each country must explicitly state this. The review we have carried out in relation to this issue has focused precisely on this aspect, i.e., on verifying whether or not the local regulations contemplated the possibility of making use of this exception (item 2.1), whether it applied exclusively to PIEs or whether it had been generalized to all types of audited companies (item 2.3) or whether stricter provisions than those established in the EU Regulation were contemplated locally (item 2.4).

Of the 15 EU countries analyzed, nine have expressly included in their regulations the possibility of exceeding this limitation on an exceptional basis. However, Denmark only allows it for a maximum period of one year. On the other hand, the regulations in force in Germany, Spain, Italy, the Netherlands, the Czech Republic, and Romania do not include this possibility.

The second of the limitations contemplated in Article 4.3 of the EU Regulation aims to avoid concentration or financial dependence on a single client. It imposes that the total fees paid by a PIE in each of the last three consecutive financial years should not exceed 15 % of the total fees obtained by the statutory auditor or audit firm. Unlike the 70 % limit mentioned above, the Regulation itself already provides for the possibility that this 15 % limit may be exceeded for two years, with the authorization of the Audit Committee and without the need for local regulations to regulate it explicitly.

Therefore, as far as PIE audits are concerned, all countries could already de facto exceed this 15 % limit for a period not exceeding two years by the mere application of the EU Regulation.

In fact, in the review of local regulations carried out (item 2.2), we verified in this respect that in most countries, their regulations do not contain any express reference to the 15 % limit or, if they do, it is worded in identical terms to the EU Regulation, as in the case of Belgium, Finland, France or Portugal.

Only in two EU countries did we detect more demanding nuances than those established in the EU Regulation in relation to this issue. These are Austria, which allows the 15 % limit to be exceeded only for a period not exceeding one year, and Spain, which also restricts it to one year and only to medium and small audit firms.

We were also interested in verifying whether, in the local regulations in force in the sample of countries analyzed, these limits introduced by the EU Regulation in relation to PIE fees have been extended under the same or different conditions to other companies that are not considered as such (item 2.3). In this regard, it can be seen that 9 of the 15 countries analyzed have not extended the application of the limits above to other non-PIE companies. The rest, which have regulated these matters to some extent, present nuances that are certainly different in each of them, as seen in Table II.5.

COUNTRY	Local fee regulations
GERMANY	There is, according to section 319 of the Commercial Code, a limit applicable to all entities, PIEs and non-PIEs, whereby an auditor may not audit an entity if in the last five years he has received more than 30 % of the total income from his professional activities from the company to be audited unless the Association of Chartered Accountants issues a special temporary permit.
AUSTRIA	 According to Article 271 of the Commercial Code, two different limits are contemplated which imply the exclusion of the auditor when a % of his total income derives from a single company or its subsidiaries: For large companies it is 15% of the last 5 years (same as for PIE). For all companies it is 30% of the last 5 years.
BELGIUM	Article 3.64.3 of the Companies and Associations Code incorporates a differentiated limit for non-EIP companies that are part of a consolidable group. For these, the fees for NAS not required by law may not exceed the audit fees.
SPAIN	Article 25 of Law 22/2015 on Account Auditing ⁸ regulates the limits to financial dependence for non-PIEs in the following terms: when the fees for the provision of audit and non-audit services to the audited entity in the last three consecutive financial years represent more than 30 percent of the total annual income of the auditor, audit firm or audit network, the latter must refrain from performing the audit of annual accounts corresponding to the following financial year.
ITALY	Article 19-ter of the Italian Commercial Code ⁹ extends the requirements of Articles 4.1 and 4.2 (70 percent limit) of the EU Regulation applicable to PIEs to the so-called "entities subject to the intermediate regime," as defined in Article 19-bis of the Commercial Code.
POLAND	Polish law ¹⁰ provides that the auditor may not audit the annual accounts of a non-PIE entity if it represents at least 40 % of the firm's total annual revenues during any of the last 5 years.

Table II.5. Extensions of non-PIE fee limits

To conclude the comparative analysis of fee limitations, item 2.4 of Table II.4 summarizes whether, by virtue of the items analyzed previously (2.1, 2.2, and 2.3), it can be concluded that the local regulations are more demanding than the European regulations by including nuances, extending their application not only to PIEs (or introducing some type of limitation for non-PIEs) and/or being more demanding in terms of the time horizon over which they apply this limit. It can be seen that slightly more than half of the countries analyzed (8 countries) have extended the requirements of the European reform in some way, specifically Germany, Austria, Belgium, Spain, Italy, the Netherlands, Poland, and Portugal.

In addition, the state of play of the regulations in force in the United Kingdom¹¹ and the USA has been analyzed.

Starting with the UK, it should be noted that when the UK left the EU, the Regulation had already been incorporated into its regulations, although some modifications were introduced as a result of Brexit. In this regard, the 70 % limit for NAS fees is maintained, but the limit of financial dependence or concentration contains some specificities, setting different limits depending on the type of company. Thus, for PIEs, the financial dependence limit is set at 10 % of the total fees, while for the

⁸ The details of how this percentage should be calculated, as well as the particular cases, can be found in articles 63 and 64 of the Regulation approved by RD 1/2021 of January 12.

⁹ Legislative Decree of January 27, 2010, n. 39 consolidated with Legislative Decree of July 17, 2016, n. 135.

¹⁰ Article 70.1 of the Law of May 11, 2017, on statutory auditors, audit firms, and public oversight.

¹¹ Extracted from the 2019 revised Ethics Standards issued by the Financial Reporting Council.

rest it is 15 %. If the fees to a client are between 5 %-10 % (PIE) or 10 %-15 % (non-PIE), the audit will be allowed to be carried out after analysis with the ethics partner and evaluation of the need to implement possible safeguards. Additionally, the computation of the total fees to be considered presents different casuistry:

- a. If the engagement partner participates in the firm's overall profits, the firm's total fees will be considered.
- b. If the working partner participates only in the profits of a part of the firm (a department, a geographical area, ...) the percentage is calculated only on that part of the firm. If the percentage is breached in this case b, the audit may be performed by another part of the firm (e.g., another geographical area).

In reviewing the regulation of these issues in the USA, we verified that there are no specific mandatory regulations in that country regarding fee limits. However, in relation to excessive financial dependence on a single client, the AICPA Code of Professional Conduct (section 1.210.010, paragraph 16) treats it as a threat to independence without setting specific limits or percentages. Specifically, the AICPA Guide to Independence, which is a guide for assistance and is not normative in nature, mentions the following: "In general, if a firm obtains more than 15 % of its revenue from an SEC audit client or group, independence could be affected because it could cause the firm to be dependent on that client or group".

2.3. Breakdown of fee disclosures

The next block of questions or items analyzed compares the information required to be disclosed in each country on the fees paid to auditors.

Item 3.1 is aimed at verifying whether, as expected, the countries in the sample have transposed Directive 2013/34/EU, which, as noted in section 1.1 of this paper, requires disclosure in the notes to the individual and consolidated annual accounts of the fees paid for the audit and NAS. We also analyzed whether the countries have allowed, on the basis of Article 18.3 of the Directive, not to include this breakdown in the annual financial statements of the companies when this information is included in the group's consolidated accounts (item 3.2).

As can be seen in Table II.4, all the countries analyzed have included the fee disclosure requirement in their local regulations. Most of them have also made its application more flexible by making use of article 18.3 of the Directive, allowing non-disclosure at the level of individual accounts when the group reports in its consolidated accounts. Only 5 countries (Spain, Finland, Poland, Portugal, and Sweden) have not made use of this option.

In addition, we have verified whether local regulations have gone beyond the European reform requirements, which only demand disclosure of this information for PIEs and large companies (item 3.3). The comparative analysis shows that only Belgium and Portugal, i.e., 2 of the 15 countries included in the sample, have generalized the obligation to disclose fees to all types of companies. Most of them, therefore, maintain the disclosure requirements at levels similar to those of the European reform, although with nuances, because for example Germany, Austria, Poland, and Romania state that it does not apply to small companies; in Italy the disclosure is not required if there is the possibility of presenting abridged annual statements, and the Irish regulations exempt medium-sized, small, and micro companies from disclosure. This diverse casuistry, together with the different definitions of "large company" and "SME" in each country mentioned above, means that European fee disclosure requirements are not very homogeneous and not at all generalizable.

In item 3.4, we summarize whether, in the light of what has been analyzed in the sample in terms of fee disclosure in items 3.1, 3.2, and 3.3, it can be concluded that the local legislations are more demanding than the Regulation because they have stricter provisions or requirements. The conclusion we obtain is that, in approximately half of the countries, local legislation is more stringent because it

does not allow the exemptions from disclosure that are included in the European regulation due to the size of the entity or because the disclosure is included in the consolidated accounts of the group to which the company belongs.

When analyzing the disclosure requirements in force in the United Kingdom, we find that it includes the obligation to disclose fees, the exemption for individual accounts in line with Article 18.3 of the Directive, and, additionally, it allows not including the breakdown of non-audit fees corresponding to the auditor's partner, when the total remuneration for all those services rendered is insignificant –not exceeding £10,000, or 1 % of the total audit remuneration received by the company's auditor in the most recent fiscal year–.

However, the UK's rules can be considered more demanding than the European ones, given that the fee disclosure requirement applies to both PIEs and non-PIEs, albeit with a different requirement level, logically higher in the case of PIEs. In addition, when the remuneration includes benefits in kind, the nature and estimated monetary value of those benefits must be disclosed, and wh. When one natural or legal person is appointed as auditor, the remuneration paid to each of them must be disclosed.

As far as the USA is concerned, the SEC requires mandatory disclosure of fees only for public (listed) companies, but not in the notes to the financial statements but in Schedule 14A¹² to be filed annually. A priori, the US legislation could be considered less strict because it only applies to listed companies and not to the whole range of PIEs. However, it incorporates interesting nuances that we do not find explicitly in the European legislation, for example, the need to detail the fees for the last two financial years or the requirement to disclose the policies and procedures for prior approval of the audit committee or to break down the percentage of audit hours performed by personnel not hired full-time and indefinitely by the audit firm, in the event that this percentage exceeds 50 % of the total hours of the audit.

2.4. Restrictions on the provision of NAS

As indicated in point 1.2 of this paper, the restrictions on the provision of NAS imposed in the European reform are specified in an exhaustive list of "prohibited services" to the auditor of a PIE (See summary in Table II.1), although the EU Regulation leaves some minor issues open to the member states that can be summarized in the following aspects:

- 1. allowing certain tax and valuation services, subject to the above conditions.
- 2. Extending the list of prohibited services.
- 3. Establish stricter rules governing the conditions under which the statutory auditor may provide the admitted services.

In our review of local regulations, we were interested in analyzing the extent to which member states have made use of these options contemplated by the EU Regulation, in addition to verifying the extent to which the list of prohibited services has been extended to other types of audited entities other than PIEs.

Thus, in item 4.1, we review whether local legislation has extended Article 5 of the EU Regulation to non-PIEs, other than those belonging to the group chain of a PIE. As seen in Table II.4, 9 of the 15 EU countries analyzed do not include in their local regulations any explicit reference to the prohibition of the provision of NAS in the case of non-PIE companies. For example, the Audit Act of the Czech Republic only refers to the prohibition of providing services that generate a "conflict of interest" without providing a specific list. However, through their International Code of Ethics, Czech auditors have a guide to determine those that generate a conflict of interest and the safeguards to be applied.

¹² Schedule 14A determines the information that must be contained in the Proxy Statement, a document that the SEC requires to be filed with the information related to the matters to be discussed at the Shareholders' Meeting so that the readers of the financial statements are adequately informed and can make the appropriate decisions.

Therefore, only 6 countries in the sample have extended the prohibition to the provision of NAS to non-PIEs, although the list of services prohibited to these entities is not as broad and exhaustive as that contained in Article 5 of the EU Regulation. Thus, for example:

- The German Commercial Code (section 319) prohibits, unless insignificant, the keeping of books or preparation of financial statements, the performance of internal audits, the provision of management or financial services, and the provision of actuarial or valuation services.
- In Denmark, the prohibition extends to public sector audits (municipalities and regional governments) where, according to the ECG (European Contact Group), non-audit services are not permitted.
- In Italy, Article 5.1 of the Regulation also applies to intermediate companies¹³.
- In Austria and Spain, there is also no coincidence between the services prohibited to non-PIEs and those established by the Regulation; for example, the Spanish regulations applicable to non-PIEs do not expressly prohibit tax services.

On the other hand, in the review carried out, it has come to our attention that some countries include in their local regulations a "whitelist" of permitted NAS (item 4.2). However, this is rare, as we have only found it in the case of Poland (see details in Table II.6) and, as we will comment below, the United Kingdom.

Table II.6. "Whitelist" in Polish local regulations

List of services explicitly permitted in Poland

- a) Services referred to in Article 15, paragraph 3 of the Act of December 7, 2000, on the functioning of Cooperative Banks and their affiliated Banks.
- b) Services of conducting due diligence procedures in relation to the economic-financial situation, and issuing letters certifying the prospectuses issued by the audited entity.
- c) Assurance services concerning pro forma financial information, forecasts of results or estimated results published in the prospectus issued by the audited entity.
- d) Examination of the historical financial information of the Prospectus referred to in the Commission Regulation (EC) No. 809/2004 of 29, regarding the information contained in the prospectuses, as well as the format, incorporation by reference, and publication of such prospectuses and dissemination of advertisements.
- e) Verification of consolidation packages.
- f) Confirmation of compliance with the terms of loan agreements concluded on the basis of the analysis of financial information from the audited financial statements.
- g) Assurance services in the preparation of reports on corporate governance, risk management, and corporate social responsibility.
- h) Services consisting of the evaluation of the conformity of the information disclosed by financial entities and investment companies with the requirements regarding the disclosure of information on capital adequacy and variable remuneration.
- i) Certification of reports or other financial information for supervisory bodies, the supervisory board, or other controlling authority of the company, or owners, exceeding the scope of the statutory audit to assist these authorities in fulfilling their statutory duties.

¹³ The entities subject to the intermediate regime are defined in article 19-bis of the Commercial Code.

Additionally, we have verified that the option open in the EU Regulation to member states to extend the list of prohibited services beyond those listed in Article 5 has not been used frequently (item 4.3) since only the Netherlands and Poland have used it. Specifically, the Netherlands regulation explicitly prohibits the provision of any service other than the audit itself in the case of PIEs, i.e., in this country the possibility of providing NAS in the case of being an auditor of a PIE is completely eliminated. In the case of Poland, although it does not expressly mention the prohibition of other services in addition to those mentioned in the Regulation, the fact of prohibiting for PIEs any type of service other than those allowed in the "Whitelist" (Table II.6), would imply adding more prohibited services.

In item 4.4 we have checked whether local legislation has made use of the possibility of allowing certain services (basically tax and valuation services) when these are relatively unimportant. In this regard, we verified that most local regulations have explicitly included this option; in fact, 11 of the 15 countries analyzed include it, and only Italy, the Netherlands, Poland, and Portugal do not.

The last issue we have analyzed is to verify whether the local regulations contain stricter provisions regarding the period in which prohibited services are not allowed to be provided (item 4.5). This circumstance was also not very frequent in the sample analyzed since only the regulations of Belgium, Poland, and, indirectly, the Netherlands include stricter time limits since, as mentioned above, in that country the firm that carries out the statutory audit of a PIE cannot provide any type of additional service for that organization and entities affiliated to that organization. The extensions of deadlines provided for in Belgium and Poland, respectively, are as follows:

- Belgian local regulations extend to two years prior to the appointment, not only the performance of services for the design and implementation of internal control procedures and computerized financial information systems but also the performance of services related to the keeping of accounts or the preparation of annual accounts and the engagement of management personnel of the company to be audited.
- In the case of Poland, it is extended to the year prior to the audit not only for services of design and implementation of internal control procedures and computerized financial information systems but also for services of maintenance/preparation of accounting books and documentation or financial statements.

