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Determinants of the choice of permanent options: The Case of European Groups

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Abstract

Research Question: What are the determinants that may affect the choices of permanent accounting options adopted by European groups during the transition to IAS/IFRS standards?
Motivation: 2005 was the year of the changeover to international standards in Europe. One of the difficulties and one of the challenges of the transition to IFRS for companies relates to the choice of permanent options retained during the first application of the IAS/IFRS standards which constitutes a commitment. It is in this perspective that we have directed our research by studying the determinants of the choices of the permanent options adopted by the European groups during the transition to the IAS/IFRS standards.
Idea: The purpose of this article is to study the determinants of the choices of permanent accounting options made during the first adoption of international accounting standards IAS/IFRS.
Data: The study sample consisted of 84 publicly listed firms in the Euronext 100 index.
Tools: To test study's hypotheses, we applied a logistical regression.
Findings: Results show that industry, and the financial performance are the most used reasons to justify the choice of permanent options.
Contribution: Compared to previous studies, our research focused on permanent options, whereas previous research was limited to the study of optional exemptions.

Key words: IAS/IFRS, international accounting standards, IFRS 1, permanent options, accounting choices, first application.

JEL codes: M41

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1. Introduction

The standardization of financial accounting has become an indispensable step in the evolution of accounting on an international level. To do so, the European Union has for a long time accelerated the work of harmonizing the accounting of member countries, by means of directives, to facilitate the comparison of financial statements between European companies. The need for harmonization is therefore proving to be increasingly necessary for European companies, to facilitate the transmission or reception understandable information understandable by everyone and to attract foreign investors. As a result, following attempts at European accounting harmonization and in the absence of an exclusively European body of standards, the EU has chosen to delegate to the IASB to take care of the standardization process. Under EU rules, listed companies must prepare their consolidated financial statements in accordance with a single set of international standards called IFRS. This exceptional step represents the transition period or the period of the first application of international standards. This period of transition to international standards was a crucial and rare moment of deep change in accounting practices for consolidated accounts.

Faced with this new context, researchers have tried to understand this exceptional phenomenon based on several studies (Demaria, 2008; Cormier *et al.,* 2009). Among the topics that caused debate, the first application and the options allowed by the IFRS 1 standard. IFRS 1 First-time Adoption provides exemptions and options for firms. It is in this perspective that we directed our research. This article is therefore devoted to studying the factors that influence and condition the choice of permanent accounting options adopted by European groups during the transition to IAS/IFRS standards. Thus, the international reference system offers two types of standards with options, namely the options for the first application of the standards, i.e. applicable only once, and the "permanent" options, when the choice of method applies for all future exercises. IFRS 1 provides guidance on the initial adoption of IFRS and provides a limited number of exemptions and exceptions as a practical solution for certain implementation issues. As for the permanent options, they mainly belong to three categories, namely presentation options, valuation options and accounting options.

The valuation options for fixed assets concern three standards relating to fixed assets, namely IAS 16 “property, plant and equipment”, IAS 38 “Intangible assets” and IAS 40 “Investment property”. Thus, IAS 16, 38, and 40 permit two accounting models for the measurement after initial recognition such as historical cost and fair value.

As for the accounting options, they concern the accounting for employee benefits (IAS 19) which offers a company the option of charging all actuarial differences, either to shareholders' equity or to the income statement.

The accounting options also concern the standard (IAS 23) “borrowing costs”. IAS 23 prescribes the methods of accounting for borrowing costs which we can either recognize as an expense or incorporate into the cost of the asset.

The question of the behavior of the company faced with a situation offering a multitude of choices attracts the attention of theoretical works. We are thus following a very interesting period to examine the accounting strategy of companies faced with this new situation. Therefore, the year of conversion to international standards in Europe, namely the year 2005, is the year of our study. Therefore, the objective of this research is to determine, in the European context, the reasons why companies have preferred such an option over another based on an empirical study and the determinants of these decisions. This paper helps to understand the choices made by 84 European companies trying to answer the following question: What are the main factors that influence and condition the choices of permanent accounting options adopted by European groups during the transition to IAS/IFRS standards?

