How to Cite:
Zergoune, O. E. F., Chenine, A., Bouzit, A., & Saidani, M. S. (2024). Rulings and commandments from the European experience in adopting international financial reporting standards. *International Journal of Economic Perspectives*, *18*(4), 766–781. Retrieved from https://ijeponline.org/index.php/journal/article/view/591

Rulings and commandments from the European experience in adopting international financial reporting standards

Dr. Omar El Farouk Zergoune
Kasdi Merbah University, Ouargla, Algeria, Algeria
Email: zergounefarouk@gmail.com

Dr. Abdelnnour Chenine
Kasdi Merbah University, Ouargla, Algeria
Email: Chenineabdennour@yahoo.com

Dr. Ali Bouzit
Kasdi Merbah University, Ouargla, Algeria
Email: alibouzit3023@gmail.com

Pr. Mouhamed Said Saidani
Amar Telidji University, Laghouat, Algeria
Email: saidanimouha@gmail.com

***Abstract*---**The study aimed at revealing the nature of the relationship between the institutional factors and quality accounting in Europe after the convergence with IFRS in 2005. The paper uses panel cointegration (VECM) to investigate in two main areas: the ethical behavior of firms, the strength of auditing and reporting standards, by using the Eviews.7 program. The results showed that the institutional factors contribute to the increase of European accounting convergence with IFRS, which makes the study expect to adopt more comprehensive accounting strategies for European countries. This paper provides new empirical evidence in European Economies in light of the increased interest by Domestic and international investors on European region.

***Keywords*---**Globalization, International Accounting Convergence, IFRS, Accounting Quality, Institutional Factors, European Countries.
JEL Classification: F02, G38, K22, M41, M49, O11.

Corresponding author: *Saidani, M, S., Email: saidanimouha@gmail.com*
Submitted: 25 April 2024, Revised: 05 August 2024, Accepted: 01 September 2024

Introduction

The EU remains is largest political and economic bloc adopting IFRS with a domestic product of $ 19 trillion at the adoption rate of 98%, while the GDP of the countries adopting the IFRS from outside the EU $ 27 trillion (P. Pacter, 2017, P 04). In 2002, the European Commission released Regulation (EC) 1606/2002 requiring all firms with securities traded on a European regulated market to prepare consolidated accounts in accordance with IFRS from 01 January 2005 onwards. At the same time, the EU enacted several measures to ensure that IFRS will be strictly implemented and to strengthen accounting convergence, the most important of which is the establishment of a Committee of European Securities Regulators (CESR), CESR (2007) states that 21 member states had at least partially implemented Standard N° 1 by 2006, 24 by 2007, and 27 were projected to do so by 2008. (For details, see e.g. EU, August 2011).

Although many of these initiatives stemmed from EU legislation, the timing of their implementation at the country level varied. For example, EU Directives often contain options allowing for implementation differences at the member state level. In this context, the unique EU setting provides us with a great opportunity to investigate the relationship between accounting quality and IFRS adoption and institutional factors. In this study, we provide evidence on the validity of these claims by examining the macro-effects of institutional factors on the accounting quality in 20 European countries from 2005 to 2018.

I-Theoretical framework and literature review:
I-1- Accounting and institutional environment: what the relationship?

Xi Li (2016, p 32) notes that despite the growing adoption of IFRS in the world, financial reporting systems remains distinctly different. Countries with different resources are supposed to choose different accounting standards; therefore, very important to understand the mutual interactions between elements of the institutional environment and characteristics of the financial reporting system.

Tokuga 1993 presents the hierarchical structure of the accounting system in five layers descending: (1) Environmental factors: economy, geography, sociology, (2) neighboring environmental factors: wealth, governance, law sources, (3) Institutional Systems: political system, economic.., (4) Accounting Objectives and Functions (5) Methods, Accounting Applications and Processes. While M. Sanada (2012, p 04) is divided into three layers: (1) Objectives of financial reporting (decision-making, general supervision, control), (2) conceptual frameworks for accounting, (3) Accounting Standards. In his view, P. Wysocki (2011, p 309) argues that the analysis of the financial reporting system within its environment must take place under five elements: (1) Institutional structure (formal and informal), (2) Level of analysis (macro and micro), (3) Causation (external institutions and self-institutions), (4) Interdependence and integration, (5) Effective results versus ineffective results.