To conclude this section, we comment below on the most important aspects that differentiate the regulations of the United Kingdom and the United States with respect to those in force at the European level regarding the prohibition of the provision of NAS.

In relation to the United Kingdom, it should be noted that its 2019-revised ethics standards, issued by the Financial Reporting Council, establish that an audit firm belonging to a network and carrying out statutory audits of public interest entities shall not provide the audited entity, its parent company in the United Kingdom or its controlled companies worldwide with services other than those detailed in Table II.7¹⁴:

¹⁴ subject also to the approval of the audit committee after it has adequately assessed the threats to independence and the safeguards applied in accordance with the aforementioned ethical standard.

Table II.7. Whitelist in the UK regulations

List of services explicitly permitted in the UK

- a) Reports required by a competent authority or regulator.
- b) In the case of a controlled company based in a third country, the information required by the laws of that jurisdiction in which the auditor is permitted to perform that engagement.
- c) Reporting on internal financial controls where required by law or regulation.
- d) Reports on iXBRL tagging of financial statements.
- e) Reports required or provided to the competent authorities supervising the audited entity, when the authority has specified the auditor to provide the service.
- f) Reviews of interim financial information, as well as providing verification of interim earnings.
- g) Where not otherwise required by law or regulation, non-audit services provided as an auditor of the entity, or as a reporting accountant, in relation to information of the audited entity in respect of which it is probable that an objective, reasonable, and informed third party would conclude that the understanding of the entity obtained by the auditor is relevant to the service, and where the nature of the service would not compromise independence.
- h) Extended audit or assurance work, authorized by those charged with governance, performed on financial or performance information and/or financial or operating controls in a relevant entity for a third-party service provider, where this work is closely related to the audit work.
- i) Additional assurance work or agreed-upon procedures, authorized by those charged with governance of the entity, performed on material included in or referred to in the annual report of an entity relevant to an engagement.
- j) Reports on government grants.
- k) Reports on covenants or loan agreements, which require independent verification, and other reports to third parties with whom the entity relevant to an engagement has a business relationship.
- 1) Services that have been the subject of a request to the Competent Authority in accordance with Rule 79 of the Auditors and Third Country Auditors Act.
- m) Generic subscriptions that provide factual updates on changes in applicable laws, regulations, or accounting and auditing standards.

From the comparison between the whitelist included in the UK regulation and the list of prohibited services in the EU Regulation, no major differences seem to be deduced since none of the services prohibited by the EU are among those permitted in the UK, so it could be said that those permitted in the UK are also allowed in the European context.

Limitations on the NAS provision have also been extended in the UK beyond PIEs. Thus, in relation to non-PIEs, the local rule includes in detail the services that cannot be provided and those that could generate a problem of independence. For example, it explicitly prohibits the provision of internal audit services and imposes clear limitations on actuarial valuation services or litigation assistance to the auditor of a non-PIE.

Focusing on the USA, the list of prohibited services is somewhat stricter in the area of human resources and tax services, adding to those included in the EU Regulation the prohibition to participate in the selection of company managers and non-management positions in financial accounting, administrative or control positions or the prohibition to provide tax services to persons in functions

of supervision of financial information. However, we must not forget, as has been pointed out, that these prohibitions only apply in the United States to listed companies and not to all PIEs, as is the case in the EU.

By way of summary, if we leave aside the contingent fees, as there are no differences between countries, we can draw the following conclusions from all that has been analyzed up to this point:

• There are seven countries (Finland, France, Ireland, Netherlands, Czech Republic, Romania, and Sweden) that limit themselves to transcribing the requirements of the EU Regulation and the Directive to their regulations without extending them to non-PIEs. On the opposite side is Belgium, which applies everything in the same terms to non-PIEs.

In other countries, some aspects have been generalized to all entities and others have not. For example, in Germany, Austria, Spain, and Italy the only aspect that non-PIEs are not obliged to do is to disclose information on fees to small companies.

- In relation to the limit on fees, again there are countries whose regulations are either silent or are drafted in the same terms as the EU Regulation, such as Denmark, Finland, France, Ireland, and Sweden, and others, such as Spain, which includes additional restrictions in all aspects.
- In the breakdown of information on fees, in addition to the five countries that have not allowed companies to be exempted from including the data in their individual accounts when it is reflected in the consolidated accounts of the group (Spain, Finland, Poland, Portugal, and Sweden), we can highlight Portugal and Belgium for extending this information to non-PIEs.
- Practically all the countries do not have variations in relation to the restrictions on the provision of NAS established in the EU Regulation.

III. LITERATURE REVIEW

To support our work, we have been interested in reviewing mainly two main groups of bibliographic sources:

- 1. those that compare the situation of fees and the NAS provision in Europe, sometimes including a modeling of the European audit market.
- 2. Other empirical studies that try to explain the behavior of fees based on certain explanatory variables.

Both groups of papers have been helpful in the development of our study. The most relevant within each group and their main results are summarized in the following sections.

1. Situation in Europe of the audit, fees, and NAS provision market

Some of these studies were conducted before the entry into force of the European reform, so their purpose was to assess the potential effects of its entry into force. Among them, Ratzinger-Sakel & Schönberger (2015) analyze the existing national restrictions and limits in France, Germany, and the United Kingdom before 2014, finding that restrictions were already being applied to most of the NAS included in the blacklist, so they assess that the European reform only means an extension of the existing limitations, although with harmonizing effects. In relation to the fees for NAS, they verified that in practice they were already well below the 70 % limit imposed in the Regulation¹⁵ and estimated a minor impact.

If we review those carried out after the implementation of the reform, we should mention the one by the European Commission (2021) referring to the financial years 2015 to 2018, based on the reports prepared by the competent national authorities on the supervision of audits and which analyzes, among other aspects, the market situation of the statutory audit of PIEs after the reform. Among its results, we highlight:

- Only 35 % of the total turnover of audit firms in the EU-28 corresponded to statutory audit services –among them, audits of PIEs accounted for 9 % of the business. The remainder, almost two-thirds of the turnover came from non-audit services (14 % licensed services provided to their auditees and 51 % provided to other entities), highlighting the significant diversification of the firms' business and a focus that goes well beyond traditional audit work. Most Big4 firms' revenues come from non-audit services (70 %).
- They note that market concentration has remained consistently high during the period under review. The Big 4 firms hold an average market share of 70 % of all PIE audits and their position is even more dominant in terms of revenues, accounting for more than 90 %. However, over these years, changes in their individual shares are noticeable and there are signs of increased concentration around the 10 largest audit firms in each country (78 % in 2018, of which 66 % would correspond to the Big4).

Also of interest is the recently published study by the International Federation of Accountants (IFAC, 2022) which establishes a comparison of audit fees for the period 2013-2020 in listed entities in the USA, Canada, and Europe¹⁶. Its results show that audit fees account on average for 0.38 % (USA), 0.29 % (Canada) and 0.13 % (Europe) of corporate revenues over the entire period. Among the European countries, it is in France that they account for the largest share, on average 0.20 % of revenues, compared with Spain (0.10 %), Germany (0.09 %), and Italy (0.08 %). By sector, there

¹⁵ Their work cites others carried out in Italy, Norway, Belgium, the Netherlands, Portugal, Denmark and even Spain, where the ratio remained below the 70% threshold, although the latter three countries were among those with the highest ratios, for example, 65.3% in Denmark in 2009 or 40.1% in Spain in 2008.

¹⁶ The database used is Audit Analytics, of general application in the most recent works in the field of auditing. This organization started collecting data from the EU-28 PIEs in 2012 (then Brexit had not yet happened). Today its database contains information at a European level on audit fees, opinions, changes of auditor, duration of contracts, key audit issues and transparency reports.

seems to be no coincidence between regions since while in the USA the manufacturing sector is where fees have the greatest weight (0.52 % of revenues), in Canada it is the service sector (0.37 %), and in Europe, the financial sector where they account for an average of 0.17 % of revenues. Where there does seem to be a coincidence is that smaller-cap companies paid higher fees (as a % of revenue) than large- and mid-cap companies in all three geographic regions.

NAS fees are higher in Canada (0.121 % of revenues) than in the USA (0.061 %) and Europe (0.053 %) and are generally more frequent in smaller capitalization companies than in large and medium-sized companies. These fees for NAS are mainly received for audit and tax-related services in the USA and Canada, while in Europe they are mainly explained, on the whole, by other services, although there are notable differences between countries.

Of the total fees received by the statutory auditor, approximately 75 % are audit fees and the remaining 25 % are NAS fees, a distribution that is broadly consistent across the three regions analyzed –in Canada NAS fees would account for 26 %, in Europe slightly less than 25 % and in the USA approximately 20 %– and which remains the same throughout the period analyzed.

The Audit Analytics (2020) paper also gives us a broad overview of the state of the audit market in Europe in the period 2014-2019, contrasting the situation before and after the European reform. Among the most noteworthy aspects of the document are the following:

• Market concentration.

With the regulatory change, the **concentration** of PIE audits in the Big4 appears to be reduced from auditing 80 % to 73 % of PIE in Europe. However, in their opinion this variation may be affected by the reduction in the scope of the definition of PIE that occurred when the Directive was adopted in many member countries¹⁷. Although less concentrated, they detect a small increase in the concentration of audits of listed entities around the Big4 (from 63 % to 65 % of listed entities on average). This small increase is not evident in terms of fees, as those invoiced to listed companies by the Big4 remain stable, representing 92 % of total audit fees before and after the reform. Undoubtedly, they are auditing the largest listed entities.

• Independence

The weight of NAS fees over the total fees invoiced by the statutory auditor in companies has fallen progressively from 19 % in 2016 and previous years to 12 % in 2019¹⁸, remaining in the entire time interval well below the threshold set by the EU Regulation. Also, the rotation obligation seems to have had some positive effect because, since 2017, Big4 rotations to the other firms exceed the number of listed companies that have replaced a small or medium-sized firm with a Big4, so they seem to detect a small sign that the Regulation may be starting to have some effect.

• Audit fees

For some audit firms, the cost of preparing and submitting a bid can be prohibitive, especially when competing to win a bid means reducing audit fees, which may partly explain why small firms are opting out of the PIEs audit market. They find that 62 % of publicly traded entities reduced their audit fees following a change of auditor. This suggests that firms are competing aggressively for clients.

As a consequence of the above, the authors conclude in their report that the European reform has had a very limited positive impact to date in terms of the level of audit market concentration and the independence sought.

¹⁷ While in 2015 approximately 26,000 PIEs were computed in the European market, in 2019 the number dropped to 17,000, with half of the drop being concentrated in Spain. Of that total, around 4,000 were companies listed in the EU 28 markets (i.e., including the UK with around 800 listed companies).

¹⁸ In the North American context, following the entry into force of the Sarbanes-Oxley Act (SOX) in 2002 restricting the services allowed to the statutory auditor, in line with the EU Regulation, also caused falls in the weight of NAS over total fees, from representing 49 % in 2002 to average levels of 20% maintained as of 2016, slightly lower (18 %) in 2021 (Audit Analytics, 2022).

Alongside this global overview, the Audit Analytics (2020) report provides a rich comparison between European countries, very useful for the purposes of being contrasted with our subsequent empirical work, from which we can extract the following aspects:

- The number of audit firms performing the statutory audit of at least one listed company varies widely across countries. Only four of them (France, Germany, Bulgaria, and Poland) account for more than half of all audit firms¹⁹. The number of audit firms has been steadily decreasing over time.
- The top 10 audit firms (the Big 4 plus six medium-sized firms: Baker Tilly International, BDO Global, Grant Thornton International, Mazars Worldwide, Nexia International, and RSM International) perform 9 out of 10 audits of PIEs in the EU-28. By country, they account for more than 75 % of PIA engagements in all countries except Greece and Bulgaria. On average, Big4s account for three-quarters of the PIE audit market, and by country, they exceed a 50 % share in all countries except Portugal, Greece, and Bulgaria. Since the entry into force of the European reform, the six medium-sized firms have gained market share in PIEs auditing, to the detriment of the Big4, going from an average of 12 % in 2014 to 18 % in 2019, with large differences between countries. In some countries they have even seen their weight fall.
- Based on the Herfindahl-Hirschman Index (HHI)²⁰, they conclude that the PIE audit market is moderately concentrated in the EU-28 (average level of less than 2,000)²¹ and shows some decline since the entry into force of the European reform (approximately 12 %). Significant differences are again evident by country, given that 14 member states have HHI levels above 2,000, including Spain²². If the HHI is applied to market shares in terms of fees received, the situation worsens considerably, as mentioned above, since the European average is above 2,000 for the whole period, and 25 countries appear to be highly concentrated. They conclude that the lack of competitors makes Europe vulnerable to sudden changes in the supply of auditors.

Among the academic works, we can cite the recent one by Bunget et al. (2021)²³, in which they find that at the European level, both for audit services and for other services, the Big4 firms bill higher fees than the rest of the firms. In addition, they show a decreasing trend in the percentage of NAS over total fees since the entry into force of the European reform in 2016. Specifically, they detect that, in the case of the Big4, the ratio of NAS fees over audit fees falls from approximately 14 % in 2014 and previous years to a level below 10 % in 2020. The drop was repeated for the other firms, from peak levels of almost 8 % in 2014 to approximately 3 % in 2020. When analyzing the behavior of audit fees, they detect, as in previous works, a higher level of audit fees in the more developed economies due to the greater complexity of business models or in some sectors of activity, such as petroleum products. On the other hand, they show a significant level of fee standardization, particularly in sectors that require greater specialization of the firm, such as oil and gas or real estate investments. Over time, they detect a trend towards an increase in the degree of uniformity or concentration of fees from the entry into force of the European reform, which is clearly broken by the Covid-19 crisis.

¹⁹ As is known, France requires joint audits for all listed companies preparing consolidated financial statements and Bulgaria requires it for certain industries. This would explain why they have more audit firms than other member states of similar size.

²⁰ This index is used to report the economic concentration of a market. It is calculated by squaring the market share held by each company and adding these amounts. The maximum result is 10,000 when a single firm operates in the market with total market concentration (monopolistic control). The value of the index decreases as market shares become more evenly distributed and when there are more participating firms. For example, a market with 5 companies, each with a 20 % share, would give an index of 2,000.

²¹ Based on the European Union guidelines for evaluating horizontal mergers which state, as a threshold, that an HHI above 2,000 would cause competition problems due to the combined entity's control over the market.

²² Countries with a higher number of PIEs usually have lower HHIs. Spain is an exception; with 1,000 PIEs, only 21 firms audit PIEs and two of them are auditing 60 % of them. Despite this, it is not the country with the highest HHI levels; Austria, Finland, or Estonia have much higher levels.

²³ The research starts from a sample of 2,896 listed firms from 35 European countries in the period 2013-2020, although 46 % of the sample analyzed are UK companies, so their work is describing to a greater extent the situation of the audit market in that country. Their source of information is also Audit Analytics.

2. Empirical work on audit fee drivers

Since the pioneering work of Simunic (1980), many empirical studies have been published to identify determinants of audit fees based on the characteristics of auditors or audited companies²⁴, institutional factors, or even specific audit regulations.

These determinants have also been systematized in some review papers, among which we highlight for its recent publication that of Widmann et al. (2021), who compiled and classified 121 academic papers²⁵ published until 2019 in journals of proven quality and in which relationships between different variables and audit fees as a dependent variable are identified.

In their compilation, they show that the behavior of fees has been linked to three groups of variables that have to do with client characteristics, auditor characteristics, and engagement characteristics or engagement specifications. For each group, those control variables that have been used most frequently - those that have been used in more than five papers - are summarized in Table III. 1, and those that have been shown to be most significant in explaining audit fees (in Table III.1, those with the greatest explanatory capacity are highlighted in bold), which is a very useful reference for focusing our subsequent empirical work.