To answer the research question, the methodology used is based on the test of a logistic regression model integrating variables related to six types of factors: the size of the company, the leverage, the mode of remuneration, the ownership structure, the industry, and financial performance. Our model was thus tested on EURONEXT 100 companies. We found that the sector of activity influences the choices made by European groups offered by the IAS40 during the transition. This means that non-financial corporations prefer to keep the method of accounting for their assets at their historical cost. Similarly, financial performance has influenced the choices offered to European groups by IAS 19 during the transition. This means that underperforming companies choose to charge all actuarial gains and losses to equity at the date of transition. As for the other variables relating to the size of the groups, the leverage of the groups, the mode of remuneration of the leaders and the distribution of the shareholding, they are not significant for all the models tested. We contribute to the existing literature on the choice of permanent options during the transition. Compared to previous studies, our research focused on permanent options, while prior research was limited to the study of optional exemptions.

The remainder of this paper is organized as follows. In Section 2, the relevant literature is reviewed. Section 3 provides the hypotheses to be tested. Section 4 describes the data and the methodology used. Finally, Section 5 highlights the results and their discussion.

2. Literature review

2.1 The political-contractual approach

Political-contractual theory (PCT) is an approach initiated by accounting researchers in the late 1970s, namely Watts and Zimmerman. According to Casta (2009), the inability of traditional research to explain practices of accounting policy, observed despite the low informative content of financial statements for investors, was at the origin of the formulation of a positive theory essentially based on the paradigm of contractual usefulness of accounting information. According to Demaria (2008b), it emerges from the literature review that PCT is the dominant approach in terms of studying and understanding accounting choices. The study of Demaria and Dufour (2007b) linked the political-contractual hypotheses in an attempt to explain the choices of accounting options made by the SBF 120 index during the transition to IAS/IFRS accounting standards. Moreover, Dumontier and Raffournier (1999) explained that the goal of political-contractual theory is to explain all decisions of an accounting nature.

2.2 The conventionalist approach to accounting choices

Additional uncertainty has been introduced into European accounting practice due to the adoption of the international accounting standards that is very different from local standards. Since uncertainty represents a fundamental notion in the theory of conventions, we mobilize this theory to explain the choices of accounting options. Indeed, the theory of conventions is concerned with the behaviors adopted by individuals when they are confronted with situations marked by uncertainty: complex situations. Moreover, Amblard (2008) notes that accounting conventions have been gradually developed to circumvent the problem of uncertainty.

However, at the time of the first application of the IAS/IFRS standards, the actors find themselves in a generalized uncertainty because they must face a completely new situation. According to Demaria (2008b), the first application of the IAS/IFRS accounting standards turned out to be a period of deep change in accounting practice and thus a challenge to the conventions generally used.

At this point, it is necessary to define what a convention is, although, according to Demaria (2008b), there is currently no unanimous definition. Thus, according to Heem (2002), convention is defined as a socially elaborated agreement that makes it possible to govern behavior in situations of uncertainty. The convention thus represents a reference standard that dictates to the actor who adheres to it the behavior to adopt in a situation of uncertainty.

The objective of the study by Demaria (2006) is to examine the options retained in terms of the valuation of tangible fixed assets during the first application of the international accounting standards IAS/IFRS. The sample of this study is composed of the 50 firms listed on the French market, including almost all the groups that make up the CAC 40 index. The study highlights the current resistance of the historical cost convention compared to the fair value alternative. It became apparent that the approach by conventions is relevant to understand the process of accounting choice in times of change of the reference system and to highlight the factors of emergence of the new methods introduced by the international reference system. We will, therefore, adopt this theory to try to explain the determinants of accounting option choices.

3 Hypotheses development

In this paper, we analyze the different factors influencing the accounting choices during the first application of international accounting standards IAS/IFRS. Therefore, a multi-theoretical framework serves to shed light on the reasons those companies chose an option over another one. In what follows, we will develop six hypotheses that are subject to statistical testing.

3.1 Hypothesis related to the size of the company

Previous studies (Watts & Zimmerman, 1990; Cormier *et al.*, 2009; Jeny-Cazavan & Jeanjean, 2008) have found that the size of the company is an important factor in accounting choices. According to Watts and Zimmerman (1990),"*It is clear there is a relation between firms' accounting choice and other firm variables, such as leverage and size*". Likewise, research of Pham and Phi (2020) shows that the company size is a factor that could explain the choice of accounting policies. The study of Aledo *et al.* (2009) examines the factors driving the choices of options of the firms listed on the Spanish Continuous Stock Market that have been using IFRS since 2005. Their analysis indicates that firm size plays an important role in explaining the probability to adopt the optional accounting criteria provided by IFRS. Similarly, Cormier *et al.* (2009) found that firm size could influence French firms' choices of optional exemptions. This indicates that larger firms are more likely to choose optional exemptions with a negative impact on equity at the transition date.

