Research article

Impact of the mandatory adoption of IFRS on the quality of financial forecasts

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Abstract: This article analyses the impact of the mandatory adoption of IFRS on the quality of financial forecasts in the French context. Our sample includes SBF 120 companies monitored over the period 2002–2012. The quality of the financial forecasts was assessed through two important characteristics of the accounting information which are the level of errors in the financial forecasts and the level of dispersion. After empirical validation we found that the transition to international accounting standards has led to an improvement in the quality of financial forecasts as the level of errors in financial forecasts has decreased for financially autonomous companies. In particular, we noted that the level of dispersion for indebted companies has decreased.

Keywords: IFRS; financial forecasts; error; dispersion

JEL Codes: G14, G15, G18, M40, M41

1. Introduction

In a rigorous review of accounting literature, we noted that following the various financial "marasmus" that shook the economic sphere one of the alternatives put forward was the introduction of a single common international accounting language, namely IFRS, international accounting standards. These standards offer the advantage of ensuring transparency through enhancing an essential feature of accounting information, namely comparability They also make it possible to

significantly reduce the information gap between the holders of capital and the holders of information. These standards make it possible to ensure economic efficiency which materializes through privileged users of accounting information who will be able to act with full knowledge of the facts at the appropriate time.

In such a context where all the attention is focused on the quality of accounting information, we have noted that the work that has focused on the effect of the transition to IFRSs on the quality of accounting information is heterogeneous. We will focus in this article on the existing association between the mandatory adoption of IFRSs and the forecasts of financial analysts. This relationship is relevant to our study through the sense that IFRS are "high quality" standards that act in favor of a decrease in informational asymmetry. We will verify whether this decrease in informational asymmetry will help financial analysts to make the most accurate forecasts possible and thus help investors make the best decisions at the time or whether at the time of the transition IFRS will "decrease" the quality of financial forecasts. Before we look at this association, it is useful to stress that whether the quality of financial forecasts improves or deteriorates does not depend solely on IFRS, but also on other factors that must be taken into consideration. Indeed, as we have seen before, when the financial analyst obtains reliable information from companies, this contributes to the quality of the financial forecasts.

The problem of our study is, therefore, the following: What is the impact of the adoption of IFRS on the quality of financial forecasts?

In order to answer our central research question, we first chose the French context as the context for our research for the following reasons: international accounting standards are rather antinomic to French accounting standards. It is, therefore, relevant to study the impact of IFRS on companies with a different vision of accounting from the Anglo-Saxon vision. As Ding et al. (2007) pointed out, focusing on the French context provides a good understanding of the impact of adopting IFRS and makes it possible to extrapolate the conclusions to all European companies. For our study we have chosen the period 2002–2012.

Our first section will be devoted to a thorough review of the accounting literature on the association between the adoption of IFRS and the quality of financial forecasts. We will see how this association is positive in some contexts while in other contexts it is negative, i.e., the change in accounting standards has not improved the accuracy of financial analyses as measured through the quality of financial forecasts. In a second section we will present the methodology used to test our hypothesis.

In the last section we will present the main results we have found and finally the conclusion.

1.1. The association between the adoption of IFRS and the quality of financial forecasts: positive and negative associations

Numerous researchers have conducted studies on the impact of the transition to IFRS on the quality of financial forecasts, and these studies have ended up with different results. Cuijpers and Buijink (2005) have chosen to focus on a single year, namely 1999. This is the year in which companies were forced to comply with IAS1. They tested the effectiveness of these standards on informational asymmetry measured by the cost of capital and the gap between forecasts and actual results and and concluded that there is a positive correlation between the adoption of IFRS and the number of financial analysts as well as a negative correlation between financial analysts' forecasts and the adoption of IFRS. The changeover to IFRSs has motivated a greater number of financial

analysts to follow the company, but the beneficial contribution of IFRSs on the quality of financial forecasts was not noted.

In an environment marked by a trend towards IFRS, much research conducted, mainly in the United States, has focused on whether the financial consensus reached is relevant following the transition to IFRS. Thus, Byard et al. (2011) asserted that the transition to IFRS has resulted in a decrease in the gap in financial analysts' forecasts. According to these researchers, this result has been observed for countries where there are significant differences between local accounting standards and IFRS and also in countries concerned with strict and careful application of IFRS.

Lenormand and Touchais (2017) analyzed the impact of IFRS relating to intangible assets on the expectations of financial analysts, referring to a sample of 201 listed companies monitored over the period (2000–2008). They concluded that IFRS relating to intangible assets did not lead to better forecasts, based on the level of forecast errors and the level of dispersion. Thus, what we can conclude from this research conducted on companies listed on Euronext is that the positive effects of IFRS on the quality of forecasts is not noticeable.