Table III.1. Explanatory variab	les of fees in the empirical literature	(Widmann et al.2021)
1 2	1	

1. Client characteristics						
1.1. Size						
 Total assets Total number of business segments Number of dependents Total customer sales Number of employees 	Variables ordered from highest to lowest frequency of use. The determining variable in 93% of the studies is total assets. A positive relationship is shown between size and fees. The size of a company usually explains approximately 70 % of the variation in audit fees.					
1.2. Client complexity						
 Market to book value ratio (MTB) Has the client carried out an M&A in the period? Does the client have any extraordinary items? Number of days between the audit's end and the audit report's signature. Does the client have foreign operations/subsidiaries? % of foreign sales. % of foreign subsidiaries. Number of geographical segments. % of foreign assets. Adjustments for discretionary accruals. Capital additions subscribed or bonds issued? Do you require foreign exchange? Tax on foreign profits? Number of dependents abroad Consolidation 	Variables ordered from most to least frequently used. All of them have been used as a proxy for the degree of com- plexity of the company. A positive relationship between complexity and audit fees is assumed. The variable "MTB," more recently used, did not prove to be clearly significant. The variables shown to be more determinant are those re- lated to the level of foreign activities of the client. Among them, whether the client has foreign operations or sub- sidiaries is the most used. The variables coded with numbers 2 and 4 were also rel- evant.					

²⁴ For example, in our country, Monterrey and Sánchez-Segura (2007), on a sample of listed companies, find that the level of fees is determined by variables representative of the complexity of the work and the risk assumed by the auditor. Furthermore, they find no evidence of "lowballing" practices -a strategy for attracting new audit clients consisting of billing them very low fees during the first year in order to guarantee a stable income in the following years-, but they do find the existence of a fee premium that indicates that large multinationals offer higher prices than other auditors. More recently, Guzmán-Raja et al. (2021) also presented a contrast of the explanatory factors of fees in our country.

^{25 25} Most of these studies focused on the USA (66), Australia (14), United Kingdom (9), China (6), South Korea (4) or included a cross-country comparison (9) and concentrated mainly on the fees received in the 2000–2014 interval.

1. Client characteristics						
1.3. Inherent client risk						
 Client's net assets Total receivables/Total assets Financial position Current assets/current liabilities. Total debt/Total assets Profitability EBIT/Total assets Existence of losses in the current period 	Net assets: Generally positive ratio to fees. Ratios of ac- counts receivable and inventories to total assets, current assets to total assets or accounts receivable to total assets are frequently used, the latter showing the best results. To evaluate the financial position, total debt/total assets (worse financial position should lead to higher fees) or shareholding structure of the company (more institu- tional investors should explain lower fees) are used, with sometimes contradictory results. Higher profitability should lead to lower fees. The most commonly used is the existence of losses in the current period, which is a significant variable, as well as if EBIT is negative, which is also a good indicator, in any case better than revenues.					
1.4. Other aspects						
1. Liquidity, growth potential, regulatory and governance aspects	Aspects such as whether the company is bearing restruc- turing costs, the fact that it is listed and has to comply with more regulatory aspects, or the number of board meetings have been shown to be significant variables.					
2. Auditor characteristics						
 Fee premium of large firms The firm is a Big4 Auditor specialization 	The results show a highly significant effect of market power on fees (Big4). Auditor specialization has been measured as audit fees of a firm relative to total fees in an industry or as total assets audited by a firm divided by total assets in the industry. The approach can be local, national, or global specializa- tion.					
3. Engagement characteristics or engagement specificati	ons					
 Duration of the audit mandate or auditor rotation. Change of auditor/audit firm. Provision of NAS services. Logarithm of total fees per NAS Audit report opinion Dichotomous variables on the auditor's opinion in the audit report on going concerns, internal control weaknesses, qualifications, etc. 	The analysis of the effect of the change of auditor on the fees after the change or the duration of the audit contract itself are variables included in a growing number of stud- ies. Still, the results do not show that it is a significant variable in most studies. Nor are there conclusive results regarding the relation- ship between NAS provision and audit fees. Whether the going concern assumption is impaired, in- ternal control weaknesses are detected, or whether a clean opinion has not been issued are factors that have been shown to affect audit fee significantly.					

Researchers have also been concerned about the potential effects of external factors on audit fees. These factors tend to be grouped into 6 groups: political, economic, social, technological, legal, and environmental (grouped under the acronym PESTLE). Eierle et al. (2021) review the works focused on this line, detecting a growing interest in it (half of the works have been published in the years 2017-2020)²⁶. Most studies analyze the effects of legal factors - including auditing standards, financial reporting standards, general investor protection, and corporate governance laws - followed by economic, political, and social factors.

²⁶ About 40% of the papers are focused on the USA, followed by those developed in China, New Zealand, Australia, and South Korea; 16 % carry out a cross-country analysis.

Among legal factors, the literature provides evidence that fees are higher in countries where auditors are exposed to higher litigation risk and regulatory burdens. Also regulatory changes such as the enactment of SOX in the USA, the adoption of IFRS in the EU, the obligation to perform joint audits, the introduction of mandatory partner or firm rotation, or even requiring fee-splitting are generally associated in the literature with an increase in audit fees. In the context of our work, we will assess whether the recent European reform of audit regulations and particularly the restrictions imposed have had any impact on the fees paid after its entry into force.

On the economic front, some studies show that clients based in developed countries pay on average higher fees than those in developing countries. Although they have been extensively studied, the effects of economic uncertainty and economic crises are not conclusive because the greater business risk borne in these times is sometimes offset by the downward pressure exerted by companies in crisis.

Among the political factors, corruption in a country or region or the client's connections with the political class have sometimes been associated with higher fees. Other forms of intervention (e.g., companies with majority public capital) have benefited from lower fees.

Social values such as societal trust or the strength of social norms in a region or country can impact the level of fees paid, penalizing clients who stray from norms with higher fees.

Our work focuses on the main EU countries in terms of Gross Domestic Product (plus the UK and USA), so all of them can be considered as developed countries where economic, political, and social factors do not, in our view, present major differences that would allow us to gauge the impact of these external factors on fees, beyond the differentiation or analysis by country and GDP, which we carry out.

IV. EMPIRICAL ANALYSIS

Having carried out a comparison of the local regulations in force and taking the bibliography analyzed in the preceding section as a point of reference, we will now proceed to develop the main objective of this study, which is to characterize the audit market in the EU from the perspective of the fees charged by firms for the services they provide to companies, both audit and non-audit services, and to analyze their evolution over time to check whether any changes have been detected after the latest regulatory changes implemented in the EU. At the same time, we analyze to what extent there is a pattern of audit costs at the level of the main EU countries, assessing whether there are disparities between countries and/or between the segments of activity analyzed.

To this end, this fourth part of the paper is organized as follows. First, we describe the database used as a source, the sample selected, and the cleaning process. This is followed by a description of the methodology, and finally, in the third section, we present the different studies. These begin with a characterization of the current situation observed in terms of audit fees, followed by a study of the evolution of these fees over the period analyzed and by sector of activity, ending with an analysis of the importance of NAS in the main EU countries.

1. Characteristics of the database and selection of the sample

The database used to compile the information necessary to carry out the work is Datastream. In accordance with the diverse typology of companies from which information could be downloaded, the availability of data on audit fees was practically limited to listed companies ("public companies"), so we focused the collection of information on this type of entities. Nevertheless, this perimeter of companies is sufficiently illustrative and valid for the objectives pursued in the study.

The various data downloads were completed in May 2022, compiling information from the last ten financial years. On this date, there were entities, not all of them, that already had data available for the 2021 fiscal year. For this reason, and to show the most current situation possible and have a reasonable number of entities for this last year 2021, we decided to include it in most of our analysis.

Subsequently, and after a random sampling of the information obtained from this database, we observed that when the listed company was the parent of a group of companies, the data extracted were those of the consolidated accounts, being the ones we have used in our work.

On the other hand, and as we have already pointed out above, of the 27 countries that currently make up the EU, we have selected the 15 with the highest Gross Domestic Product (GDP), being these: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Republic of Ireland, Italy, Netherlands, Poland, Portugal, Romania, Spain, Sweden, and Spain. In addition, some analyses are completed with the United Kingdom and the United States to check whether their situation is similar to that of the EU countries.

This means that initially we have a total of 17,484 entities (5,879 from the 15 EU countries, 1,678 from the United Kingdom, and 9,927 from the United States). Once we had obtained all the information from these companies, we proceeded to make the following adjustments:

- Eliminate those companies for which the last closing date is not known since in the absence of this information it is not possible to relate the information to the fiscal year to which it corresponds.
- Homogenize the closing dates. Since the closing date is not always December 31, we proceeded to homogenize the financial years of the entities, taking as a reference the year in which they have the most months of activity to allocate them to that year. That is to say, taking the calendar year as a reference, the closing of the accounting year before June 30 will be assigned to the previous year's fiscal year and when the closing occurs in the second half of the calendar year, then said year will correspond to the fiscal year.

- Exclude all those companies for which audit fee data is unavailable, which has led us to work with a total of 6,755 entities (2,069 companies from the 15 EU countries, 1,186 from the United Kingdom, and 3,500 from the United States). Likewise, of the companies located in the European Union, all those entities for which we do not have a minimum of four observations are eliminated.
- For EU countries, the period under study has been from 2015 to 2021, as we have little information for the three previous years, 2012 to 2014. However, we consider this an optimal interval because it allows us to see the evolution of fees over time and to detect the possible effects of the entry into force of the EU Regulation in the 2016 financial year, approved in 2014. In the UK we focus on the most current situation, i.e., 2020 and 2021; in the US we only use 2020 as we do not have sufficient observations for 2021.
- Finally, some companies have been eliminated as errors in the data have been detected due to observing extreme cases in some variables or abnormal oscillations in the data over the period analyzed.

Table IV.1.1 shows the data relating to the final selection of the sample of companies in each country under study for the years 2020 and 2021.

Countries	Number of different companies over time analyzed	Availability of audit fee data 2020 (Number of companies 2020)	Availability of audit fee data 2021 (Number of companies 2021)
Germany	433	412	332
Austria	53	53	43
Belgium	86	80	66
Denmark	83	79	69
Spain	145	128	109
Finland	96	91	87
France	307	283	217
Ireland	68	60	31
Italy	150	128	85
Netherlands	79	76	68
Poland	240	193	133
Portugal	17	16	8
Czech Republic	5	5	5
Romania	4	3	1
Sweden	303	280	195
UK	1.186	1.186	687
USA	3.500	3.500	
Total 17 countries	6.755	6.573	2.136
Total 15 UE countries	2.069	1.887	1.449

Table IV.1.1. Sample Composition

Table IV.1.1 shows the data on the final selection of the sample of companies in each country under study for the years 2020 and 2021.

For example, in the case of Spain in 2020 we analyzed a total of 128 companies, while in 2021 this data is available for 109. The number of observations for each country in the years before 2020 is very similar and there are no relevant or noteworthy variations.

Finally, it should be noted that in some analyses the countries of Romania and the Czech Republic have not been considered as they have a low number of observations. We also note that the information on Portugal is not as limited as in the two previous cases. However, the representativeness of its sample is still limited, so this circumstance has been considered in interpreting the results.

The variables we downloaded from the Datastream database are shown below:

- Audit fees: audit fees for the fiscal year for each entity.
- Audit-related fees (supplemental): cost of other services that are complementary and unrelated to the audit of each entity.
- Total assets: total volume of assets of each entity.
- Sector of activity (TRBC sector economic name):
 - 1. Basic materials (chemical products, mineral resources, paper...)
 - 2. Industrial (machinery, transport, logistic services)
 - 3. Consumer cyclical products (automobiles, hotels and entertainment, distributors, ...) 4.
 - 4. Non-cyclical consumer products (food, drugstore, ...)
 - 5. Energy (fuels, renewable energies)
 - 6. Financial (banking, insurance)
 - 7. Healthcare (services, equipment, pharmaceuticals)
 - 8. Real estate
 - 9. Technology
 - 10. Companies that offer public services such as electricity, gas, or water.

Finally, Table IV.1.2 shows the variables used and the calculations made from the data obtained.

Variable name	Definition	
Number of audits performed	We identify the number of times the audit fee data is available for each country and year.	
Average fees per audit performed	Audit fees of a country (k) in a period (t)	
	Number of audits in a country (k) in a period (t)	
	- We calculate the average for each country and year	
NAS	Expenditure on audit complementary services in a company (i) in a period	
	Company audit fees (i) in the period	
	- We calculate the average of the NAS for each country and year	
Audit fees in relation to assets	Company audit fees (i) in a period (t)	
	Total company assets (i) in a period (t)	
	- We calculate the average audit fees in relation to assets for each country and year	

Table IV.1.2. Variables analyzed

2. Methodology

Bearing in mind the main objective of the study and the structure proposed for the empirical analysis, the techniques and analyses carried out to contextualize the situation and evolution of audit fees to find out whether there are differences or similarities in fees between the different countries in the sample or to find out how fees behave according to the different economic sectors of activity and country are described below.

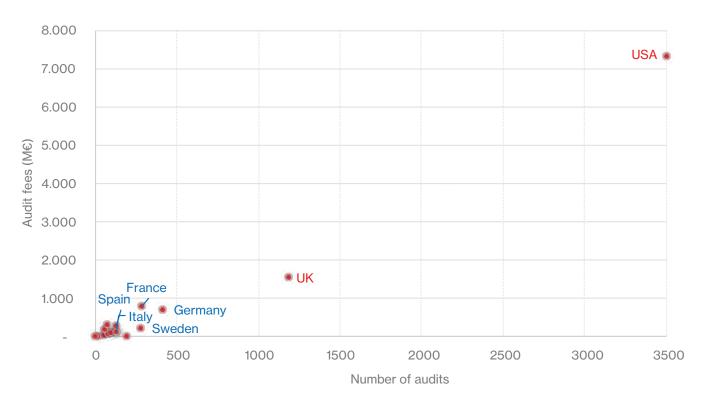
- 1. We use scatter graphs to examine the current situation of audit fees. These allow us to check the distance and proximity between countries based on two selected variables. As indicated, we take both the year 2021 and the year 2020 as a reference to analyze the current situation. The variables we wish to study and interrelate in this section and represent in each ax are volume of fees and number of audits performed, average fees per audit and GDP, average fees/assets, and GDP.
- 2. To check whether there is currently any similarity in the audit fees of the main EU countries, we apply a cluster analysis. For this purpose, we use the average fees/assets variable to check whether some countries show a homogeneous behavior and whether groups of countries with similar characteristics can be formed according to the chosen reference variable. Specifically, for this analysis we use the option of the average link between groups that measures the proximity between each of the groups (of countries) based on the arithmetic mean of the distances of all the pairs and we will reflect the situation in the corresponding dendrogram.
- 3. To observe how the fees of the different countries behave over the time series (2015-2021) we resort to a descriptive analysis through pivot tables and graphs to examine and compare the trends that the fees of each of the countries have taken as a reference the average fees/asset of each country.
- 4. We performed Pearson correlation analyses to see if there is a correlation between the countries' GDP and audit fees in a global context since we did not calculate the correlations by segmenting the observations for each country. We performed two different correlation analyses: a) With a more macroeconomic approach (correlations of country GDP concerning the aggregate fee averages and the average fee/asset for each of the 7 years); b) With a microeconomic approach (correlation analysis considering the GDP of the country in which the firm is located with respect to the raw audit fees and the fee/asset ratio that each firm has).
- 5. To find out how audit fees behave by sector and their relevance for each country, we again resort to descriptive and graphic analysis. In this section we take the entire grouped time horizon as a reference so that the sectoral situation is not limited to a single year. To this end, we use the grouped bar chart analysis to conduct a segmented analysis of fees by country and sector of activity and vice versa (by sector of activity and country). Subsequently, we performed an individualized analysis for each of the sectors in which we focused on observing the ratio of audit fees/assets for each country and on observing in which sectors there may be more similar fees between countries or sectors in which audit fees are higher than in other countries.
- 6. Finally, we identified by means of a line graph analysis the evolution of the NAS of the different countries to see the evolution and compare their situation. In addition, a stacked area chart shows the volume and evolution of fees and NAS for the countries as a whole.