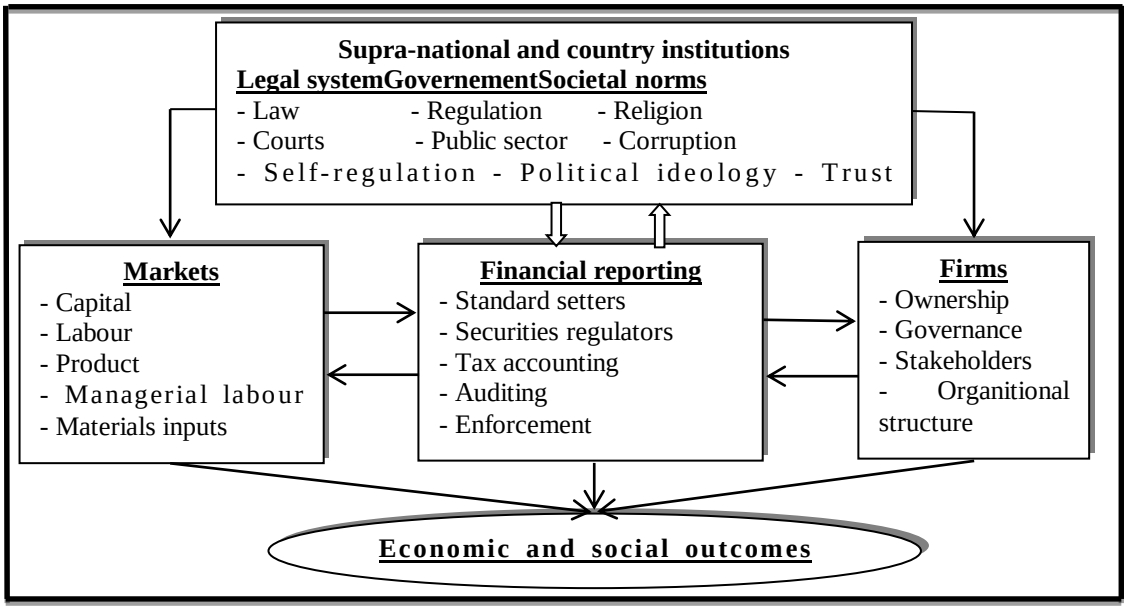

Figure n°1: Impact of the institutional environment on the establishment and functioning of financial reporting system
Source: Stuart McLeay, 2011, p 247.

"Accounting quality" can be defined as the extent to which the financial statement information reflects the underlying economic situation (Huifa Chen et al, 2010, p 220). Ball et al (2003, p 242) knows it and simply: "it is transparency in the presentation of basic transactions a company". In this context, many questions impose themselves such as: Who sets accounting standards? Are the markets (voluntary adoption)? Or governments (mandatory adoption)?, and, what factors could significantly influence countries` decisions to adopt IFRS?, How can IFRS make a difference in accounting quality in the context of different institutional environments?, Does IFRS compliance improve a firms information environment in a weak enforcement economy?. These questions have many backgrounds in current theoretical literature.

Hans B. Christensen et al (2013, p 14) assumes that there are four possibilities for developing the quality of accounting in case of changing accounting standards: (1) IFRS alone has a significant impact on the quality of accounting, (2) there is significant impact from IFRS to Accounting quality but just in the countries with strong structures and strict enforcement such as developed countries, (3) the combination of IFRS and simultaneous institutional reform is responsible for improving the quality of accounting, and this trend adopted by Hans, (4) institutional reform is the basis for any improvement in the quality of accounting.

Carnachan (2003), Hail, Leuz & Wysoki (2009) cites the costs of adoption at this level to: (i) one-time transition costs borne by all firms and the economy as a whole, including those from adjustments to institutions and professional. (ii) long term costs associated with updating accounting rules; (iii) recurring future cost savings resulting from the harmonization of international financial reporting

systems that will largely accrue to multinational companies and big four B4 (Ole-K. Hope et al, 2006, p 11). F. Bova et al (2011, p 32) finds that there is four reasons why IFRS does not improve the quality of accounting: (1) the survival of controlling factors on the incentives of firms local-origin, (2) the low level of general enforcement, (3) Local standards outweigh IFRS such as the US case, (4) Adoption costs outweigh its benefits. R. Ball (2001) argues that the adoption of IFRS requires: (1) reforming the corporate ownership structure and governance, (2) independence from the tax system to ensure that the tax targets of financial information are not distorted,(3) strong professional organizations of accounting and auditing, (4) the presence of professionals in sufficient numbers and with competence and independence,(5) an effective legal and judicial system, (6) advanced learning and technological systems, (7) Financial resources.

I-2- Adoption of IFRS in Europe

Between 1970 and 1999, the European Commission (EC) sought to harmonize accounting standards in Europe by means of Directives aimed at making financial statements increasingly comparable in terms of format and general recording and measurement rules. The Fourth Directive (in 1978) and the Seventh Directive (in 1983) were the most influential directives during the early stages of financial reporting convergence within the EU. The Fourth Directive specifies 'True and Fair View' as a general principle for financial reporting. The Seventh Directive addresses issues associated with consolidation. Despite these attempts, the harmonization process proved to be slow because the speed of transforming EC directives into national laws varied between member states (Roberts et al., 2002). Whereas the Fourth Directive was enacted as early as 1981 in the UK and Denmark, Austria did not enact this directive until 1996 (due to its late entry into the EU in 1995). This prompted a change of strategy in the mid-nineties.

The London-based IASB had from the beginning the EU's backing. The European Commission (EC), which was already pushing for a single set of accounting standards across its "common market," wanted to play a more important role in the worldwide harmonization of financial reporting and thus avoid U.S. dominance of this process. The Commission came to the conclusion that the adoption of a common set of high quality accounting standards throughout Europe would put European firms on a more equal footing with US firms, especially with respect to companies' access to external capital. In June 2000, the European Commission proposed that adoption of IFRS be compulsory for listed companies in Europe by 2005. In this stage the stated goal was to ensure that each IFRS standard: (i) is not contrary to existing European accounting directives, (ii) is conducive to the "European public good" and (iii) permits the production of high-quality financial information. Finally, in an attempt to provide timely input to the standard setting process, the EC formed an oversight (advisory) committee (The European Financial Reporting Advisory Group) to review and provide input to the IASB on proposed new IFRS standards. The stated goal of this group was to establish a dialogue with the IASB, particularly with the IASB's Standing Interpretations Committee (SIC), when implementation guidance is required. Just as EU and, in particular, British interests were central to the IASB's foundation, these interests continued to shape the IASB's development through its first decade.