H1. *There is a positive relationship between the size of the company and the choice of permanent options permitted by IFRS1.*

3.2 Hypothesis related to the leverage

Previous research (DeAngelo *et al.,* 1994; Marchal *et al.,* 2007; Demaria, 2008) have shown the influence of the leverage on the choice of accounting practices. As for Jeny-Cazavan and Jeanjean (2008), they examined, in their study on SBF 120 index, the effect of IFRS on some financial indebtedness profitability ratios and they found as a result a positive and significant relation between the leverage and the accounting choices. As a result, French companies use optional exemptions to hide their leverage. So, this study highlighted the impact of leverage on the choice of options. According to the study conducted by Demaria (2008), indebted firms favored options to increase equity, thus improving the debt ratio. Indeed, opting for a portfolio of options having a negative impact on net worth artificially increases the level of indebtedness, which is not desirable for a group that is already indebted. The results of Jeny-Cazavan and Jeanjean (2008) also show that SBF 120 firms have taken advantage of the transition to IFRS to improve their apparent leverage. Demaria and Dufour (2007b) found that highly leveraged groups would have tended to choose to revalue their fixed assets at the transition date. In conclusion, we note, through this review of the literature, that accounting choices depend on the level of corporate debt. We can then state the following hypothesis:

H2. *There is a positive relationship between the leverage of the company and the choice of permanent options permitted by IFRS1.*

3.3 Hypothesis related to executive compensation contracts:

The Missonier-Piera (2004) study's shows that managers' compensation do have an impact on accounting policy choices. Demaria and Dufour (2007b) study showed a negative and significant relationship between the existence of stock options and the adoption of conservative options. Indeed, they found that stock option compensation has a significant negative impact on the first-time application exemption of IFRS 1 which allows not to restate previous plans. As a result, it is possible to observe a link between this method of remuneration and the choice of accounting options. Thus, we notice that the remuneration of managers or directors in the form of bonuses influences the choice of accounting procedures. Hence, our hypothesis is thefollowing:

H3. *There is a positive relationship between the distribution of stock option plans to managers and the choice of permanent options permitted by IFRS1.*

3.4 Hypothesis related to ownership structure

According to Casta (2009), there are, beyond the major assumptions (remuneration, leverage, size), other factors which appear empirically as determinants of the accounting choices made by managers, namely the policy of dividend, capital intensity, the degree of risk specific to the company, the concentration in the sector or the structure of the shareholding. Therefore, we will try to find a relationship between the distribution of shareholding and the choice of accounting options.

Indeed, Missonier-Piera (2004) assumes that "*it is therefore highly probable that in firms where the ownership dilution is high, managers will choose accounting methods that accelerate the reporting of income to increase their own compensation*". In other words, the more majority shareholders there are, the more pressure there is on accounting decisions. In the Asian context, Astami and Tower (2006) believe that the level of shareholder concentration helps to understand the accounting choices of companies. Indeed, they show the tendency of managers to adopt accounting policies in accordance with the constraints linked to the relationship between main shareholder and managers. Affes and Callimaci (2007) conducted a study to understand the motivations leading to the early adoption of IAS/IFRS standards by listed German and Austrian groups. Using a logistic model, they estimated that the anticipation of international standards is explained by the size of the firm and the shareholding dispersion. Isa (2014) proved that firms with higher ownership concentration tend to use more of fair value model. In this context, our hypothesis can be as follows:

H4. *There is a positive relationship between shareholding distribution and the choice of permanent options permitted by IFRS1.*

3.5 Hypothesis related to financial industry membership

According to Demaria (2008), the introduction of industry sector in the logistic regression model leads to the appearance of additional explanatory relations making it possible to target more finely the choices of accounting options during the first application of the standards IAS/IFRS. Moreover, Demaria (2008) found a relationship between the portfolio of choice and membership in a financial company. In other words, the groups belonging to this sector have opted for exemptions with a positive impact on equity. Tort (2007) believes that the influence of industry practices has also had a substantial impact on the accounting choices made by management. Nevertheless, Demaria and Dufour (2007b) found that the sector of activity has never an influence on the choice of options. As a result, we are obliged to question the relevance of sector affiliation as a determining factor in the choice of accounting options. Hence, we develop the following hypothesis:

H5. *There is a positive relationship between financial industry membership and the choice of accounting options.*

In our research we used the industrial coding grid "*Industry Classification Benchmark*" proposed by Euronext Paris following the example of Demaria and Dufour (2007b) and Kvaal and Nobes (2010). This grid divides the groups according to their belonging to the following sectors: Oil and Gas, Basic Materials, Industrials, Consumer Goods, Healthcare, Consumer Services, Telecommunications, Utilities, Financial Companies and Technology. Based on this distribution and following the example of Jeny-Cazavan and Jeanjean (2008), we have grouped the sectors into two headings: financial companies and industrial and commercial companies. As a result, the sector of activity is a binary variable coded 1 if it is a financial company, and 0 otherwise.