3. Current situation of audit fees in Europe

The first section of our study is devoted to delimiting the features that characterize audit fees in the main EU countries, including the situation in the United Kingdom (UK) and the United States (USA) as references for comparative purposes.

To demonstrate the relevance of the European Union market in relation to the UK and the USA, we first draw up a scatter graph showing the position of each EU country, in addition to the UK and the USA, in terms of the total audit fees invoiced in each country and the number of audits performed in the 2020 financial year (Graph IV.3.1). As can be seen, the audit market in the USA is by far larger than in Europe; as an approximation we could say that it is four times larger than in any European country, including the UK.

If we look at Table IV.3.1, the figures for the United States, with 3,500 audits carried out and more than 7.3 billion euros invoiced in audit fees, are significantly different from those for Europe. The United Kingdom follows with less than 1,200 audits and 1.555 million euros.1,555 million. The main EU countries are well below these figures.



Graph IV.3.1. Comparison of fees and number of audits performed by country 2020

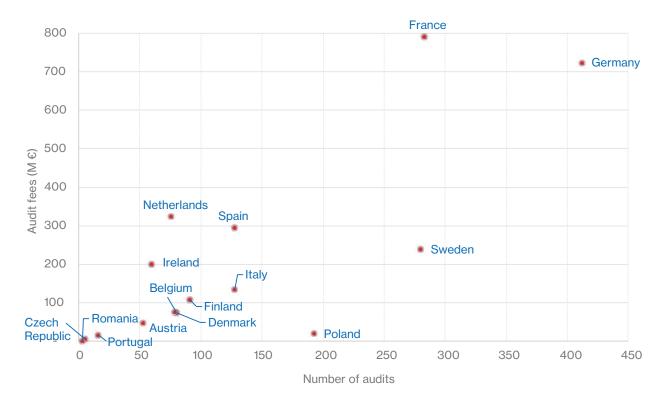
		FISCA	L YEAR 202()		FISCAL	YEAR 2021	
	Total audit fees (million €)	Number of audits	Average audit fees (€)	GDP 2020 (Millions €)	Total audit fees (million €)	Number of audits	Average audit fees (€)	GDP 2021 (Millions €)
Germany	723	412	1.755.860	3.134.443	716	332	2.157.698	3.726.055
Austria	46	53	860.885	353.062	42	43	969.316	420.930
Belgium	73	80	911.337	425.115	58	66	876.842	529.273
Denmark	74	79	935.170	290.174	76	69	1.103.889	350.365
Spain	294	128	2.297.998	1.044.282	299	109	2.740.154	1.257.522
Finland	106	91	1.163.380	221.520	105	87	1.203.545	263.945
France	790	283	2.793.061	2.143.446	798	217	3.676.877	2.591.732
Ireland	198	60	3.305.864	347.057	65	31	2.085.939	439.879
Italy	132	128	1.034.882	1.542.259	112	85	1.317.143	1.852.724
Netherlands	323	76	4.251.022	744.709	346	68	5.084.409	898.188
Poland	19	193	99.569	486.189	18	133	138.060	594.713
Portugal	15	16	949.613	186.237	9	8	1.085.400	220.475
Czech Republic	5	5	1.033.421	199.927	6	5	1.145.994	249.109
Rumania	0,23	3	77.883	203.327	0,13	1	131.396	250.650
Sweden	238	280	849.457	441.258	201	195	1.031.578	553.588
UK	1.555	1.186	1.311.289	2.417.343	1.201	687	1.747.966	2.695.503
USA	7.360	3.500	2.079.738	18.307.263	-	-	-	-

Table IV.3.1. Audit fees: Totals, averages, and number of audits performed by countryin 2020 and 202127. GDP by country

Graphically, looking exclusively at the 15 countries included in our study, their positioning is shown in Graphs IV.3.2 (fiscal year 2020) and IV.3.3 (fiscal year 2021)²⁸.

²⁷ It should be recalled that our sample consists exclusively of listed entities for which fee breakdown data was available in the Datastream database.

²⁸ As indicated, we chose to include fiscal year 2021 in order to make the report as current as possible. However, the last download of the database was in May 2022 so not all of the data for fiscal year 2021 was available at that date. Therefore, the sample for the different variables is relatively smaller in fiscal year 2021, hence, when describing the current situation, we refer to both fiscal years 2021 and 2020.



Graph IV.3.2. Comparison of fees and number of audits performed by country 2020

When analyzing the dispersion of EU countries in terms of their audit fees and the number of reports currently produced, Graphs IV.3.2 (fiscal year 2020) and IV.3.3 (fiscal year 2021), it can be seen that two countries clearly stand out from the rest. On the one hand, Germany is the leader in terms of the number of audits carried out (412 and 332 in 2020 and 2021, respectively), and on the other, France, which, with a smaller number of reports (283 and 217), has a higher turnover (close to 800 million euros), perhaps due to its greater tradition in carrying out joint audits. Also noteworthy is the position held by Sweden, which, with a number of audits close to France, discloses much lower audit fees. For example, in 2020, Sweden invoices 280 audits for a total of 238 million euros, while France presents a turnover three times higher with almost the same number of audits performed.

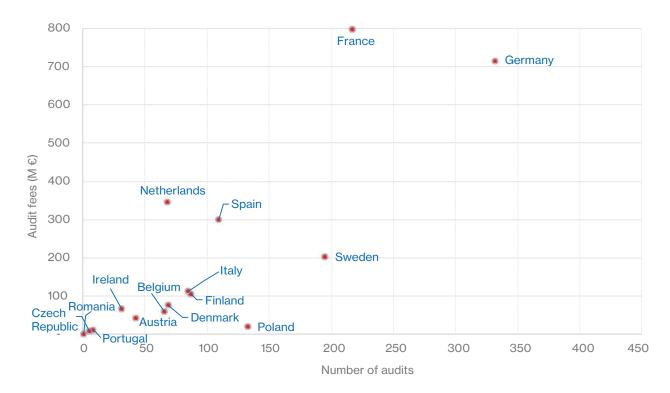


Gráfico IV.3.3. Comparison of fees and number of audits performed by country 2021

The total volume of audit fees for the remaining countries is below 200 million euros, with fewer audits performed of less than 150, as mentioned above. Finally, we note the low relevance of the number of audits available and the volume of fees of Romania and the Czech Republic, which is why they will be excluded from most analyses.²⁹

The comparison between Graphs IV.3.2 (fiscal year 2020) and IV.3.3 (fiscal year 2021) shows, as mentioned above, that the series of observations corresponding to 2021 in our database is incomplete since we have fewer audits for most countries performed. However, despite this, many countries (e.g., France, Denmark, the Netherlands, and Spain) show a comparable total volume of audit fees in both years, suggesting an increase in audit costs in 2021 compared to 2020.

3.1. Positioning of the main EU countries in relation to the variables "average audit fees" and GDP

We were also interested in relating the current behavior of fees to the country's Gross Domestic Product (GDP) to verify whether any relationship between the two variables was evident, i.e., whether similar fee patterns are detected at identical GDP levels within our sample.

To this end, taking the GDP series by country, we calculated the average audit fees for each country and related them through a scatter plot, taking as a reference the situation in 2021 and 2020 (Graph IV.3.4 and Graph IV.3.5) –the values taken by the variables represented in both exercises are detailed in Table IV.3.1 above–.

²⁹ When analyzing by sector, Portugal has few observations in multiple sectors and will therefore be excluded for this purpose.

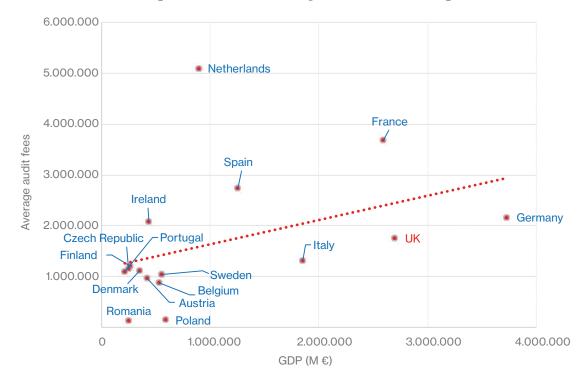


Gráfico IV.3.4. Comparison between average audit fees with respect to GDP 2021

If we look at both graphs, it can be seen that there are some situations in which there does seem to be a certain correspondence between the average audit fees of a country and its GDP, as the trend line appears to corroborate. For example, focusing on those with the highest GDP, we see this is true for France. Similarly, those with the lowest GDP (Romania, Poland, Czech Republic, etc.) are among those with the lowest audit costs on average. However, this is not the case in countries such as Italy, whose comparatively high levels are associated with relatively low average fees.

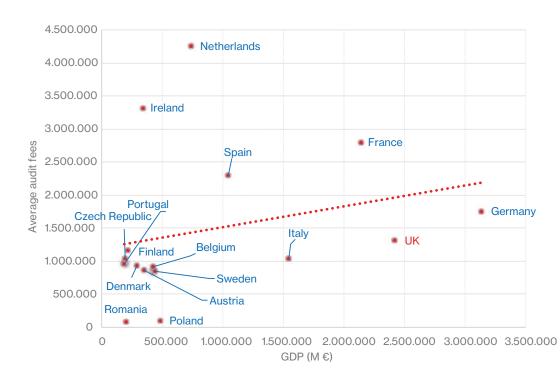


Gráfico IV.3.5. Comparison between average audit fees with respect to GDP 2020³⁰

³⁰ The graph includes the United Kingdom as an element of comparison, but not the USA because its high level of GDP (18,307,263 million euros) distorts the graph.

In comparing these graphs IV.3.4 and IV.3.5, it is worth bearing in mind the unique circumstances that occurred in 2020 due to the Covid pandemic, which resulted in significant falls in GDP in all countries worldwide, which recovered considerably in 2021. The GDP series for the two years analyzed, 2020 and 2021, show increases in all countries between 19%-25 % in 2021, showing a more favorable economic situation in the latter year. This improvement is also evident in terms of fees, given that in 2021 all countries, with the exception of Belgium and Ireland, have seen a considerable increase in the average cost of audit fees. We can highlight the sharp drop in fees in Ireland.

Focusing on Spain, we note that in both years it is positioned among the countries with the highest GDP in the EU –fourth behind Germany, France, and Italy– and in terms of fees, it is among the 4 countries with the highest average costs, above 2.7 million euros per a report in 2021 and around 2.3 million euros in 2020.

Finally, taking 2021 (Graph IV.3.4) as the most representative of the current situation in relation to the GDP variable, we detect a certain coinciding pattern among the countries with GDP levels close to 500 billion euros, whose average audit fees are around 1,000,000 euros per report. Only the Netherlands is clearly distanced from this pattern, with average audit fees of over 5,000,000 and, to a lesser extent, Ireland, where it is close to 2.000.000 euros.

The positioning of the countries described above is based on the average fees observed in 2020 and 2021, without considering the larger or smaller size of the entities in each country. It is therefore of interest to us to verify whether the patterns observed are repeated or not when we weigh the amount of audit fees borne by the total assets of the audited entity. This is dealt with in the following section.

3.2. Positioning of the main EU countries in relation to the variables "average audit fees/total assets" and GDP

When we try to characterize the current situation by relating the figure of fees to the total assets of the entity and relating it to GDP (Table IV.3.2), we observe that the United States is the country with the highest average audit cost/assets, with a considerable distance from the rest of the European Union countries, including the United Kingdom, so we have ruled out including this country in the graphical representation.

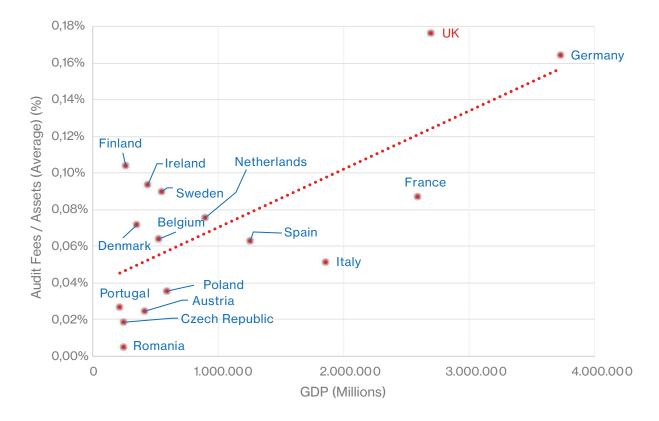
	FISCAL YEA	AR 2020	FISCAL YEA	R 2021	
	Audit fees/Total assets (%)	GDP 2020 (Millions €)	Audit fees/Total assets (%)	GDP 2021 (Millions €)	
Germany	0,155%	3.134.443	0,164%	3.726.055	
Austria	0,033%	353.062	0,025%	420.930	
Belgium	0,075%	425.115	0,064%	529.273	
Denmark	0,075%	290.174	0,072%	350.365	
Spain	0,063%	1.044.282	0,063%	1.257.522	
Finland	0,114%	221.520	0,104%	263.945	
France	0,120%	2.143.446	0,087%	2.591.732	
Ireland	0,117%	347.057	0,094%	439.879	
Italy	0,061%	1.542.259	0,051%	1.852.724	
Netherlands	0,124%	744.709	0,075%	898.188	
Poland	0,056%	486.189	0,035%	594.713	
Portugal	0,026%	186.237	0,027%	220.475	
Czech Republic	0,020%	199.927	0,018%	249.109	
Romania	0,016%	203.327	0,005%	250.650	
Sweden	0,131%	441.258	0,090%	553.588	
UK	0,229%	2.417.343	0,176%	2.695.503	
USA	0,497%	18.307.263	-	-	

Table IV.3.2. Ratios "Audit fees/total assets" by country in 2020 and 2021. GDP by country

The scatter charts IV.3.6 and IV.3.7 show in detail the positioning of the EU countries analyzed (and the UK as a comparative element) in relation to the variables "audit fees/assets" and GDP in fiscal years 2021 and 2020, respectively.

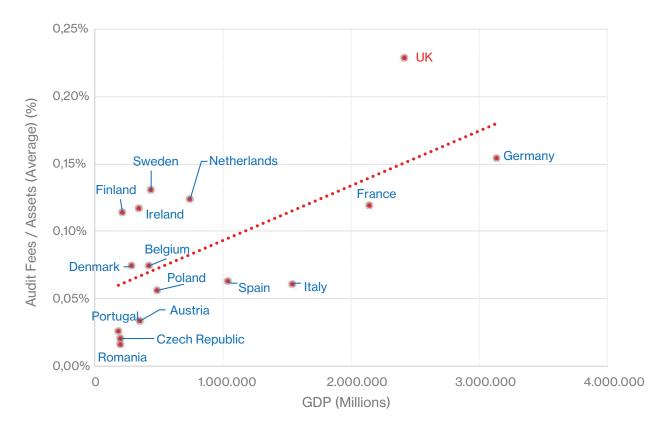
The comparison of the positioning of the European countries in terms of average fees (Graphs IV.3.4 and IV.3.5) and in terms of the "fees/assets" ratio (Graphs IV.3.6 and IV.3.7) shows that in both cases the countries in the sample with the lowest GDP are positioned, in many cases, among those with the lowest audit fees, both average and weighted in relation to the entity's assets. Germany, the country with the highest GDP and high average fees, also has the highest "fees/assets" ratio. However, the other countries have different positions in the scatter graph in each case.

Thus, for example, while the Netherlands had the highest average fees, in Graphs IV.3.6 and IV.3.7 we can see that Germany leads in terms of audit fees/assets ratio.



Graph IV.3.6. Comparison of average fees/assets in relation to GDP 2021

Graph IV.3.7. Comparison of average fees/assets in relation to GDP 2020



It should also be noted that if we compare the values taken by the ratio in 2020 (Graph IV.3.7) and 2021 (Graph IV.3.6), it is evident that, with the exception of Germany, Spain, and Portugal, in the rest of the countries the ratios of fees/assets are lower in 2021 with respect to the 2020 values, which may be due to a significant increase in the assets of the entities.