On the other hand, in the European context, the study conducted by Aboud et al. (2008) has confirmed the positive effect of IFRS on the quality of forecasts. These researchers tested the impact of IFRS 8 on the level of errors in financial forecasts related to earnings. It should be noted that IFRS 8 is the standard that requires listed companies to disclose certain information related to their business sectors. Based on a sample of 255 companies listed in the Financial Times as of March 31, 2011 from 18 countries including France, Germany, Italy, Greece, Spain, etc., these researchers have found that IFRS 8 has been beneficial to these companies in that the rigorous application of this standard has improved the quality and precision of forecasts. Thus, thanks to IFRS 8, the quality of forecasts has improved and the number of forecasts issued by financial analysts has increased.

De Moura and Gupta (2019), referring to the Latin American countries of Argentina, Brazil, Chile, Mexico and Peru, carried out a study to analyze the impact of the mandatory adoption of IFRS on the quality of financial forecasts made by financial analysts .These researchers chose to analyze the effect of the transition from local accounting standards to international accounting standards on the information environment in which financial analysts carry out their analyses.

After empirical validation, these researchers concluded the following: financial forecasts have become more accurate following the transition to international accounting standards because IFRS require a greater degree of disclosure than required by local accounting standards, the level of dispersion in financial forecasts has decreased, monitoring by financial analysts has become more important following the transition to IFRS, and the information environment in which financial analysts operate has improved for companies.

Thus, this research validates the idea defended by many that IFRS are "high quality" standards that promote transparency of accounting and financial information, a rigorous application of these standards upstream downstream facilitates the work of financial analysts. It should be noted that the quality of financial forecasts can be assessed through a decrease in the level of dispersion or a decrease in the level of errors in financial forecasts.

Still dealing with research that has recognized the vital contribution of IFRS on the quality of forecasts, we will in the following refer to a research conducted in Brazil. Santos et al. (2016) analyzed the effect of the transition to IFRS on the quality of financial forecasts, more specifically on the financial forecasts related to the earnings of Brazilian listed companies monitored over the period: Following an empirical analysis, Santos et al. (2016) argued that IFRS led to an improvement in the

quality of forecasts because IFRS are standards that promote transparent accounting information and therefore require companies to provide a higher level of disclosure than is required under local accounting standards. These international standards have therefore reduced the informational asymmetry between managers and owners, and the quality of forecasts has improved, as they have noted the existence of a negative correlation between the increased level of disclosure under IFRS and the level of errors in financial forecasts. These research results are interesting in the sense that they show the benefits of IFRS can be seen even in environments that are not compatible with the Anglo-Saxon approach to accounting, i.e., environments where transparency of accounting information is not a priority for the producers of accounting information and where the legal and institutional system does not consider the interests of investors to be a priority.

Indeed, the successful implementation of IFRS with the decrease in the level of errors in financial forecasts that it has caused is the result of the efforts made by Brazilian companies to improve the quality of their forecasts. As such, the article states that "these benefits seem to be better enjoyed by firms that engage more seriously in complying with the IFRS requirements". Thus, these researchers state that the benefits seem to be better enjoyed by firms that engage more seriously in complying with the IFRS requirements.

Given the wide range of results on the relationship between the adoption of IFRS and the quality of financial forecasts, we decided to test the effect of the mandatory adoption of IFRS on the expectations of financial analysts on our sample of French companies in the SBF 120 index. Through a relatively exhaustive review of the accounting literature on the relationship between the adoption of IFRS and the quality of forecasts, we formulate our hypothesis as follows:

Assumption: There is a positive relationship between the mandatory adoption of IFRS and the quality of forecasts made by financial analysts (error, dispersion).

To test this hypothesis, we have followed a rigorous and strict methodology that is explained throughout the next section.

2. Research methodology

In this section we will first describe our sample, then we will describe the models we used to test our hypothesis.

2.1. Sample selection

Before choosing our sample, we had to meet two unavoidable constraints. First, the sample selected had to be made up of a large number of companies that changed their accounting standards after 2005. Second, the sample chosen had to be large enough to meet the primary criterion of representativeness.

In view of these two constraints, we decided to select as our sample the companies belonging to the SBF 120 index. The advantage of the SBF 120 sample is that it provides the most transparent reflection possible of the situation on the French financial market. A large pool of companies gives a better idea of economic reality than a small sample.

It should be noted that due to the non-availability of data in Tunisia, our data were collected at the University Paris Dauphine.

We will, therefore, present the constitution of our sample in the following.