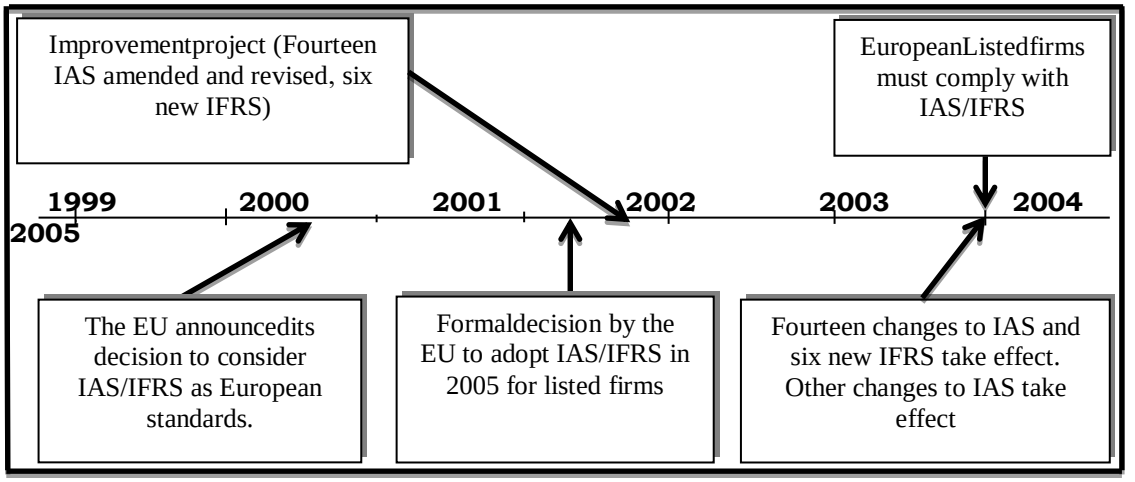

Figure n°2: Transition to IFRS in the European Union
Source: Capkun Vedran et al, 2016, p 355.

Despite the decision in 2002 to adopt IFRS in 2005, all European countries did not evolve at the same pace. Some European countries decided to anticipate the mandatory adoption of IFRS in 2005 by allowing listed firms to use either domestic GAAP or IFRS, which was the case for Germany and Austria among others. Other countries, like France, Spain and the UK, decided to not allow early adoption of IFRS. These differences led to three kinds of companies: (1) Early Adopters: these are firms from EU countries (and other countries throughout the world) that permitted firms to adopt IFRS standards prior to the EU mandatory adoption date of 2005 (between 1994 and 2004). (2) Late Adopters: these are firms from countries that allowed early adoption of IFRS standards before 2005, but chose to wait to adopt IFRS standards beginning in 2005. (3) Mandatory adoption: these are firms from countries that were forced to adopt IFRS after 2005.

I-3- Are there any benefits of IFRS in Europe?

The view of international bodies such as the World Trade Organization (WTO), OECD (Organization for Economic Development), IMF and World Bank seems to be that “measurement and reporting problems faced by accountants are the same throughout the world” (Rodrigues and Craig, 2007, p. 745), thus, as reported by the Financial Crisis Group 2009: “the standard-setting due process was set up to ensure that all voices in all geographical regions have an adequate opportunity to make their view known, Wide consultation also promotes excellence, neutrality, the identification of unintended consequences, and ultimately, broad acceptance of the legitimacy of the standards that are adopted”(K. Mcmeeking et al, 2016, P 10). The European Commission considered this an important step in the future of IFRS in the EU, which had previously stated that IFRS could ‘… ensure transparency, provide safeguards for investors and contribute to the overall stability of markets, the protection of investors and the maintenance of confidence in the financial markets, freedom of movement of capital in the internal market and helps to enable European companies to compete on an equal footing for financial resources available in European capital markets, as well as in world

capital markets' (EC 2000, para 3, 4, 5). The European Commission, for instance, provides the following reasons for mandating one set of IFRS, across the entire EU: (1) To contribute "to the efficient and cost-effective functioning of the capital market"; (2) To increase the overall global competitiveness of firms within the EU and thereby improve the EU economy (T. Jeanjean, Hervé Stolowy, 2008, p 04). From his side, European Commissioner McCreevy, responsible for the Internal Market and Services (2004–10), says: 'As users become more familiar and confident with IFRS, the cost of capital for companies using IFRS should fall. It should lead to more efficient capital allocation and greater cross-border investment, thereby promoting growth and employment in Europe.' (Peter F. Pope et al, 2011, p 247), the six largest international accounting firms applaud the EU's decision in GAAP Convergence 2002 (Donna L. Street et al, 2004, p 04). The United Nations Conference on Trade and Development (UNCTAD) has acknowledged the need to "mobilize investment for financing economic and social development", and the essential role of a "global set of high-quality financial reporting standards" in that development (UNCTAD, 2005, p 3).

II-Research Methodology
II-1- The problems:

In accordance with the above literature review, the study considers the impact of several institutional factors in improving financial reporting quality in the EU in the context of adoption IFRS as illustrated in Figure (03) as follows:

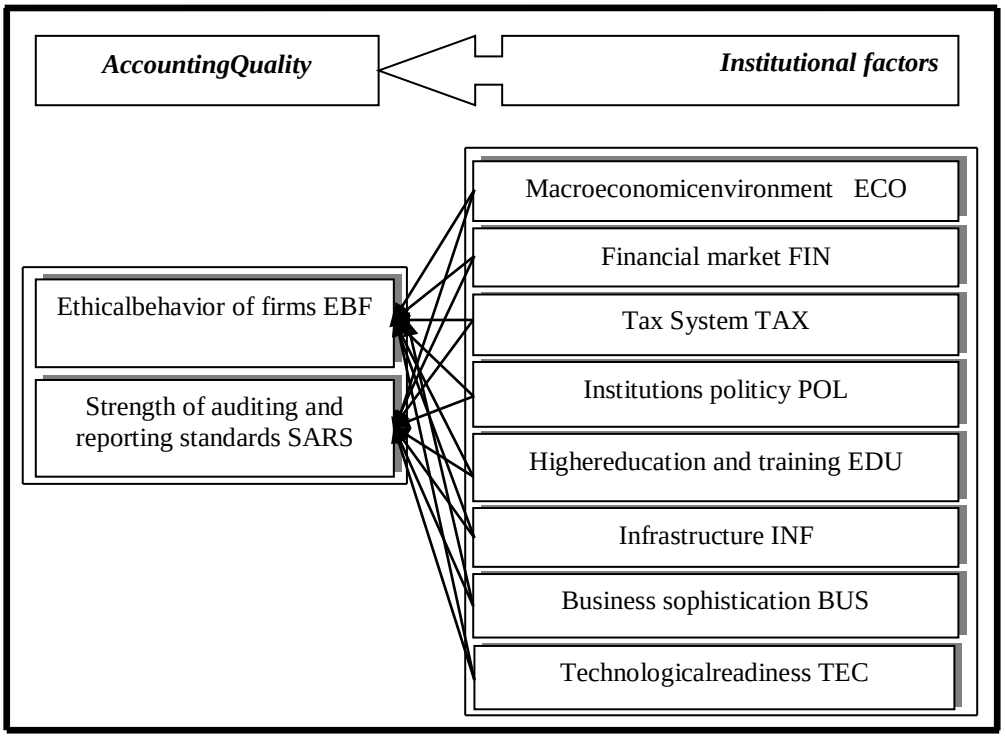

Figure n°3: Suggest the factors and variables of the study
Source: Prepared by the researcher.

Our paper intends to answer the following research question:-
Does the transition to IFRS enhance the quality of accounting in European countries in the context of regional institutional harmony achieved during the period 2005-2018?, in statistical terms: Is there any statistical impact to enhance the European institutional factors on the quality of accounting European after adopting IFRS during the period 2005 - 2018?.

H0: There is no significant relation between the institutional factors and the quality of accounting European after adopting IFRS during the period 2005 - 2018.
And, the sub-problems are given as follows:-
H01: Is there a long-term dynamic relationship between the ethical behavior in European companies and the macroeconomic environment and/or the development of financial markets and/or the tax systems and/or the strength of political systems and/or the quality of higher education systems and/or the infrastructure and/or the business environment and/or the technological readiness during the period 2005-2018?.

H02: Is there a long-term dynamic relationship between the strength of auditing and reporting standards in European countries and the macroeconomic environment and/or the development of financial markets and/or the tax systems and/or the strength of political systems and/or the quality of higher education systems and/or the infrastructure and/or the business environment and/or the technological readiness during the period 2005-2018?.

II-2- Research hypotheses:

Based on the previous figure, and for the purpose of this study, the researchers expect that the institutional factors will result in a increase the quality of the accounting European, for that, the main Hypothesis is:-
The quality of accounting European is driven in big part at enhance of institutional factors during the period 2005 - 2018, in statistical words: There is a statistically significant relationship between enhancing the quality of the financial reporting environment by adopting IFRS and the institutional factors during the period 2005 - 2018.

H1: There is a significant relation between the institutional factors and the quality of the European financial reporting environment after adopting IFRS during the period 2005 - 2018.
The research hypotheses of this study can be formed as follows:-

H11: There is a long-term dynamic relationship between the ethical behavior in European companies and the macroeconomic environment and/or the development of financial markets and/or the tax systems and/or the strength of political systems and/or the quality of higher education systems and/or the infrastructure and/or the business environment and/or the technological readiness during the period 2005-2018.

H12: There is a long-term dynamic relationship between the strength of auditing and reporting standards in European countries and the macroeconomic

environment and/or the development of financial markets and/or the tax systems and/or the strength of political systems and/or the quality of higher education systems and/or Infrastructure and/or the business environment and/or the technological readiness during the period 2005-2018.

II-3- Empirical models and variables involved:

We use the degree of cointegration and causal relationships between the quality of accounting European and institutional factors variables, by using the traditional Johansen-Fisher panel cointegration model with a related vector error correction model (VECM) proposed by Johansen (1988) and Johansen and Juselius (1990). Therefore, in order to empirically test the research hypotheses, the general model is:-

Quality of accounting = Economic Reform + Financial Reform + Tax Reform + Political and Legal reform + Educational reform + infrastructure reform + business environment reform + technological reform + Social and cultural reform + Reform of the accounting profession + Quality IFRS + εi …… (2)

$$EBFi \text{ or } SARSi = B0 + B1\ ECO + B2\ FIN + B3\ TAX + B4\ POL + B5\ EDU + B6\ INFRA + B7\ BUS + B8\ TEC + \varepsilon i$$

The variables are defined as follows:-

First: the independent variables used are: (1) the macroeconomic environment ECO: this indicator reflects the degree of development of European macroeconomic environment during 2005-2018; (2) financial markets FIN : this indicator reflects the degree of development of financial markets during 2005-2018; (3) the tax systems TAX : This indicator reflects the degree of development of European tax systems in period 2005-2018; (4) political systems POL: the index reflects the degree of development of the strength of political systems and legal in Europe during 2005-2018; (5) Education systems EDU: the indicator shows the degree of development of European higher education systems during the period 2005 - 2018; (6) Infrastructure INFRA: this indicator reflects the degree of development of European infrastructure during 2005-2018; (7) the business environment BUS: the indicator reflects the degree of development of European business environment during 2005-2018; (8) technological readiness TEC: the indicator reflects the degree of development of technological readiness in Europe during 2005-2018.

Secondly: the dependent variable used is the quality of accounting European by using two indicators: (1) the ethical behavior of firms EBF: this indicator reflects the evolution of the ethical behavior in the European companies after adoption IFRS in 2005; (2) the strength of auditing and reporting standards SARS: this indicator shows the development of the European national accounting standards by adoption of IFRS.