3.6 Hypothesis related to the firm performance

At the German level, Leuz and Verrecchia (2000) have examined the accounting choices of companies listed on the DAX index for the year 1998. Using a logistic regression analysis, the authors show that financial performance significantly explain the decision of adopting international standards. TA *et al.* (2021), Tran *et al.* (2019) and Carmona and Trombetta (2008) also indicate that high-profitability companies tended to adopt IFRS. Thus, Hung and Subramanyam (2007) conducted a survey on a sample of 80 German companies which adopted international standards for the first time between 1998 and 2002 to study the effect of this adoption on the financial statements. They predicted that financial performance affects the decision to adopt IAS. On the other hand, Dumontier and Raffournier (1999) have demonstrated the absence of a significant relationship between the voluntary adoption of IAS and the firm performance. Hence, the hypothesis can be presented as:

H6. *There is a relationship between financial performance and the choice of permanent options permitted by IFRS1.*

4 Research Methodology

4.1 Sample

The selection of the sample size results from a determination of representativeness. The sample of the Euronext 100 index is our starting sample, it comprises the largest and most liquid stocks traded on Euronext. The following table specifies the constitution of the sample.

Table 1. The sample

Starting sample	**100**
Delisted or merged groups	1
Groups applying IFRS before 2005	8
Groups with a closing date other than December 31, 2005	5
Groups having anticipated the application of an IAS or IFRS standard	1
Groups with outlier data (statistical reasons)	1
Final sample	**84**

The relationship between the choices offered by IFRS 1 and the characteristic of the firm is tested using the following logit model.

$$Y = C + b_1\, LogAct + b_2\, RatioEnd + b_3\, Rem + b_4\, DDV + b_5\, SectFin + b_6 ROE + ei$$

With Y: The dependent variable which is a binary variable.

4.2 Dependent variables

The dependent variables of the model correspond to the choices of permanent options allowed by the IFRS1 standard. These options are related to IAS 16, IAS 38, IAS 40, IAS 19 and IAS 23. Indeed, we decided to withdraw the option relating to IAS 1. Indeed, according to Demaria (2008), these choices have been estimated with no impact on the content of the financial statements. So, there will be no impact on the determinants of the choices. The table 2 below shows how the options have been coded.

Table 2. Dependent variables

Variables	Measures
IAS 16, IAS 38 and IAS 40	Coded 1 if the group opts for the revaluation of certain assets, otherwise 0.
IAS 19	Coded 1 if the group opts to recognize all actuarial gains and losses in equity at the transition date, otherwise 0.
IAS 23	Coded 1 if the group opts for the incorporation in the cost of an asset of borrowing costs that are directly attributable to the acquisition, otherwise 0.

The collection of data related to the variables of the models tested pertaining to the year 2005, the transition's year, was hand collected form annual reports.

Table 3. The explanatory variables

Variables	Measures	Symbols
Size of the company	Natural logarithm of lagged total assets (Bah & Dumontier, 2001; Cormier *et al.* 2009).	LogAct
Leverage	Long-term debt divided by total assets (Cormier *et al.* 2009)	RatioEnd
CEO's compensation	Dummy variable for stock-option compensation plan coded 1 if stock options are granted to executives and 0 otherwise (Demaria & Dufour, 2007a)	Rem
Financial industry membership	Dummy variable: for finance industry coded 1 and 0 otherwise	SectFin
Ownership structure	The percentage of voting rights held by the principal shareholder (Missonier-Piera 2004)	DDV
Financial performance	Return on Equity (ROE), as Net Income/Equity (Affes & Callimaci, 2007; TA *et al,*. 2021)	ROE

Table 4 reports descriptive statistics for the variables used in our analyses. We report the mean and the standard deviation for the following variables, IAS 40, IAS38, IAS 16, IAS 19 and IAS 23.