In the case of Spain, if we compare graphs IV.3.5 and IV.3.7, we observe how it changes its position in relation to several EU countries, i.e., while its average audit fees were clearly higher than most of the EU countries, the same does not occur when these fees are related to the assets of the entity, this is due to the fact that the audited entities in our country are larger than those of the countries indicated and, therefore, the Spanish fee/asset ratios are lower.

Finally, although we have found that the scatter graphs are not conclusive as to the relationship between GDP and audit fees when analyzing the historical evolution, some statistical studies have been carried out that do confirm the existence of such a relationship. These can be seen in section 4 of this document.

3.3. Is there any similarity in the current audit fees behavior among the main EU countries?

At this point, after the analyses carried out, we ask ourselves whether in the current situation (fiscal year 2020), statistically, any similarity can be detected in the behavior of audit fees (measured through the variable "fees/assets") between countries to form homogeneous groups.

For this purpose, focusing on the countries of the European Union³¹ and considering the situation in the 2020 financial year, we performed a cluster analysis to verify the existence of such homogeneous groups.

Graph IV.3.8 shows the dendrogram that supports the preparation of the different clusters³² based on the arrangement of the countries.

³¹ We have carried out the same analysis, also incorporating the United States and the United Kingdom, but in order to analyze the similarities or differences between European countries, the results were not relevant.

³² In the ANNEX we include the conglomeration history of the process followed.

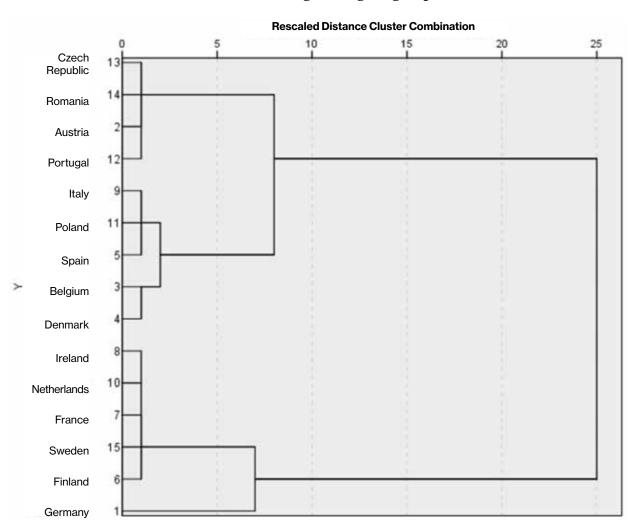


Gráfico IV.3.8. Dendrogram cluster analysis based on the average fees/assets of 2020 in the EU (average linkage of groups)

In the graph, we see how the groups of countries that are formed based on fee similarity are:

- Group 1 Countries with the highest EU fee rates Germany, Finland, Sweden, France, Netherlands, and Ireland.
- Group 2 Countries with average EU fee rates Denmark, Belgium, Spain, Poland, and Italy.
- Group 3 Countries with lower EU fee rates Portugal, Austria, Romania, and the Czech Republic.

By way of conclusion, we can say that looking at the variable "audit fees/total assets of the entity," the United States differs significantly from the audit fee context of the European countries and the situation of the United Kingdom is different from two groups of EU countries. If we focus on EU fees, we can differentiate three groups of countries: high fees (between 0.16% and 0.11%), medium fees (between 0.08% and 0.06%), and lower fees (0.03% and 0.02%). Looking at the cluster analysis we also see that the EU countries with average and lower fees are more similar than those with higher fees. The cost of an audit in Spain is statistically placed in the second group with a medium fee level, considering the dendrogram we see that within this group Spain could have a situation more similar to Poland and Italy than to Belgium and Denmark.

4. Evolution of audit fees

In this section we study the evolution of audit fees in the period analyzed in the main EU countries.

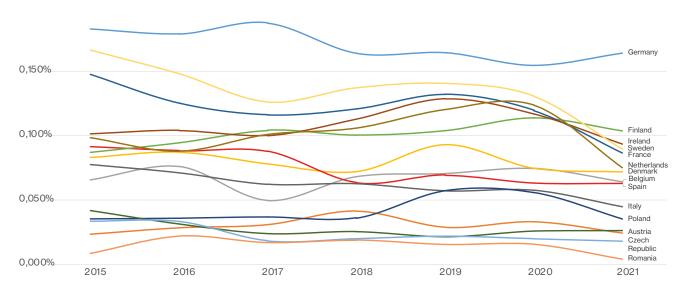
To present a comparison of the behavior of audit fees between countries requires homogenizing the database, i.e., weighting these fees by some variable representative of the size of the entity, since there is empirical evidence that this is one of the variables that most determines the amount of fees. Specifically, as shown in Table III.1, the variable that is shown to be most decisive is total assets, so the evolution of audit fees is studied in this work on the basis of the evolution of the calculated variable "Audit fees/Total assets of the audited company."

The development of this variable over time and between countries is shown in Table IV.4.1 and Graph IV.4.1 .1. We can observe that, on an aggregate basis for all the countries in the sample, the average audit fees experience a slight drop as of 2015, so that the approval of the Regulation and the mandatory rotation of auditors imposed as of its entry into force have not caused an increase in the cost of the service for the audited companies as might be expected, but rather the opposite, which would be compatible with the existence of "low balling" practices, although this has not been contrasted. In addition, over the period analyzed, a certain harmonizing trend can be observed in audit fees in the sense that in recent years there has been less dispersion in the fee/asset variable, with the most "expensive" countries being closer to the average fees.

Table IV.4.1. Evolution of variable audit fees/total assets of the audited firm

	Germany	Austria	Belgium	Denmark	Spain	Finland	France	Ireland	Italy	Paises Bajos	Poland	Portugal	Czech Republic	Rumania	Sweden	Average
2015	0,183%	0,024%	0,066%	0,083%	0,092%	0,087%	0,148%	0,101%	0,078%	0,099%	0,035%	0,042%	0,034%	0,009%	0,166%	0,083%
2016	0,179%	0,029%	0,076%	0,087%	0,088%	0,094%	0,125%	0,104%	0,071%	0,088%	0,036%	0,031%	0,034%	0,022%	0,148%	0,081%
2017	0,187%	0,031%	0,050%	0,078%	0,088%	0,104%	0,116%	0,100%	0,062%	0,101%	0,037%	0,024%	0,019%	0,017%	0,126%	0,076%
2018	0,164%	0,042%	0,068%	0,072%	0,064%	0,101%	0,121%	0,113%	0,063%	0,106%	0,036%	0,026%	0,020%	0,019%	0,137%	0,077%
2019	0,164%	0,029%	0,071%	0,093%	0,069%	0,104%	0,132%	0,129%	0,057%	0,120%	0,057%	0,022%	0,022%	0,016%	0,140%	0,082%
2020	0,155%	0,033%	0,075%	0,075%	0,063%	0,114%	0,120%	0,117%	0,058%	0,124%	0,056%	0,026%	0,020%	0,016%	0,131%	0,079%
2021	0,164%	0,025%	0,064%	0,072%	0,063%	0,104%	0,087%	0,094%	0,045%	0,075%	0,035%	0,027%	0,018%	0,005%	0,090%	0,064%

Graph IV.4.1. Audit fees in the main EU countries



On an individualized approach, we can see that there is a group of countries that, in all the years analyzed, show above-average audit schedules (highlighted in red in Table IV.4.1) while others show below-average fee levels throughout the period.

Among those showing fees systematically above average values are, in this order: Germany, Sweden, France, and, although not as differentiated, Finland, the Netherlands, and Ireland. At the other extreme, the lowest values of fees per asset are found every year in Portugal, the Czech Republic, and Romania, although as mentioned above the latter have the fewest observations available in our database.

Apart from these two groups of countries that mark the limits above and below the average, we can say that the rest move around the average, with small fluctuations. Thus, for example, Spain was slightly above the EU average values for the first three years, while from 2018 onwards it is below, but in values very close to these³³.

The groups of countries identified in our work seem to point to a certain relationship between the level of fees/asset and GDP, in the sense that countries such as Germany, with higher GDP in Europe, have been bearing higher audit fees while the cheapest audit fees occur precisely in countries with lower GDP levels. However, this is not generalizable because, for example, Italy has relatively low audit/asset levels compared to its GDP.

In the following, we try to verify statistically whether there is a correlation between GDP with respect to audit fees and the fees/assets variable through two correlation analyses.

a) *Macroeconomic approach*. We analyze jointly for the 15 countries and the 7 years of the series the correlations of GDP with respect to average fees/assets and average fees. Table IV.4.2 shows that the correlation between GDP and the two variables is positive and significant at 99 %. In other words, being situated in a global economic context with a higher level of GDP can have an impact on higher average audit costs relative to assets, as well as higher average audit fees in the country.

		Fees/Assets (average)	Audit Fees
	Pearson correlation	0,601**	0, 360**
GDP	Sig. (bilateral)	0,000	0,000
	N	105	105

Table IV.4.2. Pearson correlations. GDP with respect to country averages

** Correlation is significant at the 0.01 level (bilateral).

b) *Microeconomic approach.* We analyze for the 15 countries and the 7 years the correlations of the GDP of the country where the firm is located with respect to the fee/asset ratio of each of the firms and the audit fees. In this case we have a greater number of observations when working with the fee/asset data at the individual level and the fees of each of the companies to relate them to the country's GDP. Table IV.4.3 again shows this positive and significant 99 % correlation between the GDP of the country where the firm is located and the firm's fee/asset and audit fee expense figures. In this regard, it appears that a higher GDP of the country in which the firm is located may affect a higher gross fee amount, as well as a higher level of the fee/asset ratio.

³³ Considering the variable "audit fees/turnover," the IFAC study (2022), on a sample of European listed companies with a turnover of more than 10 million euros, extracted from the Audit Analytics database, obtains a ranking of fees by country that is somewhat different from the results extracted in our work. In their case, audit fees account on average for the whole of Europe (including the UK) for 0.13 % of revenue in the period 2013-2020 (lower than the US average of 0.38%). The countries that are above the average based on this ratio are, in this order: France (0.20 %), the Netherlands (0.15 %), and the United Kingdom (0.14 %), while Spain (0.10 %), Germany (0.09 %) or Italy (0.08 %) would be clearly below average levels, so we draw attention to the disparate results that can be obtained depending on how the ordering variable is defined.

		Fees/Assets (average)	Audit Fees
	Pearson correlation	0,097**	0,085**
GDP	Sig. (bilateral)	0,000	0,000
	Ν	12.573	12.575

Table IV.4.3. Pearson correlations. GDP with respect to firms' fees

** Correlation is significant at the 0.01 level (bilateral).

5. Audit Fees by Sector

In addition to analyzing the behavior of fees over time in aggregate and by country, we have been interested in verifying whether differentiating patterns of audit fees borne by sector can be detected and, if so, whether these patterns are repeated in the main EU countries.

To this end, we segmented our database according to the economic sectors described in section IV.1 of this paper. In the analyses presented below, it should be noted that we exclude those sectors and/or countries for which we do not have a representative number of observations per sector, such as Portugal, the Czech Republic, and Romania, as well as the education sector. Table IV.5.1 shows the distribution of observations in the sample over the entire 2015-2021 time interval, segmented by sector, as well as the representation of each country in the sector, expressed as a percentage. Countries with a weight greater than 10 % within each sector in the set of observations of the sample are highlighted.

SECTOR	Germany	Austria	Belgium	Denmark	Spain	Finland	France	Ireland	Italy	Netherlands	Poland	Portugal	Czech Rep.	Romania	Sweden	Total
Main materials	17%	4%	5%	4%	10%	5%	11%	3%	3%	4%	19%	2%	0%	0%	13%	993
Cyclical	22%	2%	2%	3%	6%	4%	18%	2%	12%	3%	11%	1%	0%	0%	12%	1.981
Non-cyclical	14%	3%	7%	4%	5%	5%	17%	5%	6%	6%	17%	2%	1%	0%	8%	747
Energy	12%	5%	5%	5%	6%	2%	18%	10%	8%	11%	10%	0%	0%	0%	10%	373
Financial	23%	4%	4%	6%	4%	5%	12%	2%	10%	3%	13%	1%	1%	1%	11%	1.426
Health	18%	0%	5%	6%	6%	2%	19%	8%	2%	2%	6%	0%	0%	0%	24%	1.225
Industrial	18%	3%	2%	4%	7%	7%	13%	3%	8%	4%	13%	0%	0%	0%	17%	2.267
Real Estate	19%	3%	11%	2%	20%	2%	15%	1%	1%	2%	8%	0%	0%	0%	16%	1.051
Tech	29%	2%	3%	3%	2%	6%	14%	2%	6%	5%	8%	1%	0%	0%	18%	1.759
Public services	22%	4%	2%	2%	11%	2%	9%	2%	20%	2%	18%	4%	2%	0%	2%	330
Totals	2.509	308	507	495	855	570	1.811	391	884	470	1.400	97	30	20	1.805	12.152

Table IV.5.1. Weight of the sectors by country in the sample

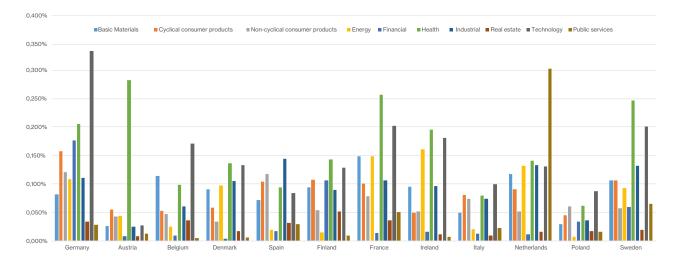
To analyze the behavior of fees by sector, we calculated the average ratio of "audit fees/total assets of the audited entity" (expressed as a %) over the last seven years in each country, the breakdown of which is shown in Table IV.5.2, which highlights the values that exceed the global average (0.082 %)

or the sector average, provided that the country's weight in the sector is greater than 10 %. The representation of this ratio segmented by sector and country, shown in Graph IV.5.1 and Graph IV.5.2, shows at first glance that there does not seem to be a homogeneous pattern among the main European countries when it comes to setting audit fees in each sector of activity.

	Main ma- terials	Cyclical consume products	Non-cyclical consume products	Energy	Financial	Health	Industrial	Real Estate	Tech	Public services	Average
Germany	0,081%	0,158%	0,121%	0,108%	0,176%	0,205%	0,111%	0,034%	0,334%	0,028%	0,136%
Austria	0,026%	0,055%	0,043%	0,044%	0,008%	0,283%	0,025%	0,009%	0,028%	0,013%	0,053%
Belgium	0,114%	0,052%	0,048%	0,025%	0,009%	0,098%	0,060%	0,036%	0,172%	0,005%	0,062%
Denmark	0,091%	0,059%	0,034%	0,098%	0,004%	0,137%	0,105%	0,017%	0,133%	0,006%	0,068%
Spain	0,071%	0,104%	0,118%	0,019%	0,017%	0,094%	0,145%	0,031%	0,084%	0,030%	0,071%
Finland	0,095%	0,107%	0,054%	0,014%	0,106%	0,143%	0,089%	0,052%	0,129%	0,010%	0,080%
France	0,148%	0,100%	0,079%	0,149%	0,014%	0,257%	0,106%	0,036%	0,202%	0,051%	0,114%
Ireland	0,095%	0,049%	0,051%	0,161%	0,016%	0,195%	0,097%	0,011%	0,181%	0,008%	0,087%
Italy	0,050%	0,081%	0,074%	0,021%	0,013%	0,079%	0,074%	0,009%	0,100%	0,022%	0,052%
Netherlands	0,117%	0,091%	0,052%	0,132%	0,011%	0,141%	0,133%	0,016%	0,131%	0,303% ³⁴	0,113%
Poland	0,029%	0,045%	0,061%	0,007%	0,033%	0,062%	0,037%	0,017%	0,087%	0,016%	0,039%
Sweden	0,106%	0,106%	0,057%	0,093%	0,059%	0,247%	0,131%	0,019%	0,201%	0,065%	0,109%
Average	0,085%	0,084%	0,066%	0,073%	0,039%	0,162%	0,093%	0,024%	0,148%	0,046%	0,082%

Table IV.5.2. Audit fees to segmented assets ratio

Graph IV.5.1. Audit fees by sector and country



However, taking as a reference the average value of the ratio for the entire sample of 0.082 %, it is possible to observe sectors characterized, in global terms, by higher audit fees in relation to their assets.