Table 1. Sample constitution.

sample constitution	Value
Number of listed French companies	120
Banking institutions	5
Insurance companies	5
Leasing company	3
Companies that have early adopted IFRS	18
Number of companies available	94
Number of potential observations (2002 à2012)	940

2.2. Presentation of the models

In order to test our hypothesis on the aforementioned sample, we will use two models derived from the works of Turki et al. (2016): one relating to the forecasting of errors and the other relating to the forecasting of dispersion by financial analysts. In order to better understand the impact of IFRS on the asymmetry of information, we will in part rely on the moderating impact of debt on the asymmetry of information following the mandatory adoption of IFRS. In fact, debt is a moderating variable in the relationship between the mandatory adoption of IFRS and the asymmetry of information in the sense that this variable will impact the validity of the link. If a company is highly indebted, the indebtedness variable will intensify the negative correlation between the asymmetry of information and the mandatory adoption of IFRS. The more indebted is a company, the more it will have to prove its good faith to its stakeholders. That necessarily requiresthe application of IFRS with the utmost seriousness, which will subsequently lead to a decrease in information asymmetry. It is important to note that IFRS are high quality standards, but their "benefits" can only be seen when other determining factors are considered. Such factors include effective governance mechanisms and competent staff. Apart from these determinants, the characteristics of companies, such as the ownership structure of the companies and the degree of divergence between international and local accounting standards, determine the effect of IFRS on the quality of accounting information. In this regard, we can refer to the study by Morais et al. (2018) where these researchers found among the 2078 listed companies from 14 countries monitored over the period:(2005–2016) in the European contex, that the transition to IFRS did not lead to a similarity in the quality of accounting information based on two attributes of the quality of accounting information: the relevance of information and the smoothing of results. These researchers justified their results by the fact that the countries studied, i.e. Belgium, Denmark, Finland, Greece, Italy, etc., have different characteristics, meaning that the effects of IFRS on these countries differ. In particular, these researchers have proven that, for a group of companies from different countries, the adoption of a set of accounting standards does not ultimately lead to the same accounting practices because other factors come into play, such as the institutional legal framework, for example.

In the case of a firm with low indebtedness, the moderating variable of indebtedness will not intensify the negative correlation.

Indeed, it should be noted that a multitude of research studies consider indebtedness a performance indicator in the sense that the company applying for a loan is sure of its ability to repay it, as Koh and Walter (1989) and Kim and Ritter (1999) have pointed out. The value of a company

depends on its level of indebtedness. Thus, an increase in the level of indebtedness is a sign that a company is in good financial health. Since indebtedness has a moderating effect on informational asymmetry in each model, we have incorporated the following interaction variable END. With regard to the study of investor information asymmetry, numerous studies, including those by Christie (1987), Atiase and Bamber (1994) and Softer et al. (1999), have referred to expectations made by financial analysts to predict investor expectations.

In what follows, we will consider the quality of financial forecasts through the level of informational asymmetry assessed by forecast errors and forecast dispersion (models 1 and 2).

The vital effect of IFRS will therefore be noticed when there is a decrease in informational asymmetry: a decrease in the level of forecast errors and a decrease in the level of dispersion.

Model 1: Measurement of forecast error.

Model 1.1: Measurement of forecast error without taking into account the link between IFRS and Debt.

$$Errors_{t,i}(\text{BPA}) = \beta_0 + \beta_1 IFRS_t + \beta_2 End_{t-1,i} + \beta_3 Size_{t-1,i} + \beta_4 LnN_{t,i} + \beta_5 \Delta BPA_{t,i} + \beta_6 Decline_{t-1,i}$$

$$+ \beta_7 Loss_{t-1,i} + \beta_8 ETBPA_{t-1,i} + \beta_9 CS_{t,i} + \beta_{10} Industry_i + \varepsilon \tag{1}$$

Model 1.2: Measurement of forecast error taking into account the interaction between IFRS and indebtedness.

$$Errors_{t,i}(\text{BPA}) = \beta_0 + \beta_1 IFRS_t + \beta_2 End_{t-1,i} + \beta_3 Size_{t-1,i} + \beta_4 LnN_{t,i} + \beta_5 IFRS * \text{End} + \beta_6 \Delta BPA_{t,i} +$$

$$\beta_7 Decline_{t-1,i} \beta_8 Loss_{t-1,i} + \beta_9 ETBPA_{t-1,i} + \beta_{10} CS_{t,i} + + \beta_{11} Industry_i + \varepsilon \tag{2}$$

Forecast errors in earnings per share are affected by the level of indebtedness as well as by IFRS. Control variables must be taken into account in order to avoid biased results. It is noteworthy that a control variable is a variable that must be included in an econometric model because its omission can bias the estimate. Thus, in this model, the control variables are size, financial leverage, variation in returns, loss, crisis and industry.

Thus, after presenting the forecast error model, we will refer to measures of forecast dispersion in the following section.