Table 4. Description of the dependent variables

	Mean	Standard deviation
IAS16	0.0357	0.18669
IAS38	0.0833	0.27805
IAS40	0.0952	0.29531
IAS19	0.1310	0.33937
IAS23	0.3452	0.47830

From this table, we note that the average of the IAS 16, IAS 38 and IAS 40 is very low compared to the average of the IAS 19 and IAS 23. This explains the dispersion of the choice of option, namely the revaluation of assets. In other words, most groups choose not to use the option offered by IFRS1 and prefer to keep the method of accounting for their assets at their historical cost. So, we find that the "historical cost" convention has resisted fair value. This result is consistent with the results of Fasan and Marcon (2018) who found that continental European companies prefer the historical cost in the three accounting standards (IAS 40, IAS38 and IAS 16). Moreover, in a Romanian context, Istrate (2015) showed the resistance of companies to choose the revaluation model. He noted that the transition to IFRS is accompanied by an important continuation in the choices of accounting policies. Similarly Haller and Wehrfritz (2013) noted that firms tend to continue with accounting policies required or predominantly chosen under national GAAP.

Table 5. Description of the explanatory variables

	Min	Max	Mean	Standard deviation
LogAct	3.05	6.06	4.2696	0.71249
RatioEnd	-141.46	322.84	44.3467	61.93950
Rem	-	-	0.8571	0.35203
SectFin	-	-	0.1905	0.39504
DDV	0.59	100	26.6281	22.88276
ROE	-0.74	0.64	0.1600	0.15027

From this table, we notice that 85.71% of the sample attributes stock option plans to the management team. In addition, 19.05% of the sample consists of financial companies. The groups in the sample are highly indebted. However, we notice from the standard deviation of the debt ratio and the shareholding distribution, a strong dispersion in the sample.

4.3 Correlation study

This step will be devoted to the presentation of the correlations between the explanatory variables. Indeed, studying the correlation between two or more variables means studying the intensity of the connection that may exist between them. The study of the links between different variables is measured using the correlation coefficient. We will present below the correlation matrix obtained by SPSS using the Pearson coefficient. The value of this coefficient varies between 0 and 1. The closer the coefficient approaches 0, the more the variables are independent, i.e. they vary little together. Thus, empirically, there is a problem of multi-collinearity if the correlation is greater than 0.7.

Table 6. Correlations of variables according to the Pearson matrix

	LogAct	RatioEnd	Rem	SectFin	DDV	ROE
LogAct	1					
RatioEnd	0.135	1				
Rem	0.197	-0.124	1			
SectFin	0.394**	-0.018	-0.062	1		
DDV	-0.140	-0.098	-0.205	-0.104	1	
ROE	-0.029	-0.172	0.188	0.040	0.049	1

** Correlation is significant at the 0.01 level.

Table 6 shows that some variables have a certain degree of collinearity between them. This positive relationship suggests that the large firms are the financial firms. Thus, we note that all relationships have correlation coefficients below 0.5. Thus, there is a relationship between these variables, but it is low.

In the following, we will present the outcome of the five logistic regressions. For each regression, we give the Khi-deux derived from a Wald test and the Cox&Snell R^2. The Cox-Snell R^2 is an attempt to provide a logistic analogy to R^2 in Ordinary Last Squares Regression.

4.4 Statistical results

Table 7. Results of the IAS 16 regression

Variables	B	SE	Wald	Sig	EXP (B)
LogAct	0.073	1.653	0.002	0.965	1.075
RatioEnd	0.002	0.030	0.004	0.950	1.002
Rem	42.332	6814.818	0.000	0.995	2.425E18
SectFin	9.397	7.373	1.624	0.203	12049.680
DDV	0.103	0.099	1.066	0.302	1.108
ROE	-39.458	25.733	2.351	0.125	0.000
Constant	-50.885	6814.841	0.000	0.994	0.000
Khi-deux	**Coef**= 17.023			**Sig**= 0.009	
-2Log vraisemblance	8.862				
R² de Cox&Snell		0.183			
R² de Nagelkerke		0.692			
Pourcentage Correct		0.988			

From Table 7, we can conclude that none of the variables has a direct significant impact on IAS 16. Thus, Nagelkerke's R^2 is 0.692 for IAS 16, which represents an adequate threshold for judging the goodness of fit of the model. As for the khi-square test, it is significant at the 1% level, so the model can be considered explanatory.