³⁴ This high amount is due to the existence of a company with a ratio well above the average and, as there are very few observations in this sector, the average is distorted. If we eliminate this country, the average is 0.023%.



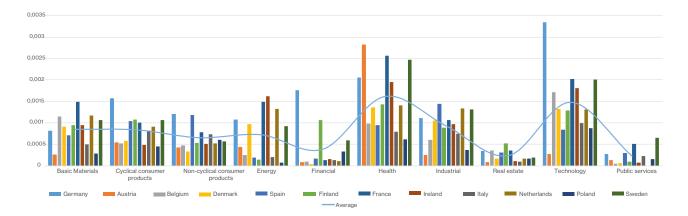


Table IV.5.2. and Graph IV.5.2. show that health care, technology, and, to a lesser extent, industrial companies have ratios above the average, while at the other extreme are the financial sector, real estate, and public services, which have the lowest values, although this may be due to the characteristics of these sectors, with very high asset figures. The rest of the economic sectors are around the average.

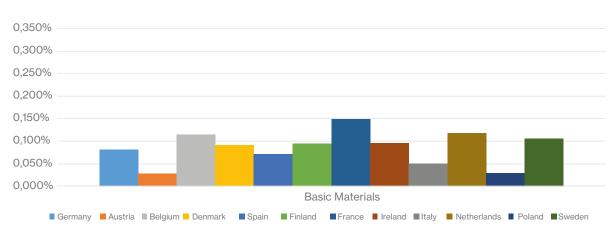
To analyze this casuistry in detail, we present below a comparison of the average ratio of "audit fees/ total assets" in the main EU countries for each sector.

a. Basic Materials

The basic materials sector brings together those entities whose activity is focused on producing chemical products, mineral resources, paper... and in our sample represents approximately 8 % of the total.

In Europe as a whole, the ratio value in this sector is around the average of 0.085%.

To make a comparison between countries, we consider it essential to focus on those where the sector is highly representative, which, as we have already pointed out, for the purposes of our work, is marked by the fact that it accounts for more than 10 % of the observations in the sample.





According to Table IV.5.1, the most representative countries in this sector are Germany, Spain, France, Poland, and Sweden. Graph IV.5.3 shows that the ratio of fees/assets between France and Poland shows notable differences (0.148 % in France compared to 0.029 % in Poland), almost at the extremes. Spain, with a representativeness of 10 %, shows an average value of the ratio of 0.071 %, behind Germany (0.081 %) or Sweden (0.106 %).

b. Cyclical and non-cyclical consumer products

The consumer sector (22 % of the sample), both cyclical (that which is influenced by the cycles of the economy) and non-cyclical, which includes the consumption of essential products, are characterized by ratios that do not show notable differences between countries, although in the sample as a whole the average audit fees borne by entities linked to the consumption of cyclical products is higher (0.084 %) than those payable by non-cyclical consumer entities (0.066 %), in relation to their assets.

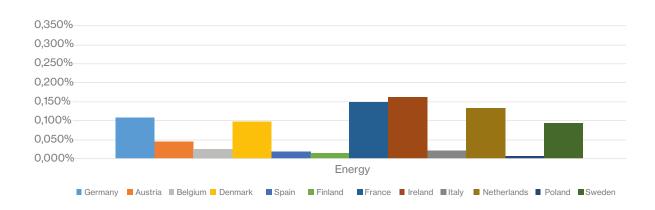
Germany, France, and Sweden are above average in the cyclical sector, and in the non-cyclical sector, Germany and France are above average.

Spain also exceeds the average, although it shows values of 0.104 % and 0.118 %, but it only accounts for 6 % and 5 % of the entities in these economic sectors, respectively, so it cannot be considered relevant.

c. Energy

With a weight of 3 % in our sample, within the energy sector, Germany, France, Ireland, the Netherlands, Poland, and Sweden have a relatively important weight (>10 %). Spain represents only 6 % of the entities in the sector in Europe and its fee/asset ratio is 0.019 %, well below the European average of 0.073 %.

If we look at Graph IV.5.4, the ratio shows notable differences by country, with values that clearly exceed the average and even 0.10 % in precisely those countries that are most representative in the sector, with the exception of Poland. Therefore, it could be said that the audit fees charged by energy entities do show a certain homogeneous behavior in the countries with a certain degree of specialization in the sector, in the sense that their fees tend to range between 0.10 % and 0.15 % of the entities' total assets.

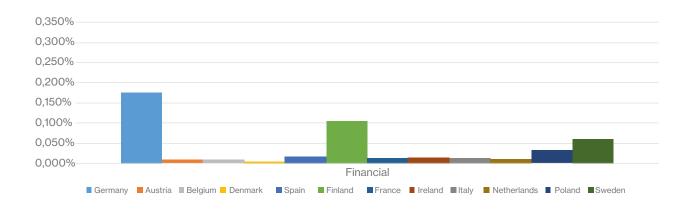


Graph IV.5.4. Audit Fee Ratio: Energy Sector

d. Financial

In our sample, Germany, France, Italy, Poland, and Sweden have more than 10 % weight within the financial sector. The sector as a whole account for approximately 12 % of the total number of observations.

With the exception of Germany, where the ratio again exceeds the sector average (0.176 % compared to an average of 0.039 % of assets) and to a lesser extent Sweden (0.059 %), the other countries share a fee/asset ratio, comparatively very low compared to the other sectors, which practically does not exceed 0.025 % in any country. Spain is no exception to this general rule with 0.017 %, but it is not very representative in this sector either.

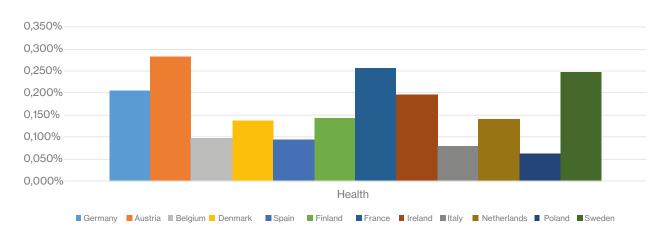


Graph IV.5.5. Audit Fee Ratio: Financial Sector

e. Healthcare

Healthcare (10 % of the observations) is, as mentioned above, one of the sectors with the highest audit fees in relation to its assets, with an average ratio of 0.162 %. Germany, France, and Sweden are particularly relevant in this sector, accounting for more than 60 % of the healthcare sector entities in our sample.

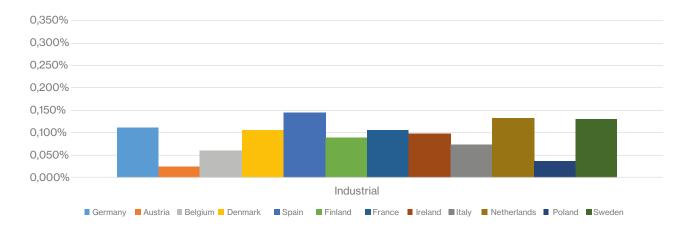
If Graph IV.5.6 is observed, it is precisely these countries that present ratios clearly above the average, showing an almost coinciding behavior in the sense that audit fees in the three countries represent approximately between 0.20 % and 0.25 % of total assets. Spain, with a low representation of 6 %, is below the average (0.094 %).



Graph IV.5.6. Audit Fee Ratio: Healthcare Sector

f. Industrial

Entities engaged in industrial activities are concentrated mainly in Germany, France, Poland, and Sweden, accounting for more than 60% of the sector, representing approximately 19% of the total number of observations.



Graph IV.5.7. Audit Fee Ratio: Industrial Sector

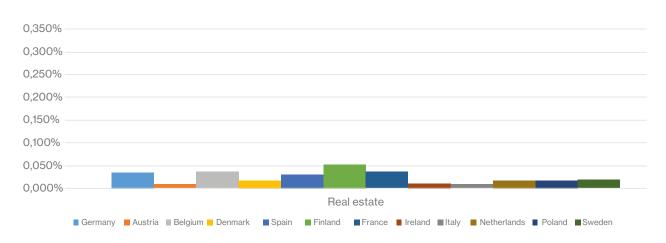
As mentioned above, the audit fees borne by the sector as a whole are higher than the global average (0.093 % compared to an average of 0.082 %), but the difference is not as notable as in the case of the healthcare or technology sectors.

The analysis by country (Graph IV.5.7) repeats the trend that we have already detected in other sectors, i.e., it can be seen that the fee/asset ratios of the countries with the greatest weight (Germany, France, and Sweden) are above the average, in a range between 0.11 % and 0.13 % of assets. Poland, although relevant within the sector, reiterates a behavior of low fees, already seen in other sectors.

In Spain, industrial entities bear, in relation to their assets, the highest fees of the EU countries, representing 7 % of the sector's total.

g. Real estate

Spain has a significant weight in the real estate sector (20 %), together with Germany, Belgium, France, and Sweden. Together they represent 80 % of the entities in the sector in our sample. Observations related to this activity account for just over 8 % of the total.



Graph IV.5.8. Audit fees ratio: Real Estate Sector

As mentioned above, this sector is characterized by comparatively low audit fee/asset ratios compared with other sectors (average of 0.024%), even lower than those observed in the financial sector.

Despite this, again the fees observed in the most representative countries of the sector, particularly Germany, Belgium, Spain, and France, are above the average and show a completely homogeneous be-

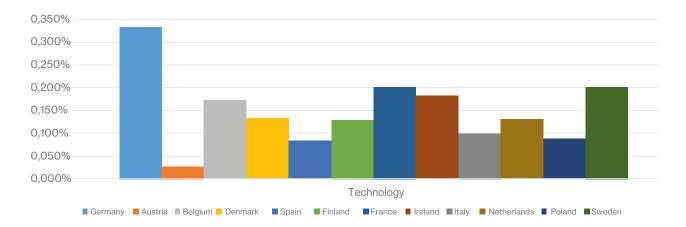
havior, which leads us to affirm that the audit fees in this sector represent between 0.031 % and 0.036 % of the total assets of the audited entity in those countries where the sector has a certain relevance³⁵.

h. Technology

After the healthcare sector, the next largest sector in terms of audit fees in relation to its assets is the technology sector, with an average of 0.148 % of total assets.

Germany (29 %), France (14 %), and Sweden (18 %) have a significant presence in the technology area. Together they account for 60% of the sector, while Spain accounts for only 2 %. Out of the total sample, the sector represents 14 % of the observations.

The leading countries in this area coincide in presenting fee ratios that are above average and, to a certain extent, homogeneous, so that once again we can point out that there is a basically coinciding pattern in the sense that for this sector the fees tend to be between 0.20 % and 0.33 % of the total assets of the audited entity.



Graph IV.5.9. Ratio of audit fees: Technology Sector

In Spain, the sector's fees are clearly below the average (0.084%).

i. Companies offering public services

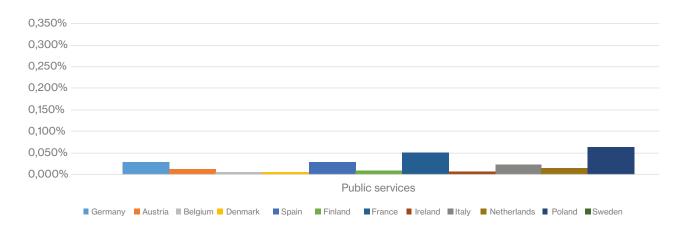
Companies offering public services, such as electricity, gas, or water, are located mainly in Germany, Spain, Italy, and Poland, together accounting for 71 % of the companies in the sector. Within the sample as a whole, it is a residual sector, accounting for only 2.7 % of the sample.

The average value of the ratio in the sector for the set of countries analyzed is 0.046% of total assets, considering the atypical amount reflected in the Netherlands which, as we have already pointed out, is due to a single company within the sector. If we exclude this country, the average ratio takes a value of 0.023 %, which we believe is more in line with reality.

Well, taking this last value as a reference, we can see that the leading or most representative countries in the sector show average ratios somewhat higher than the average or equal to it. We could say that the trend in audit fee pricing in the sector is in the range of 0.22 % to 0.30 % in Europe, with the exception of Poland, which tends to have ratios below the average.

We would like to highlight the case of France, with a representation in the sector of 9 %, which reflects a ratio of 0.051 %.

³⁵ Only Sweden fails to comply with this rule, with an average ratio of 0.019 %.



Graph IV.5.10. Ratio of audit fees: Public services

As a general conclusion, Table IV.5.3. summarizes the main features observed in relation to the behavior of the "audit fees/assets" ratios in the main EU countries, allowing us to delimit behavior patterns by sector.

Sectors analyzed	Countries high presence in the sector (>10 %)	Fee patterns detected in relevant countries (audit fee/total assets ratio)
Basic Materials	Germany, Spain, France, Poland, Sweden	(0.07%-0.15%) Except Poland, with lower ratios (lower GDP)
Cyclical and non-cyclical consumer goods	Cyclical: Germany, France, Italy, Poland, and Sweden. Non-cyclical: Germany, France, and Poland	Cyclical: (0.08%-0.15%) Non-cyclical: (0.08%-0.12%) Except Poland, with lower ratios (lower GDP).
Energy	Germany, France, Ireland, Netherlands, Poland, and Sweden	(0,10%-0,15%) With the exception of Poland, with lower ratios (lower GDP)
Financial	Germany, France, Italy, Poland, and Sweden	Average of 0.039%. All countries below the average except Germany (0.176%) and Sweden (0.059%)
Healthcare	Germany, France, and Sweden	(0,20%-0,25%)
Industrial	Germany, France, Poland, and Sweden	(0,11%-0,13%) Except Poland, with lower ratios (lower GDP)
Real Estate	Real Estate Germany, Belgium, Spain, France, and Sweden	(0,031%-0,036%) Except for Sweden with a ratio of 0.019%.
Technology	Germany, France, and Sweden	(0,20%-0,30%)
Public Services	Germany, Spain, Italy, and Poland	(0,02%-0,03%) Except Poland, with lower ratios (lower GDP)

Table IV.5.3. Audit fees by sector of activity

6. Analysis of NAS

Having characterized the behavior of audit fees in the main EU countries, as well as their evolution and behavior by economic sector, we focus in this section on analyzing the importance of fees for NAS in our sample. The availability of this detail derives, as developed in section II.1 of this paper, from the requirement introduced through Directive 2013/34/EU by which all PIEs and large companies must disclose both the amount of audit fees and those paid by NAS to their statutory auditor. Our database collects the detail at the consolidated accounts level, although with a higher number of missing values in this variable than in the one corresponding to "audit fees." In addition, we have detected some anomalies in the variable "NAS fees," which, since they could not be corrected, have led us, on the one hand, to exclude Austria³⁶ from the analyses presented below and, on the other hand, to limit the historical series to 2016-2021, given that in the preceding years the shortcomings were even greater.

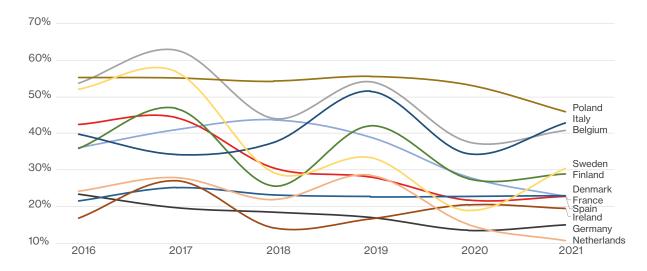
The first aspect analyzed was to verify the extent to which the limitation established in Article 4.2 of the EU Regulation, already mentioned, whereby the NAS/audit fees ratio cannot exceed 70 %, was being complied with in the main EU countries.