II-4- Sample selection, and database:

Data used in this study is a quantitative data. Samples collected in this study were 280 observations during the period 2005-2018 (14 years). Data source of 20 European countries such as: Germany, Belgium, Spain, Denmark, Croatia,

France, Cyprus, Finland, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Norway, Poland, Portugal, Romania, Russia, Sweden, was taken from the Global Competitiveness Reports issued by the World Economic Forum: http://reports.weforum.org/global-competitiveness-index -2017-2018/downloads/, For years: 2005, 2006, ..., 2018. Subsequently, comparative data which are referred to the research were collected "by hand" and were transferred to spreadsheets for processing.

III-Empirical results:

III-*1*- Typical selection tests:

The results of the study can be addressed in the following order:-

III-*1-1*- By using the ethical behavior of firm's index:

Table n°1: Summary Results of Cointegration Test, Wald test, Hausman Test and Regression Models

Cointegration Test							
Test Summary					**t- statistic**		**Prob**
ADF (*EBF)*					-2.831167		0.0023
H0 : No Cointegration H1 : It is Cointegration							
Wald test							
Test Summary				**F- statistic**	**Chi-Square**		**Prob**
Value (*EBF)*				13.61278	245.03		0.000
H0 : Pooled Regression Model H1 : Fixed-effects model							
Hausman Test							
Test Summary				**Chi-Sq.**	**Chi-Sq. d.f**		**Prob**
Cross-section random (*EBF)*				33.951732	8		0.000
H0 : Random effects model H1 : Fixed effects model							
	Coefficient	**Std. Error**	**t-statistic**	**Prob (t)**	**R-squared**	**F-statistic**	**Prob (F)**
EBF Model							
C	0.285	0.40168	0.7096	0.4785	96.74	311.41	0.0000
ECO	0.02	0.02772	0.7342	0.4635			
FIN	-0.0785	0.04418	-1.7783	0.0765			
TAX	0.0012	0.0024	0.5016	0.616			
POL	0.73	0.0848	8.6065	0.000			
EDU	-0.2411	0.0863	-2.7922	0.006			
INFR	0.0027	0.0302	0.08929	0.929			
BUS	0.6427	0.0887	7.24174	0.000			
TEC	-0.0534	0.03041	-1.7563	0.0801			

Source: Based on Eview.7 program outputs.

Based on table n°1 the cointegration test is aims to accept at least one causal relationship between EBFt and ECOt, FINt, TAXt, POLt, EDUt, INFRAt, BUSt, TECt, because the P- value less than 5%: Prob= (0.0023) <5%, therefore we refuse H0 and accepted H1, in other words, there is a long-term relationship between the ethical behavior of European firms and the institutional factors in period 2005 - 2018.

Based on Wald test Results and Hausman test results in same table, it was proven that Fixed Effect Model are better to use. This is indicated be the value of a probability of (0.000, 0.000) which is less than 0.05 significant at alpha 5 %: P-value (0.000, 0.000) <5%, therefor we reject the H0 (H0: Random Effect Model And H0: All Dummy=0 (Pooled Regression Model)) in two test and accepted H1: the Fixed Effect Model is the best in representing the relationship between the ethical behavior of European firms and the institutional factors. Based on the test results of panel data regression models using the Fixed Model can be seen in the following:

$$EBFt = 0.285 + 0.02\ ECOt - 0.07856\ FINt + 0.0012\ TAXt + 0.7299\ POLt - 0.2411\ EDUt + 0.0027\ INFRt + 0.6427\ BUSt - 0.05341\ TECt$$

In general, the results imply that the changes in the ethical behavior of European firms can be explained by long-term the changes in variables POL, EDU, BUS because the p-value less 5 %: Sig=(0.000, 0.0056, 0.000)<5%, with no long-term dynamic relationship between EBF and the variables ECO, FIN, TAX, INFR, TEC because p-value large then 5 %: Sig=(0.4635, 0.0765, 0.6163, 0.9289, 0.0801)>5%,and the model with a strong predictive capacity with an R-squared value of 96.74 %.

III-1-2- By using the ethical behavior of firm's index:
In the same way:-

Table n°2: Summary Results of Cointegration Test, Wald test, Hausman Test and Regression Models

Cointegration Test			
Test Summary		**t- statistic**	**Prob**
ADF (*SARS)*		-5.966844	0.0000
H0 : No Cointegration H1 : It is Cointegration			
Wald test			
Test Summary	**F- statistic**	**Chi-Square**	**Prob**
Value (*SARS)*	13.62	245.03	0.0000
H0 : Pooled Regression Model H1 : Fixed-effects model			
Hausman Test			
Test Summary	**Chi-Sq.**	**Chi-Sq. d.f**	**Prob**
Cross-section random (*SARS)*	13.512978	8	0.0954
H0 : Random effects model H1 : Fixed effects model			

	Coefficient	Std. Error	t-statistic	Prob (t)	R-squared	F-statistic	Prob (F)
SARS Model							
C	-0.06285	0.425	-0.1479	0.8825	68.24	78.14	0.0000
ECO	0.15902	0.0322	4.94	0.0000			
FIN	0.42735	0.0531	8.053	0.0000			
TAX	-0.00273	0.0025	-1.069	0.2859			
POL	0.21957	0.0918	2.391	0.0174			
EDU	0.19017	0.0952	1.9978	0.0467			
INFR	-0.02307	0.0355	-0.6494	0.5166			
BUS	0.20742	0.107	1.9384	0.0535			
TEC	-0.0308	0.0377	-0.816	0.4152			

Source: Based on Eview.7 program outputs.

Based on table n°2 the cointegration test is aims to accept at least one causal relationship between SARSt and ECOt, FINt, TAXt, POLt, EDUt, INFRAt, BUSt, TECt, because the P- value less than 5%: Prob= (0.000) <5%, therefore we refuse H0 and accepted H1, in other words, there is a long term dynamic relationship between the strength of auditing and reporting standards and the institutional factors in European countries in period 2005 - 2018.