Table 8. Results of the IAS 38 regression

Variables	B	SE	Wald	Sig	EXP (B)
LogAct	0.008	0.605	0.000	0.990	1.008
RatioEnd	0.006	0.007	0.824	0.364	1.006
Rem	-0.093	1.412	0.004	0.948	0.911
SectFin	1.503	0.921	2.663	0.103	4.497
DDV	-0.65	0.045	2.094	0.148	0.937
ROE	-2.870	2.540	1.276	0.259	0.057
Constant	-1.569	2.459	0.407	0.523	0.208
Khi-deux	**Coef=** 7.517			**Sig=** 0.276	
-2Log vraisemblance	40.672				
R² de Cox&Snell	0.086				
R² de Nagelkerke	0.196				
Pourcentage Correct	0.917				

From Table 8, we can conclude that no variable has a direct significant impact on IAS 38. We note that the R^2 of Nagelkerke is 0.196 for IAS 38, it can be qualified as acceptable. Indeed, since the pseudo-R^2 is not enough to prove the existence of the relationship between the dependent variable and the explanatory variables, we must also analyze the level of specification of the model through the chi-square test. However, the latter is not significant at the 1% or 5% level. Consequently, this model cannot be considered explanatory. Hence, we must reject in what follows this regression from our analysis. This result is confirmed by the results of (Cormier *et al.*, 2009; Haller & Wehrfritz, 2013) which did not include the option between the cost model and the fair value model for intangible assets since prior research suggests that the use of fair value accounting under IAS 38 internationally is rare.

Table 9. Results of the IAS 40 regression

Variables	B	SE	Wald	Sig	EXP (B)
LogAct	-0.361	0.575	0.394	0.530	0.697
RatioEnd	0.011	0.007	2.372	0.124	1.011
Rem	1.632	1.527	1.143	0.285	5.113
SectFin	3.269	1.176	7.732	0.005***	26.286
DDV	0.021	0.022	0.901	0.343	1.021
ROE	-3.841	2.607	2.171	0.141	0.021
Constant	-3.950	2.401	2.706	0.100	0.019
Khi-deux	**Coef=** 13.137			**Sig**= 0.041	
-2Log vraisemblance		39.698			
R² de Cox&Snell		0.145			

Variables	B	SE	Wald	Sig	EXP (B)
R^2 de Nagelkerke		0.310			
Pourcentage Correct		0.905			
Note : *** Significant variable at the 1% level					

Concerning IAS 40, we note, according to Table 9, that the only variable having a direct significant impact on IAS 40 is the one relating to the financial industry membership (SectFin). Nagelkerke's R^2 is 0.310 for IAS 40, which represents an acceptable threshold for judging the quality of adjustment of the model. As for the khi-square test, it is significant at the 5% level, so the model can be considered explanatory.

Table 10. Results of the IAS 19 regression

Variables	B	SE	Wald	Sig	EXP (B)
LogAct	0.284	0.708	0.161	0.688	1.329
RatioEnd	0.008	0.005	2.230	0.135	1.008
Rem	0.977	1.279	0.584	0.445	2.657
SectFin	-0.767	1.299	0.348	0.555	0.465
DDV	0.015	0.015	1.032	0.310	1.015
ROE	-8.034	3.724	4.655	0.031**	0.000
Constant	-3.726	3.233	1.328	0.249	0.024
Khi-deux	**Coef=** 12.976			**Sig=** 0.043	
-2Log vraisemblance		52.240			
R^2 de Cox&Snell		0.143			
R^2 de Nagelkerke		0.265			
Pourcentage Correct		0.893			
Note: ** Significant variable at the 5% level.					

From Table 10, we can conclude that the only variable having a direct significant impact on IAS 19 is the variable related to financial performance (ROE). Nagelkerke's R^2 is 0.265 for IAS 19, which represents an acceptable threshold for judging the quality of adjustment of the model. As for the khi-square test, it is significant at the 5% level for the IAS 19 regression. The model can therefore be considered as explanatory.

Table 11. Results of the IAS 23 regression

Variables	B	SE	Wald	Sig	EXP (B)
LogAct	0.222	0.397	0.314	0.575	1.249
RatioEnd	0.006	0.004	2.428	0.119	1.007
Rem	0.009	0.790	0.000	0.991	1.009
SectFin	1.330	0.661	4.041	0.044**	3.779
DDV	-0.018	0.013	1.764	0.184	0.983
ROE	-0.285	1.780	0.026	0.873	0.752

Variables	B	SE	Wald	Sig	EXP (B)
Constante	-1.731	1.686	1.054	0.305	0.177
Khi-deux	**Coef=** 12.231			**Sig**= 0.057	
-2Log vraisemblance		96.037			
R² de Cox&Snell		0.135			
R² de Nagelkerke		0.187			
Pourcentage Correct		0.69			
Note: ** Significant variable at the 5% level					

From Table 11, we can conclude that the only variable having a direct significant impact on IAS 23 is the variable related to the sector of activity (SectFin). Nagelkerke's R^2 is 0.187 for IAS 23, which represents a weak explanatory power of the model. In addition, the khi-square test is not significant at the 1% or 5% level. Therefore, this model cannot be considered explanatory, and hence, we must eliminate it in the following from our analysis.