Graph IV.6.1 shows that on the date of entry into force of the Regulation, the ratio was already below 70 % so the "maximum ceiling" established does not seem to have had a significant effect³⁷. However, the new European regulation does seem to have had a clear effect on the decrease in the ratio as of its entry into force since, while in 2016 NAS fees accounted on average, for the EU as a whole, for 36.48 % of audit fees, in 2021 that percentage drops to 27.5 %. It is even detected that it has brought about a certain degree of convergence between countries, in the sense that currently in most EU countries, the ratio is in the range (10 %-30 %).

	Germany	Belgium	Denmark	Spain	Finland	Ireland	Italy	Paises Bajos	Sweden
2016	23%	54%	36%	42%	36%	17%	40%	24%	52%
2017	20%	63%	41%	44%	47%	27%	34%	28%	57%
2018	18%	44%	44%	31%	26%	14%	38%	22%	29%
2019	17%	54%	39%	28%	42%	17%	51%	29%	33%
2020	14%	38%	28%	22%	28%	20%	34%	15%	19%
2021	15%	41%	23%	23%	29%	20%	43%	11%	30%

Table IV.6.1. Evolution of the ratio "NAS Fees/Audit Fees"

Graph IV.6.1. Evolution of the ratio "NAS Fees/Audit Fees"



On an individualized level (Table IV.6.1), we see that in Germany and the Netherlands they were around 20 % in the early years, while in 2020 and 2021 they remain at levels somewhat lower than

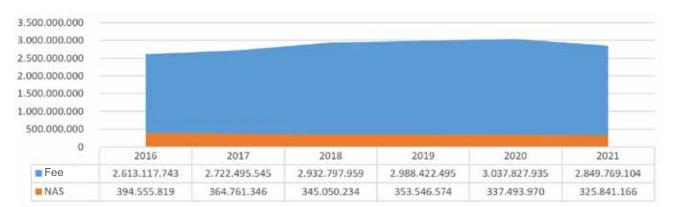
³⁶ For this country we detected NAS/audit fee ratios above 110% in multiple years of the analyzed series. In tracing the possible error, we detected that the information disclosed in the NAS field contained multiple inconsistencies.

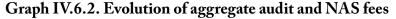
³⁷ This circumstance was already advanced by Ratzinger-Sakel & Schöberger (2015) in the years prior to 2014.

15 % in Germany or even 10% in the Netherlands³⁸. Denmark, Finland, Spain, and Sweden, where the ratios were close to or even slightly above 40 % in the early years, are now between 20 % and 30 %. Poland and Belgium also show declines, although the entire period of analysis shows one of the highest "NAS/audit fee" ratios in the EU.

However, the decline in the provision of NAS is not evident in France or Ireland, although they maintain small ratios of less than 25 % throughout the period analyzed or in Italy, where values close to 40 % are observed yearly.

Graph IV.6.2 shows how audit and NAS fees have evolved at the aggregate level for all the countries in the sample. It can be seen that it confirms the progressive decline in the provision of NAS by the statutory auditor mentioned above. While in the 2016-2021 interval there is a sustained growth in the amount achieved by aggregate audit fees –except in 2021, for which it has been noted that the database was incomplete at the date of downloading the sample–the aggregate volume of fees for NAS has decreased considerably from just over 394.5 million euros in 2016 to below 330 million euros. Overall, between 2016 and 2021 we see a decrease matching a cumulative growth in audit fees of approximately 9 % in NAS fees of just over 17 %.

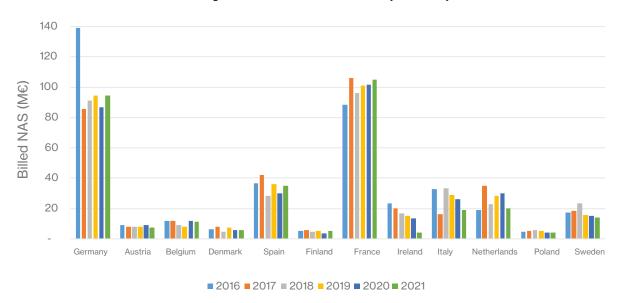




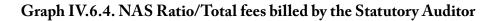
This slight decrease over the period analyzed can also be seen by country in Graph IV.6.3.

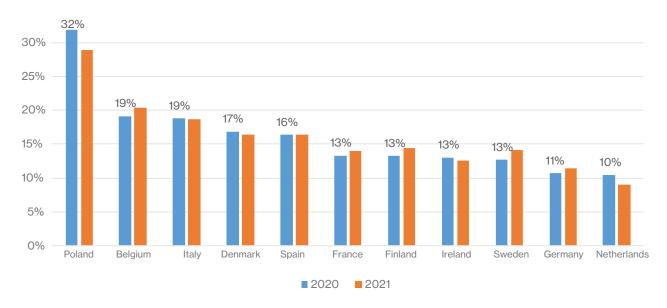
Germany and France stand out in it, whose highest audit fees correspond to a total volume of NAS higher than the rest of the EU, at levels close to 100 million euros. Spain is in third place, with a turnover of less than 40 million euros, slightly above the NAS turnover of the Netherlands, Italy, Sweden, and Ireland. The remaining countries have a volume of less than 10 million euros.

³⁸ It should be recalled that, according to local regulations in the Netherlands, the firm performing the statutory audit of a PIE may not provide any additional services to that organization or its affiliates, which would justify this low percentage (see section II of this document).



Graph IV.6.3. NAS invoiced by country

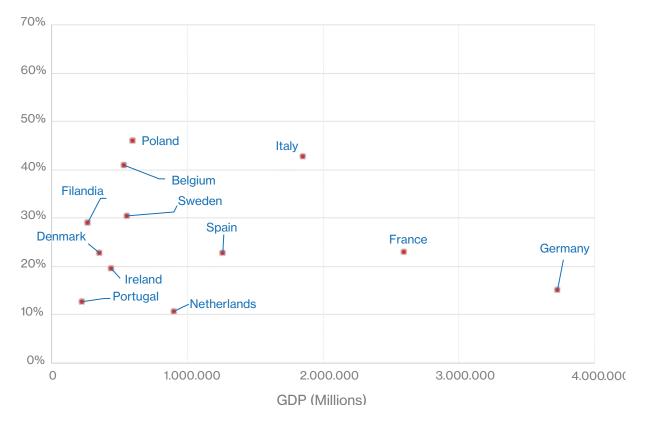




If we focus on the last two years analyzed (2020 and 2021) and calculate the importance of fees for NAS in the total fees invoiced by the statutory auditor, we can order the countries in our sample as shown in Graph IV.6.4 (ordered from highest to lowest weight in 2020, which is the year for which we have the largest number of observations). It can be seen that the ratio in Spain is within the average values for the EU, with fees billed by NAS representing around 16 % of total fees on average.

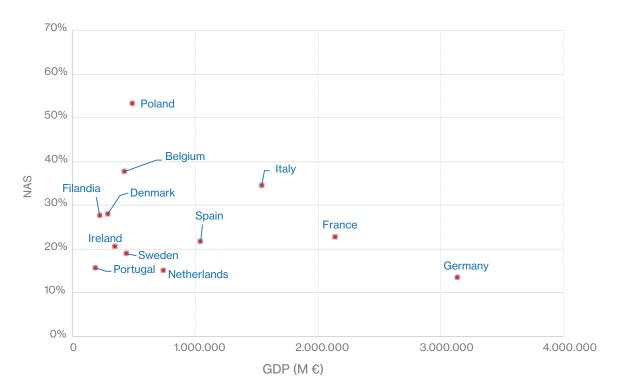
Finally, for the years 2020 and 2021, we relate the fees for NAS (measured through the variable "NAS fees/audit fees") to the GDP of each country (Graphs IV.6.5 and IV.6.6), where it can be seen, as we have seen above, that all countries are positioned below 70 % of NAS, although we do identify slight variations between countries. Considering the most recent situation, we observe a certain disparity in relation to the country's GDP. However, looking at the two countries with the highest GDP, we can see that Germany is at the lowest NAS level and France is also at lower NAS levels, although Italy (third country in terms of GDP) is close to the highest NAS level (in 2021 only behind Poland and in 2020 behind Poland and Belgium). Portugal is characterized as the country with the lowest

GDP and of those with very low levels of NAS. By 2020, we find similar contexts between two pairs of countries: Finland and Denmark and Ireland and Sweden (Graph IV.6.6). With respect to Spain, we see that it is the fourth country in terms of GDP, while in terms of NAS level it is close to 22 % (slightly behind France and at a greater distance from Finland, Sweden, Belgium, Italy, and Poland).



Graph IV.6.5. Comparison of NAS in relation to the country's GDP 2021

Graph IV.6.6. NAS comparison in relation to the country's GDP 2020



CONCLUSIONS

The European audit reform -Directive 2014/56 and EU Regulation 537/2014- introduces some measures that directly affect the structure of the fees that the statutory auditor may receive from the audited entity to reinforce independence. Basically, it extends the restrictions on the provision of Non-Audit Services ("NAS"), establishes a limit on the volume of fees for NAS and another limit for concentration or financial dependence on a client, and introduces fee disclosure requirements.

Several years after its entry into force, this document presents a review of the status of these issues in Spain and the main EU countries, with a twofold objective:

- 1. To verify the impact that the transposition of the reform has induced in the local regulations in force in the main member states, reviewing to what extent they have applied, or not, the options contemplated by the EU Regulation and, if applicable, whether their restrictions have been extended to other entities not classified as PIEs.
- 2. As the main objective, we try to characterize the audit market in the EU from the perspective of the fees charged by firms for the services they provide to companies, both audit and non-audit services, and we analyze their evolution over time to see if any changes have been detected after the reform. At the same time, we study to what extent there is a pattern of audit costs at the level of the main EU countries, assessing whether there are disparities between countries and/ or between the segments of activity analyzed.

In the following, we summarize the most important results of our research, differentiating between the two objectives.

Review of local regulations in force in the main EU countries

To carry out the comparison of the local regulations in force on fees and NAS provisions in the main EU countries, it was necessary not only to obtain the reference regulations applicable in each country but also to ensure the correct interpretation of these regulations through contacts with auditors, collaboration with national regulatory bodies and other personal contacts. All this to obtain a high degree of reliability and contrast of the conclusions obtained.

The review focused on the following thematic areas: contingent fees, limits, and breakdown of information on them, as well as restrictions on the provision of NAS. From the exhaustive comparison, we can highlight the following results:

- In relation to the fees received by NAS, the option provided for in Article 4.2 of the EU Regulation to exceed, if a competent authority allows it for a maximum period of 2 years, the limit of 70% of the average audit fees of the last 3 financial years, has only been included in 9 of the 15 EU countries analyzed (Austria, Belgium, Denmark, Finland, France, Ireland, Poland, Portugal, and Sweden); although Denmark only allows it for a maximum period of 1 year.
- With regard to the limitation on the receipt of fees from a single EIP client, established in Article 4.3 of the EU Regulation, which may not exceed 15% of the total fees of the auditor in 3 consecutive financial years, only 2 countries have restricted the possibility of exceeding this limit for 2 years, in accordance with the provisions of this article. These are (i) Austria, which limits the period to one year, and (ii) Spain, which restricts it only to small and medium-sized audit firms and for a maximum period of one year.

On the other hand, 6 of the 15 EU countries analyzed have established limitations of some kind on the fees to be r|eceived from a single client to entities that are not PIEs, namely Austria, Belgium, Germany, Italy, Poland, and Spain.

• The obligations to disclose audit fees in the financial statements for the 15 EU countries analyzed present a relatively homogeneous situation. Only 5 countries have not made use of the disclosure

exemption when this is included in the consolidated financial statements of the group (Spain, Finland, Poland, Portugal, and Sweden), and 2 countries (Belgium and Portugal) do not include in their regulations the exemption from disclosure due to the size of the audited company.

- With regard to the restrictions on the provision of NAS by the auditor in PIEs, established in Article 5 of the European Regulation, we note the following:
 - The possibility of allowing certain tax and valuation services to PIEs when they are of minor importance has been generally included in the regulations of the countries analyzed, except in four of them (Italy, the Netherlands, Poland, and Portugal).
 - Six EU countries have extended some kind of prohibition on the provision of NAS to non-PIEs (Austria, Belgium, Denmark, Germany, Italy, Spain, and Denmark), although this limitation has a different scope in each country.

Empirical studies on fees in the main EU countries

To carry out the empirical studies, the main objective of our work, we used the Datastream database from which we were able to download the historical series 2015-2021 of all the necessary variables, mainly audit and non-audit fees, total assets and sectors of activity of a sample of listed entities from the EU, the United Kingdom and the United States, the latter as elements of comparison. After appropriate filtering, we have been able to work with the consolidated information of 2,069 entities from the 15 EU countries with the highest GDP, 1,186 entities from the UK, and 3,500 listed companies from the US.

The first of the studies is devoted to the characterization of audit fees in the main EU countries in the years 2020 and 2021, which we identified as the current situation, given that the series for 2021 was incomplete at the date of downloading the sample. We find that the audit market in the US is not comparable to that in the EU as it is four times larger than any European country in terms of number of reports completed and total audit fees. The UK is almost twice as large.

Focusing on the 15 EU countries, and considering the same variables, we observe that Germany and France are clearly different from the rest (Germany is the leader in the number of audits performed and France in volume of audit fees invoiced, perhaps explainable by its greater tradition in the performance of joint audits). Spain ranks fourth out of the 15 countries and fifth in terms of the number of audits performed. Romania and the Czech Republic are of little relevance in terms of both variables.

On the other hand, we try to verify whether similar fee patterns are detected for identical GDP levels within our sample in the current situation through average fees and also in relation to the variable "Audit fees/total assets." Under both variables, the scatter plots show coincidence in that the countries in the sample with the lowest GDP are positioned among those with the lowest audit fees, both average and weighted in relation to the entity's assets. Germany, the country with the highest GDP and high average fees, also has the highest "fees/assets" ratio. In the other countries, the relationship is not so obvious. Thus, for example, Spain, the fourth country in relation to GDP, behind Germany, France, and Italy, has high average fees (above 2.7 million euros per a report in 2021 and around 2.3 million euros in 2020). Still, when we weigh these fees in relation to total assets, their ratios are clearly lower than those of most EU countries.

Finally, to finish characterizing the current situation (year 2020), we have studied whether statistically any similarity can be detected in the behavior of audit fees (measured through the variable "fees/ assets") between countries to form homogeneous groups. The results of the cluster analysis carried out seem to show that the cost of an audit in Spain is statistically at the level of Belgium, Denmark, Italy, or Poland and below the level of fees charged in countries such as Germany, Finland, France, Ireland, the Netherlands or Sweden, which form a conglomerate with higher rates. The fee pattern of the intermediate group, which includes Spain, is closer to the low-fee group (Austria, Portugal, Czech Republic, and Romania) than to the high fee group. In other words, Spain is located in the medium-low zone according to the fee/asset ratio. In addition to studying the current situation, we have been interested in the recent evolution of audit fees in the main EU countries based on the development of the calculated variable "Audit fees/ total assets" of the audited entity.

In this sense, we observe that in the period 2015-2021 audit fees experienced a slight drop, so the approval of the Regulation and the mandatory rotation of auditors imposed from its entry into force have not caused an increase in the cost of the service for the audited companies as might be expected, but rather the opposite, which would be compatible with the existence of "low balling" practices. On the other hand, there is evidence of a certain harmonizing trend, which we believe to be a consequence of the European reform, in the sense that in recent years there has been less dispersion in the fees/ assets variable, with the most expensive countries coming closer to the average fees. In the case of Spain, this was slightly above the EU average values for the first three years, while from 2018 onwards it is below, but in values very close to these.