Based on the Wald test Results in same table, it was proven that Fixed Effect Model are better to use. This is indicated be the value of a probability of (0.000) which is less than 0.05 significant at alpha 5 %: P-value (0.000) <5%, therefor we reject the H0 (H0: All Dummy=0 (Pooled Regression Model)) and accepted H1, but in Hausman test the p-value is large than 5 %: P-value (0.0954)>5%, because that, we accept H0 in this test: H0 :Random Effect Model, this means that the Random Effect Model is the best in representing the relationship between the strength of auditing and reporting standards and the institutional factors than the Fixed Effect Model. However, the R-squared value in Fixed Effect Model 96.7 % is more than the Random Effect Model 68.24 %. Based on the test results of panel data regression models using the Random Model can be seen in the following:-

SARSt= -0.0628 + 0.159 ECOt + 0.4273 FINt - 0.0027 TAXt + 0.2196 POLt + 0.19 EDUt - 0.023 INFRt + 0.2074 BUSt - 0.0308 TECt

In general, the results imply that the changes in the strength of auditing and reporting standards in European countries can be explained by long-term the changes in variables ECO, FIN, POL, EDU, BUS because the p-value less 5 % : Sig=(0.000, 0.000, 0.0174, 0.0467, 0.0535)<5%, with no long-term dynamic relationship between SARS and the variables TAX, INFR, TEC because p-value large then 5 %: Sig=(0.2859, 0.5166, 0.4152) <5%.

III-2- The case of estimating the models:

In the case of estimating the models, the results can be addressed in the following order:-

III-2-1- Panel Unit Root Test:

Here we shall detect whether EBFt, SARSt, ECOt, FINt, TAXt, POLt, EDUt,

INFRAt, BUSt, TECt hes unit root or not, and we assume that all our variables are integrated of same order, when the variables are integrated of same order, we can run the Cointegration test.

Table n°3: Summary Results of Panel Unit Root Test

	In lavel				**First differences**			
	Levin	Pesaran	ADF	PP	Levin	Pesaran	ADF	PP
EBF	0.0000	0.022	0.0084	0.5628	-	-	-	-
SARS	0.0847	0.7765	0.5316	0.8139	0.0000	0.0000	0.0000	0.0000
ECO	0.0053	0.5444	0.5777	0.5753	0.0000	0.0000	0.0000	0.0000
FIN	0.3643	0.8784	0.3831	0.7961	0.0000	0.0000	0.0000	0.0000
Tax	0.0004	0.3963	0.3516	0.2050	0.0000	0.0000	0.0000	0.0000
POL	0.0000	0.834	0.8177	0.9357	0.0000	0.0000	0.0000	0.0000
EDU	0.4436	0.9958	0.9753	0.9819	0.0000	0.0000	0.0000	0.0000
INFR	0.0354	0.9137	0.6388	0.9332	0.0000	0.0000	0.0000	0.0000
BUS	0.0985	0.1754	0.153	0.3042	0.0000	0.0000	0.0000	0.0000
TEC	0.05	0.998	0.999	0.999	0.0000	0.0000	0.0000	0.0000

Source: Based on Eview.7 program outputs.

Based on table n°3, we observe that all-time series are not stationary in level, with the exception of variable EBF, which is stable at level, because the P-value is large than 5 % (the majority Prob>5%), the majority of the methods are telling that the SARSt, ECOt, FINt, TAXt, POLt, EDUt, INFRAt, BUSt, TECt are become stationary after first differenced, this means: SARSt, ECOt, FINt, TAXt, POLt, EDUt, INFRAt, BUSt, TECt ~I(1), therefore, we can not estimate the model EBE, and we can estimated the model SARS, because he has the same order with variables ECOt, FINt, TAXt, POLt, EDUt, INFRAt, BUSt, TECt.

III-2-2- Cointegration Test:

The relationship of cointegration was studied in table n°1 and B, Overall, the cointegration test is aims to accept at least one causal relationship between SARSt and ECOt, FINt, TAXt, POLt, EDUt, INFRAt, BUSt, TECt, in other words, there is a long term relationship between SARSt and ECOt, FINt, TAXt, POLt, EDUt, INFRAt, BUSt, TECt in period 2005-2018.

III-2-3- Empirical Models:

Table n°4: Summary Results of Regression Models

Long run CointEq1									
	SARS (-1)	ECO (-1)	FIN (-1)	TAX (-1)	POL (-1)	EDU (-1)	INFR (-1)	BUS(-1)	TEC (-1)
Coefficient	1.000	0.207	-1.67	0.016	1.114	-0.88	0.239	-0.454	-0.4
Std. Error	-	0.104	0.2	0.007	0.28	0.25	0.128	0.262	0.162
t- statistic	-	1.986	-8.4	2.263	3.99	-3.55	1.861	-1.73	-2.45
Error Correction (Short run)									

	Coefficient	Std. Error	t-statistic	Prob (t)	R-squared	F-statistic
CointEq1	-0.096446	0.03451	-2.795	0.0052		
D(SARS(-1))	-0.449215	0.068	-6.606	0.0000		
D(ECO(-2))	0.098605	0.05567	1.7714	0.0766		
D(FIN(-1))	0.274402	0.08651	3.1717	0.0015		
D(TAX(-2))	0.003815	0.00407	0.938	0.3484		
D(POL(-1))	0.0691	0.1878	0.368	0.7129	21.21	6.7007
D(EDU(-2))	0.218356	0.142164	1.536	0.1247		
D(INFR(-1))	0.036547	0.04654	0.7853	0.4324		
D(BUS(-2))	0.136507	0.22616	0.6036	0.5462		
D(TEC(-2))	-0.073511	0.05202	-1.4131	0.1578		
C	-0.040126	0.0213	-1.8842	0.0597		

Source: Based on Eview.7 program outputs.