5 Discussion

Overall, our models (IAS 16, IAS 40 and IAS 19) shed light on the determinants of option choices during the transition to international accounting standards. They posted Nagelkerke R^2s between 26.5% and 69.2%. After eliminating the two models relating to IAS 23 and IAS 38 from our analysis, we will try in what follows to situate our research in relation to previous work and classify our hypotheses into two groups, namely hypothesis partially validated, and hypotheses not validated.

Thus, the hypothesis relating to the financial industry membership was validated for the regression of the model relating to IAS 40. The variable (SectFin) is significant at the 1% level. In other words, financial companies can positively influence the company's strategy in the choice of accounting options. There is a positive link between the choice to opt for the fair value and financial industry membership. However, this hypothesis was not validated for the regressions of the models relating to IAS 16 and IAS 19. This is consistent with the study by Demaria and Dufour (2007b) who noted that the sector of activity has never any influence on the choice of options made during the transition to the IAS/IFRS accounting standards adopted by the French groups.

The result obtained for IAS 40 are consistent with the results of Tort (2007). Indeed, he states that the influence of sectoral practices has a substantial impact on the accounting choices made by management when applying the new standards for the establishment of their first consolidated accounts. As for Demaria (2008), she revealed that the introduction of sectors of activity in the logistic regression model leads to the appearance of additional explanatory relationships making it possible to target more finely the choices of accounting options during the first application of IAS/IFRS standards. However, she realizes that the sectors of activity have a relatively partial explanatory capacity since they turn out to be significant only for certain options. She also noted that only a few sectors seem to have an influence on some options. She found a negative and significant relationship between the choice to opt for the exemption from IAS 21 and financial companies.

The introduction of the sector of activity in our regression model made it possible to conclude that certain accounting methods are favored according to the fields of activity. Indeed, the mandatory application of the international accounting framework has left the preparer of the accounts the possibility of choosing between alternative methods for processing certain transactions. When deciding between one or the other of the treatments, the account preparer refers to generally accepted practices in his sector of activity. They will therefore make a conventional choice in relation to their socio-economic environment. Therefore, we find that the hypothesis relating to sectoral affiliation is partially validated.

In addition, the financial performance hypothesis is also partially validated. It has been verified for the regression of the model related to IAS 19. The variable (ROE) is significant at the 5% level. In other words, financial performance can influence the company's strategy in the choice of accounting options: the weaker the performance is, the more companies opt for the choice of option relating to IAS 19, namely the allocation of all actuarial differences in equity at the date of transition. However, this assumption was not validated for the regressions of the models relating to IAS 16 and IAS 40.

Moreover, Affes and Callimaci (2007) mentioned that the financial performance variable (ROE) does not seem to be significant in explaining the choice of early adoption of international standards by German and Austrian companies. The fact that this hypothesis was not validated for the regressions of the models relating to IAS 16 and IAS 40 is explained by the resistance of the groups faced with this new concept "measurement at fair value".

Indeed, since this option was not chosen by most of the groups, we cannot know if the financial performance really influences this choice. This resistance is explained by the uncertainty felt by European groups in the face of this new situation. Indeed, choosing the known makes it possible to minimize uncertainty about the impacts of changing standards. By opting for the alternative to the agreement, the groups can hardly quantify the medium-term impacts of the new rules on their results. Therefore, the first application of IAS/IFRS standards is a period of fundamental uncertainty during which practitioners want to refer to past practices.

Regarding the non-validated hypothesis, we found that the assumption relating to the size of the company, the level of indebtedness of the companies, the contracts of remuneration of the directors and the distribution of the shareholding were rejected.