On the other hand, the descriptive and graphic analysis of the historical series of audit fees seems to point out that the cheapest audit fees occur precisely in countries with lower GDP level and countries such as Germany, with the highest GDP in Europe, has been bearing the highest audit fees.

We therefore tried to verify whether any correlation could be statistically established between the GDP variable with respect to average fees, on the one hand, and the fees/assets variable, on the other. The correlation analyses carried out for the 15 countries and the 7 years, both jointly and individually for each entity, show that this correlation is positive and significant at 99%, so we can conclude that such a link exists and allows us to affirm that a higher level of a country's GDP typically corresponds to higher average audit fees or a higher fee/asset ratio.

Another fundamental aspect analyzed in our work has been to verify whether differentiating patterns could be detected in the audit fees borne by the entity depending on the sector to which it belongs and, if so, whether these patterns are repeated in the main EU countries.

Again taking the "fees/total assets" ratio as a reference, we found that sectors characterized, in global terms, by higher audit fees in relation to their assets can be observed, as is the case of entities working in the field of health, technology and, to a lesser extent, industry. On the other hand, in the financial, real estate, and public services sectors, the ratio is below average, i.e., their fees in relation to their assets are lower. However, this may be due to the characteristics of these sectors, which generally have very high asset figures.

When analyzing the values taken by the ratio individually by sector, we verify that in most of them, it is feasible to identify a coinciding pattern among the countries with greater representativeness within the sector in our sample, particularly among those with higher GDP. This is clearly observed in the energy, healthcare, industrial, real estate, technology, and public services sectors, for which it is feasible to establish a range of variations in the "fees/assets" ratio, within which the leading countries in the sector with a high level of GDP would be located. On the contrary, this pattern is not repeated in those countries with a lower level of GDP, even though they are highly representative in the sector, as is the case of Poland, in sectors such as industry, energy, and public services, which ratifies our previous results confirming the importance of GDP in the level of audit fees paid.

Finally, we have studied the behavior of NAS fees, verifying that, on the date of entry into force of the Regulation, the ratio "NAS fees/audit fees" was already below 70%, so the "ceiling" established in the European reform does not seem to have had a relevant effect, as previous studies had already pointed out. However, the new European regulation does seem to have had a clear effect on the decrease in the ratio since its entry into force, since while in 2016, NAS fees accounted, on average, for the EU as a whole, for 36.48% of audit fees, in 2021 that percentage drops to 27.5%. It is even detected that it has had a certain harmonizing effect between countries, in the sense that currently in most EU countries, the ratio is in the range (10%-30%).

At the aggregate level in our sample, between 2016-2021, there was a cumulative growth in audit fees of approximately 9%, corresponding to a decrease in NAS fees of just over 17%.

Spain is the third European country attending to the total volume of NAS fees invoiced, just under 40 million euros, while attending to the ratio "NAS fees/total fees invoiced by the statutory auditor," which is at the EU average (16%).

In summary, from all the analyses performed we can conclude that within the EU it is feasible to identify patterns of behavior of the variable "audit fees/total assets" and even of the average fees, depending on the level of the country's GDP. It is also feasible to detect patterns depending on the sector of activity in which the entity operates.

The entry into force of the EU Regulation does not seem to have increased the service cost for the audited companies. It does seem to have affected a reduction of the fees invoiced by the statutory auditor as NAS. There is also evidence of a harmonizing effect of the regulations.

Focusing on our country, taking as a reference the variable "audit fees/assets," which we consider to be the most representative, Spain is currently positioned at medium-low levels of audit fees in relation to the main EU countries.

The evolution of this variable in the interval 2015-2021 shows that Spain was positioned slightly above the EU average values for the first three years of the time series, while from 2018 onwards it is below, but in values very close to these.

This convergence towards the European average values is also evident in Spain in terms of NAS fees, which represented in 2016 42% of the audit fees invoiced by the statutory auditor, while the last years 2020 and 2021 remained below 25%.

To conclude, and as a line of future action, we understand that these results would be reinforced if they could be replicated in the Audit Analytics database, commonly used in work related to this topic but whose cost exceeded the budget of the research team. This would also allow us to complete the study of audit and NAS fees from the point of view of the audit firms.

BIBLIOGRAPHY

- Accountancy Europe (2021). "Organisation of the public oversight of the audit profession in 30 European countries. State of affairs after the implementation of the 2014 EU Audit Reform". Available online: https://www.accountancyeurope.eu/wp-content/uploads/210519-Organisation-of-the-Public-Oversight-of-the-Audit-Profession-2021-survey-update.pdf
- Audit Analytics (2020). "Monitoring the audit market in Europe." Available online: https://www. auditanalytics.com (accessed: 22 February 2022)
- Audit Analytics (2022). "Twenty-year review of audit¬non-audit fee trends." Available online: https://www.auditanalytics.com (last accessed on October 4, 2022).
- BEIS. Department for Business, Energy and Industrial Strategy (2021). White Paper for Audit Reform.
- Bunget, O., Dumitrescu, A., Blidişel, R., Bogdan, O., Burcă, V. (2021). Aspects regarding the structure of the financial audit market in the European Union from fee perspective. Audit Financiar, vol. XIX, no. 4 (164)/2021, pp.724-742, DOI: 10.20869/AUDITF/2021/164/024.

European Commission (EC) (2010). Green Paper "Audit policy: lessons from the crisis."

- European Commission (2021). Report from the Commission to the European Parliament, the Council, the European Central Bank, and the European Systemic Risk Board on developments in the EU market for statutory audit services to public interest entities in accordance with Article 27 of EU Regulation 537/2014, available at: https://eur-lex.europa.eu/legal-content (accessed: 14 June 2022).
- Condor, V., Ansón, J.A., Costa, A. (2018). The effects of rotation after the entry into force of the European Regulation and La Ley de Auditoría de Cuentas. ASEPUC-ICAC.
- Condor, V., Ansón, J.A., Blasco, M.P., Costa, A., Olmo, J. (2020). The effects of auditor rotation regulations on the duration of contracts with entities that are not Public Interest Entities (PIEs). Relationship between fees billed and contract duration in non-PIEs. ASEPUC-ICAC.
- Eierle, B., Hartlieb, S., Hay, D. C., Niemi, L., Ojala, H. (2021). Importance of country factors for global differences in audit pricing: New empirical evidence. International Journal of Auditing, 25(2): 303-331.
- Guzmán-Raja, I., González-Sánchez, M., Rúa-Alonso-De-Corrales, E., Sánchez-García, J.F. (2021). Audit quality and fees: Evidence from Spain, Spanish Journal of Finance and Accounting/Revista Española de Financiación y Contabilidad, 50:4, 469-492, DOI: 10.1080/02102412.2021.1919959.
- Instituto de Contabilidad y Auditoría de Cuentas (ICAC) (2017): Consultation no. 2. BOICAC 110/ JUNE 2017.
- International Federation of Accountants (IFAC) (2022). Audit fees survey 2022. Understanding audit fees and non-audit service fees. 2013-2020. Available at: https://www.ifac.org/knowledge-gateway/ contributing-global-economy/publications/audit-fees-survey-2022 (accessed June 2022).
- Monterrey, J., Sánchez-Segura, A. (2007). An empirical study of auditor fees. Cuadernos de Economía y Dirección de la Empresa. Vol. 32, 081-110. https://doi.org/10.1016/S1138-5758(07)70092-0.

- Ratzinger-Sakel, N., Schönberger, M. (2015). Restricting non-audit services in Europe-The potential (lack of) impact of a blacklist and fee cap on auditor independence and audit quality. Accounting in Europe, 12(1), 61-86. https://doi.org/10.1080/17449480.2015.1035290. https://doi.org/10.1080/17449480.2015.1035290
- Simunic, D. (1980). The pricing of audit services: theory and evidence. Journal of Accounting Research 18(1):161-190.
- European Union (2021). Report from the Commission to the European Parliament, the Council, the ECB, and the European Systemic Risk Board on developments in the EU market for statutory audit services to public interest entities.
- Widmann, M., Follert, F., Wolz, M. (2021). What is it going to cost? Empirical evidence from a systematic literature review of audit fee determinants. Management Review Quarterly 71: 455-489.

REGULATIONS

EUROPEAN UNION

European Commission (EC) (2013). Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings.

European Commission (EC) (2014a). Directive 2014/56/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2006/43/EC on statutory audits of annual accounts and consolidated accounts, available at: https://eur-lex.europa.eu/(accessed: 22 February 2022).

European Commission (EC) (2014b). Regulation (EU) 537/2014 of the European Parliament and of the Council of 16 April 2014 on specific requirements for the statutory audit of public interest entities and repealing Commission Decision 2005/909/EC, available at: https://eur-lex.europa.eu/(accessed: 22 February 2022).

REGULATIONS EUROPEAN UNION COUNTRIES

GERMANY

Commercial Code (Handelsgesetzbuch).

Law on the Professional Status of Auditors (Gesetz über eine Berufsordnung der Wirtschaftsprüfer) (Wirtschaftsprüferordnung - WPO).

AUSTRIA

Federal Act on Special Civil Law Regulations for Companies (UGB Commercial Code) StF: dRGB1. S 219/1897 (GBlö No. 86/1939) (*Bundesgesetz über besondere zivilrechtliche Vorschriften für Unternehmen* (Unternehmensgesetzbuch – UGB)).

BELGIUM

The Companies and Associations Code, introduced by the law of March 23, 2019. (*Le Code des sociétés et des associations*).

Royal Decree implementing the Companies and Associations Code of 29 April 2019. (*L' arrêté royal portant exécution du Code des sociétés et des associations du 29 avril 2019*).

Law on the Organization of the Profession and Public Supervision of Statutory Auditors (Loi portant organisation de la profession et de la supervision publique des réviseurs d'entreprises).

DENMARK

Act on Certified Public Accountants and Audit Firms (Auditors Act), cf. Decree Law No. 1287 of 20 November 2018. (*Herved bekendtgøres lov om godkendte revisorer og revisionsvirksomheder (revisorloven)*, *jf. lovbe-kendtgørelse nr. 1287 af 20. november 2018*).

Danish Financial Statements Act (Bekendtgørelse af årsregnskabsloven).

SPAIN

Law 22/2015, of July 20, 2015, on Account Auditing.

Royal Decree 2/2021, of January 12, approving the Regulations for the implementation of Law 22/2015, of July 20, 2015, on Account Auditing.

Royal Legislative Decree 1/2010, of July 2, 2010, approving the revised text of the Capital Companies Act.

FINLAND

Auditing Act (1141/2015). (Auditing Act (1141/2015)).

Accounting Act 1336/1997 (*Accounting Act 1336/1997*).

Accounting Decree 1339/1997 (Accounting Decree 1339/1997).

FRANCE

Code of Commerce (Code de commerce).

Code of professional ethics of the auditor (Code de déontologie de la profession de commissaire aux comptes).

ANC Regulation No. 2014-03 in relation to the General Chart of Accounts - Consolidated version as of January 1, 2019. (*Reglement ANC N° 2014 03 relaatif au Plan Comptable General – Version consolidee au 1er Janvier 2019*).

IRELAND

Companies Act 2014 revised. Updated to 15 December 2021. (Companies Act 2014 revised. Updated to 15 December 2021).

ITALY

Civil Code. October 2021 edition. (Codice Civile. Edizione ottobre 2021).

Decreto Legislativo 27 gennaio 2010, n.39 - Testo consolidato con il decreto legislativo 17 luglio 2016, n. 135. (Legislative Decree 27 gennaio 2010, n. 39 - Testo consolidated with the legislative decree 17 luglio 2016, n. 1359.

NETHERLANDS

Law of 19 January 2006 on the supervision of audit firms (*Wet van 19 januari 2006, houdende het toezicht op accountantsorganisaties*).

Decree of August 16, 2006, containing rules concerning the implementation of the Audit Firm Supervision Act (*Besluit van 16 augustus 2006, houdende regels ter zake van de uitvoering van de Wet toezicht accountantsorganisaties*).

Civil Code. (Burgerlijk Wetboek).

Regulation on the independence of accountants in assurance work (Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten).

POLAND

Act of 11 May 2017 on Statutory Auditors, Audit Firms and Public Oversight (Act of 11 May 2017 on Statutory Auditors, Audit Firms and Public Oversight).

Act of 29 September 1994 on Accounting (Ustawa z dnia 29 września 1994 r. o rachunkowości).

PORTUGAL

Law No. 148/2015 of September 9. Régimen Jurídico de la Supervisión de Auditoría. (Lei n.º 148/2015, de 09 de Setembro. Regime Jurídico de Supervisao de Auditoria).

Law No. 140/2015, of September 7. Statute of the Order of Statutory Auditors (*Lei n.º 140/2015*, *de 07 de Setembro. Statute of the Order of Statutory Auditors*).

Code of Commercial Companies. Decree-Law No. 262/86, of September 2. (*Código das Sociedades Comerciais. Decreto-Lei n.º 262/86, de 2 de setembro*).

CZECH REPUBLIC

Act No. 93/2009 Coll. Act on Auditors and Amendment of Certain Acts. (Zákon č. 93/2009 Sb. Zákon o auditorech a o změně některých zákonů).

Act No. 563/1991 Coll (Accounting Act) (Zákon č. 563/1991 Sb. Zákon o účetnictví).

Decree No. 500/2002 Coll. Decree implementing certain provisions of Act No. 563/1991 Coll. on Accounting, as amended, for accounting entities that are entrepreneurs accounting in the double-entry accounting system. (*Vyhláška č. 500/2002 Sb. Vyhláška, kterou se provádějí některá ustanovení zákona č. 563/1991 Sb., o účetnictví, ve znění pozdějších předpisů, pro účetní jednotky, které jsou podnikateli účtujícími v soustavě podvojného účetnictví)*.

ROMANIA

Law no. 162/2017 on the statutory audit of annual financial statements and consolidated annual financial statements and normative amendments. (*Legea nr. 162/2017 privind auditul statutar al situ-ațiilor financiare anuale și al situatiilor financiae anuale consolidate și de modificare a unor acte normative*).

Accounting Standards of December 29, 2014 (updated.) (*Reglementările Contabile din 29 decembrie 2014 (*actualizate*)*).

SWEDEN

Auditors Act SFS 2001:883 (Revisorslag SFS 2001:883).

Annual Accounts Act (1995:1554) (Årsredovisningslag (1995:1554)).

UNITED KINGDOM REGULATIONS

Revised Ethics Standards 2019. Financial Reporting Council (FRC). (*Revised Ethical Standard 2019. Financial Reporting Council (FRC)*.

Companies Regulations 2008 (Disclosure of Auditor Remuneration and Liability Limitation Agreements) Regulations 2008 (2008 No. 489)).

UNITED STATES REGULATIONS

Code of Federal Regulation (CFR) Title 17. Parts 210 & 240. (Code of Federal Regulation (CFR) Title 17. Parts 210 & 240).

Public Company Accounting Oversight Board (PCAOB) professional standards. Section 3- Auditing Standards and Related Professional Practice. (*Public Company Accounting Oversight Board. Professional Standards. Section 3. Auditing and Related Professional Practice Standards*).

Code of Professional Conduct. American Institute of Certified Public Accountants (AICPA.) (Code of Professional Conduct. American Institute of Certified Public Accountants (AICPA)).

APPENDIX

Cluster Analysis Clustering History

			Clustering	g history		
C.	Combined of	cluster		First occurrence of	f the stage cluster	N
Stage	Cluster 1	Cluster 2	Coefficients	Cluster 1	Cluster 2	Next stage
1	13	14	,000	0	0	9
2	2	12	,000	0	0	9
3	9	11	,000	0	0	5
4	8	10	,000	0	0	6
5	5	9	,000	0	3	11
6	7	8	,000	0	4	8
7	3	4	,000	0	0	11
8	7	15	,000	6	0	10
9	2	13	,000	2	1	13
10	6	7	,000	0	8	12
11	3	5	,000	7	5	13
12	1	6	,002	0	10	14
13	2	3	,002	9	11	14
14	1	2	,007	12	13	0