Based on table n°4, we can representation the results of relationship between the accounting quality and institutional factors as follows:

Long run:

$$e_{t-1} = SARS_{t-1} + 0.207\ ECO_{t-1} - 1.6689\ FIN_{t-1} + 0.0165\ TAX_{t-1} + 1.1143\ POL_{t-1} - 0.8788\ EDU_{t-1} + 0.239\ INFR_{t-1} - 0.4538\ BUS_{t-1} - 0.3976\ TEC_{t-1} + 2.7221$$

Short run:-

$$\Delta SARSt = -0.09645\ e_{t-1} - 0.4492\ \Delta SARS_{t-1} + 0.0986\ \Delta ECO_{t-1} + 0.2744\ \Delta FIN_{t-1} + 0.0038\ \Delta TAX_{t-1} + 0.0691\ \Delta POL_{t-1} + 0.2183\ \Delta EDU_{t-1} + 0.0365\ \Delta INFR_{t-1} + 0.1365\ \Delta BUS_{t-1} - 0.0735\ \Delta TEC_{t-1} - 0.04$$

From this model we can see that the Speed of adjustments towards long run equilibrium is negative and significant: C (1) =-0.09645 & P- value=0.0052< 5%, for that, we can confirm the long causality from the three independent variables such as ECOt, FINt, TAXt, POLt, EDUt, INFRAt, BUSt, TECt to SARSt; Meaning that, ECOt, FINt, TAXt, POLt, EDUt, INFRAt, BUSt, TECt have influence on SARSt in the long run. In other words, there is long run causality running from ECOt, FINt, TAXt, POLt, EDUt, INFRAt, BUSt, TECt to SARSt. In the long term the European countries need 10.368 years(1÷0.09645=10.368) to return of the point equilibrium, therefor, the first correction of this model in the year 2015 and the second correction in 2025, and the speed of the logarithmic convergence is: $\mu = \frac{\ln(1-TB)}{T} = \frac{LN(1-14(-0.09645))}{14} = 0.061 = 6.1\%$, this means that the quality of accounting European returns in to balance point after any external shock or crisis in the European institutional factors at a rate of 06.1 % in the year, and the time required for European countries to complete half of the gap that separates them from the stable situation in the long term are: $\mu = \frac{\ln(2)}{\mu} = \frac{LN(2)}{0.061} = 11.363$, this means that the achievement of half the distance of economic accounting convergence between the European countries requires about 11.363 years. And for study the short-term causal relationship, we using Wald test Statistics, the null Hypothesis of this test is: H0: C(3)=0, H0: C(4)=0, H0: C(5)=0, H0: C(6)=0, H0: C(7)=0, H0: C(8)=0, H0: C(9)=0, H0: C(10)=0, if we accept H0, meaning that there is no short run causality running from ECOt, FINt, TAXt, POLt, EDUt, INFRAt,

BUSt, TECt to SARSt, based on the Wald test Results the P-value is: (0.0015, 0.0766)≤5% and (0.3484, 0.7129, 0.1247, 0.4324, 0.5462, 0.1578) > 5%, from these results we can accept H1 in case ECOt, FINt, meaning that there is short run causality running from ECOt, FINt to SARSt, with no short run causality running from TAXt, POLt, EDUt, INFRAt, BUSt, TECt to SARSt.

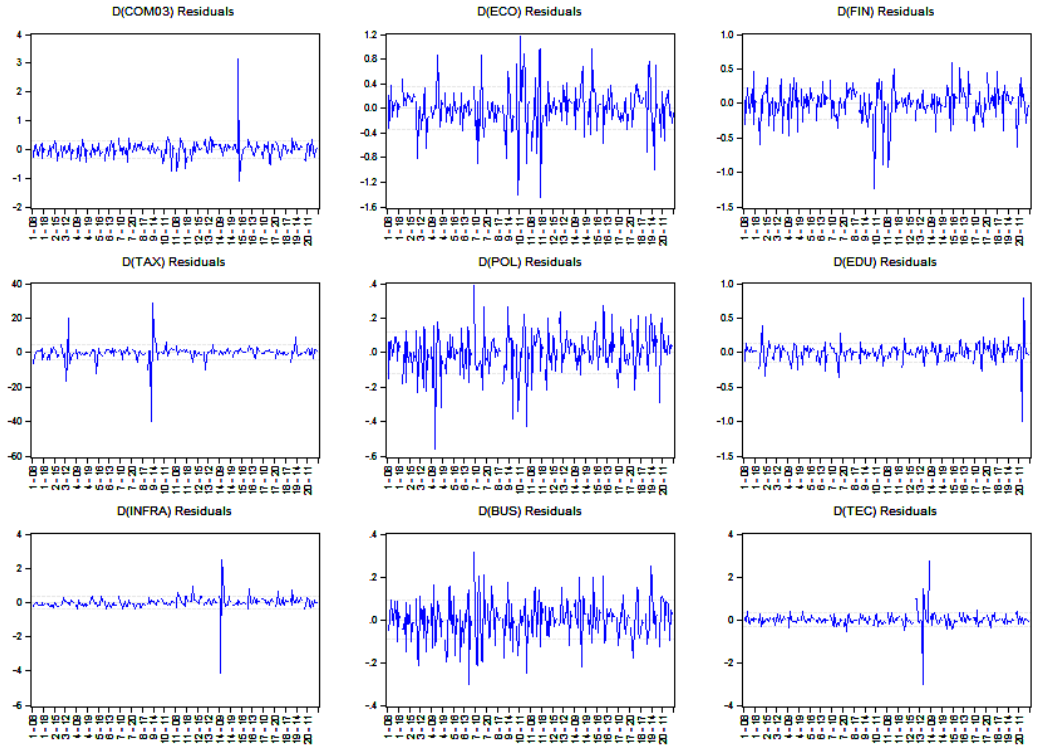

Figure n°4: Graphical of the residuals
Source: Based on Eview.7 program outputs.