Unlike the results of previous studies (Jeny-Cazavan & Jeanjean, 2008; Affes & Callimaci, 2007; Demaria & Dufour, 2007b; Pham & Phi, 2020), the firm size hypothesis was not verified. As a result, the size of the company has no influence on the decision of companies to choose the options relating to IAS 16, IAS 40 and IAS 19 allowed by IFRS1. Nevertheless, Missonier-Piera (2004) indicates that there is an absence of significance of the size variable on the choice of accounting options. Faced with the different results obtained about the relationship between the size of the company and the accounting choices, we are in a situation of uncertainty about the relevance of this variable as a determinant of the choices of accounting options.

The hypothesis relating to the leverage has not been verified. It appears out that the level of corporate debt has no influence on the decision of companies to choose the options relating to IAS 16, IAS 40 and IAS 19 allowed by IFRS 1. The hypothesis predicted by Quagli and Avallone (2010) that a higher level of debt could lead management to opt for the IAS 40 cost model has not been tested. Similarly, our results seem consistent with those of Affes and Callimaci (2007) and Missonier-Piera (2004). As for Cormier *et al.* (2009), they have found a negative and significant relationship between the leverage and the choice of optional exemptions. This shows that firms with higher leverage are less likely to elect optional exemptions with a negative impact on equity at the transition date, potentially to avoid further increases in leverage from the first-time adoption of IFRS.

The hypothesis relating to executive compensation contracts also has no effect on the choices of options offered by IAS 16, IAS 40 and IAS 19. So, there is no relationship between executive compensation and the choice of an options portfolio. Demaria (2008) results are similar to ours. However, Demaria and Dufour (2007b) found that the way directors are compensated significantly influences the first application exemption. We therefore note that the fact of attributing stock option plans to managers does not influence accounting choices, yet it is a founding variable of the politico-contractual theory. After having retained the classic variables of the politico-contractual theory, namely the size of the group, the leverage, and the methods of remuneration of the leaders, we conclude that these determinants do not explain the choice made by the European groups. As a result, Raffournier (1990), declared that "*it is therefore permissible to question the universality of this theory*".

Also, the last hypothesis relating to the distribution of the shareholding does not also influence the choices made by the companies. These results seem consistent with the results of Demaria and Dufour (2007b) who found that the distribution of shareholding is not a relevant criterion for understanding the accounting choices during the first application of IAS/IFRS.

In conclusion, from our study of the practices of the transition to IAS/IFRS standards, we have noticed that the accountants have favored the continuity of the old methods. This decision is due to the uncertainty of the groups when facing of a new situation.

6 Conclusion

We contribute to the transition to IFRS standards debate by examining the determining factors of their choices offered during the transition. Indeed, Haller and Wehrfritz (2013) state that harmonized accounting standards do not necessarily lead to harmonized accounting results when standards provide preparers with flexibility in their application. Factors specific to each company may explain the choices made. Thus, most European countries were confronted with problems of choice of accounting options following the first application of international standards. Therefore, the study of the choice of accounting options in Europe has been an avenue of research. However, compared to previous studies, our research focused just on permanent options, whereas previous research was limited to the study of optional exemptions (Cormier *et al.,* 2009) or all explicit options under IFRS (Kvaal & Nobes, 2010; Haller & Wehrfritz, 2013). Indeed, these choices will be irreversible, so if a group opts for the application of a new method, such as fair value measurement or the allocation of actuarial gains and losses to equity, it will not be able to reverse this choice later. So, these are choices that will affect financial statements in the future. Therefore, other groups that intend to adopt international standards may be interested in our study. We have highlighted the link between option choices and the intrinsic characteristics of groups. Indeed, we found that non-financial corporations choose to record their investment properties at historical cost. Also, the financial performance influenced the choices offered by the IAS 19 made by the European groups during the transition. Thus, less performing companies choose to charge all actuarial gains and losses to equity at the date of transition.

However, all research conceals methodological or theoretical weaknesses, which should be pointed out. Indeed, the limitations of our study are mainly related to the options studied. We are only interested in permanent accounting options, whereas there are a multitude of optional options. Therefore, the research should perhaps be spread out, studying all the options allowed by IFRS1 since there may be a link between them. The second limitation concerns the empirical part for the choice of factors influencing the decision of European groups. There are other factors, which we have not mentioned, that could better explain the phenomenon of accounting option choices. Thus, other characteristics of the firm can be studied such as the membership of the first two auditors in a BIG 4, the nationality of the groups belonging to the sample or the country of origin, the listing on a financial market in the USA and the institutional shareholding. The limitations mentioned offer several research perspectives, and a broadening of the field of research would certainly be a fruitful avenue to explore. In other words, this research could be carried out in other contexts outside of Europe, namely in developing countries.

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