III-3- Discussion of Hypotheses:
Based on the tests statistics by using panel data we have the following results:-

First: there is evidence that the hypothesis H11 are supported but in part, because of the inability to estimate the model, and preferring a Fixed effect model as the best representation of this relationship, therefore, it is possible we can to say that there is a statistically significant relationship between enhancing the quality of the ethical behavior of European firms and institutional factors in light of the adoption of IFRS during the period 2005-2018.

Second: there is evidence that the hypothesis H12 is fully supported by estimating the relationship in the long and short term, meaning that there is a statistically significant relationship between the strength of auditing and reporting standards and institutional factors in European countries during the period 2005-2018.

Third: In line with our hypotheses, there appears to be evidence that the convergence of institutional factors to have helped shift from European GAAP to IFRS, from these findings we can confirm the main hypothesis of the study that the quality of European accounting is driven, in part, by convergence of institutional factors during the period 2005-2018, particularly in the areas of: the ethical behavior of European firms, the strength of auditing and reporting standards; where we can use the models to predict future changes in the European accounting quality, this is in spite of the fact that the withdrawal of England from the European Union may affect the policies of European accounting convergence in the future.

Conclusion

This paper examines whether and how high-quality institutional environment can push to optimize the accounting quality among countries and international regions, this is a very important issue, for that, in this study we used econometric regression models in order to investigate the impact which the institutional factors had on the accounting quality of European countries as of 2005. Our evidence suggests that the increase in on the European accounting quality is more likely a result of improved institutional factors quality; we find that IFRS adoption has a significantly greater effect on the quality of accounting in European countries. The research findings are summarized as follows: (1) There is a significant relationship between institutional factors and the accounting quality in light of IFRS adoption by companies and European countries; (2) The adoption of IFRS is an effective tool for enhancing the efficiency of European economies; (3) There are still some challenges militating against the success adoption and implementation of IFRS in European countries against the backdrop of the withdrawal of England from the European Union.

References

1. C. Vedran and Collins, Daniel W. and Jeanjean, Thomas (2016), The Effect of IAS/IFRS Adoption on Earnings Management (Smoothing): A Closer Look at Competing Explanations, Journal of Accounting and Public Policy, Vol 35, n° 04, p 352-394; HEC Paris Research Paper n° ACC-2016-1170, Available at SSRN:https://ssrn.com/abstract=1850228orhttp://dx.doi.org/10.2139/ssrn . 1850228.
2. D.L. Street, Robert K. Larson (2004), Large Accounting Firms' Survey Reveals Emergence of “Two Standard” System in the European Union, Advances in International Accounting, 2004, Vol 17, n° 1, p 04.
3. F. Bova, Raynolde Pereira (2011), The Determinants and Consequences of Heterogeneous IFRS Compliance Levels Following Mandatory IFRS Adoption: Evidence from a Developing Country, Journal of Intrernational Accounting Research, Forthcoming, Vol 15, p 32.
4. Hans .B, Christensen, Luzi Hail, Christian Leuz (2013), Mandatory IFRS Reporting and Changes in Enforcement, Journal of Accounting and Economics, Vol 56, N° 2-3, p 14.
5. H. Chen, Qingliang Tang, Yihong Jiang, Zhijun Lin (2010), The Role of International Financial Reporting Standards in Accounting Quality: Evidence

from the European Union, Journal of International Financial Management and Accounting, Vol 21, n° 3, p 210-220.
6. K. P. Mcmeeking & Matthew Bamber (2016), An examination of international accounting standard-setting due process and the implications for legitimacy, The British Accounting Review, P 10, Available at Cite: https://www.researchgate.net/publication/274372258.
7. M. Sanada (2012), Legitimacy of Global Accounting Standards: A New Analytical Framework, P 04, available at SSRN: https://ssrn.com/ abstract=1990796, (date: 02/01/2019).
8. Ole-K. Hope, Justin Y. Jin, Tony Kang (2006), Empirical Evidence on Jurisdictions that Adopt IFRS, Journal of International Accounting Research, Vol 5, n° 2, p 11.
9. P. Pacter (2017), Pocket Guide to IFRS® Standards—the global financial reporting language, United Kingdom, P 04, Available at SSRN:http://archive.ifrs.org/Use-around-theworld/Pages/Jurisdiction-profiles.aspx. (Date: 13/12/2018).
10. P. Wysocki (2011), New institutional accounting and IFRS, Accounting and Business Research, Vol 41, N° 03, p 309.
11. R. Ball, Ashok Robin, Joanna Wu (2003), Incentives versus Standards: Properties of Accounting Income in Four East Asian Countries, Journal of Accounting and Economics, Vol 36, n° 1 et 3, p 242.
12. S. McLeay, Peter F. Pope (2011), the European IFRS Experiment: Objectives, Research Challenges and Some Early Evidence, Accounting and Business Research, Vol 41, n° 03, p 247.
13. T. Jeanjean, Hervé Stolowy (2008), Do Accounting Standards Matter? An Exploratory Analysis of Earnings Management Before and After IFRS Adoption, Journal of Accounting and Public Policy, p 04.
14. Xi Li, Emmanuel T. De George, Lakshmanan Shivakumar (2016), A review of the IFRS adoption literature, Review of Accounting Studies, Vol 25, P 32, Available at SSRN: **Erreur ! Référence de lien hypertexte non valide.**.
15. World Economic Forum, The Global Competitiveness Report, of years: 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, pp: 65, 93, 91, 85, 99, 103, 91, 93, 41, 45, website: https://www.weforum.org/reports, (date: 05/01/2019).