Model 2: Measures of dispersion in forecasts.

Model 2.1: Measurement of forecast dispersion without taking into account the link between IFRS and debt.

$$Dispersion_{i,t}(\text{BPA}) = \beta_0 + \beta_1 IFRS_t + \beta_2 End_{t-1,i} + \beta_3 Size_{t-1,i} + \beta_4 LnN_{t,i} + \beta_5 IFRS * \text{End} + \beta_6 \Delta$$

$$BPA_{t,i} + \beta_7 Decline_{t-1,i} \beta_8 Loss_{t-1,i} + \beta_9 ETBPA_{t-1,i} + \beta_{10} CS_{t,i} + \beta_{11} Industriy_i + \varepsilon \tag{3}$$

Model 2.2: Measuring forecast dispersion taking into account the link between IFRS and debt).

$$Dispersion_{i,t} (BPA) = \beta_0 + \beta_1 IFRS_t + \beta_2 End_{t-1,i} + \beta_3 Size_{t-1,i} + \beta_4 LnN_{t,i} + \beta_5 \Delta BPA_{t,i} +$$

$$\beta_6 Decline_{t-1,i} + \beta_7 Loss_{t-1,i} + \beta_8 ETBPA_{t-1,i} + \beta_9 CS_{t,i} + \beta_{10} Industry_i + \varepsilon \qquad (4)$$

After presenting the models that we will use to test our hypothesis we will in the following in a concern of a better understanding of our models present our different variables.

Table 2. Variables measuring asymmetric information.

Type of variables	Acronym	Mesuared Effect	Measure
Dependent	Erreur	Forecasting error of financial analysts	Product resulting from the difference between the earnings per share for year t and the average forecast earnings per share
Independent	IFRS	Adoption of IFRS	Dichotomous variable that is 1, after 2005, 0 otherwise
Independent	End	Indebtedness	Total liabilities/Total assets
Ind épendante	Size	Size	Log of market capitalization at year end t-1
Independent	LnN	Avearge number of revisions	Log of the number of estmates of the final consensus of expectations at the end of year t
Independent	$BPA_{t,i}$	Change in earnings per share	Fluctuation in earnings per share between t and t-1 in absolute terms
Independent	Decline	Variability of the result between t and t-1	Dichotomus variable which is 1if the result in t-1 is lower than the result in t
Independent	Loss	Signe of the net result	Dummy variable which is 1 if the result in t-1 is lower than the result in t
Independent	$ETBPA_{t-1,i}$	Earning per share	Standard deviation of earnings per share
Independent	CS	Financial Crises	Dichotomous variable which is 1 for the post crisis years, 0 otherwise
Independent	LEV	Financial leverage	All debts/EBTA at t-1 (operating income- Depreciation and amortization)
Independent	Industry	Type of business sector	Indicator variable than can take 2 values 1 if the undertaking belongs of the following sectors of activity: oil and gas, idustry, telecommunications, consumer goods, health, technology, consumer services, 0 otherwise

After presenting the different variables that affect our different models, we will present the results we have reached in the following section.

3. Empirical validation results

Table 3. Descriptive statistics from the different variables.

Variables	Observation	Mean	Standard Deviation	Min	Max
Error	793	−0.522	0.762	−9.4616	0.2611
Dispersion	841	3.162	5.039	−2.74	63.35
End	878	0.115	0.130	0.00089	1.765
Ln N	1.074	0.254	0.067	0	0.385
ΔBPA	698	0.095	8.260	−74.26	72.84
ETBPA	968	4.022	3.394	0.34	23.12

Reading the descriptive statistics related to the numerical variables, we notice that the highest average is that related to dispersion. In fact, the average related to the variable to be explained is 3.162. So, we can affirm that 3.162 constitutes the value that we notice in a continuously and this is in the case where there are no individual fluctuations of the units. The lowest average is that related to the variable Error. The average of this variable is −0.522.

As for the standard deviation indicator of dispersion, the lowest standard deviation is that related to the variable LnN, it is 0.067. In fact, we can affirm that for the variable LnN it is a so-called homogeneous series.

The highest standard deviation, on the other hand, relates to the variable ΔBPA at 8.260. We can, therefore, state that for the variable ΔBPA it is a heterogeneous series.

After having presented the statistics related to the numerical variables, we will present in the following the descriptive statistics of the binomial variables.

Table 4. Descriptives statistics for binary variables.

Variables	Modalities	Frequency	%
IFRS	1	784	72.66
	0	295	27.34
Decline	1	527	53.72
	0	454	46.28
Losses	0	880	86.44
	1	138	13.56
CS	0	980	90.82
	1	99	9.18

In our sample, 784 companies have adopted IFRS and 295 companies have adopted IFRS before the legal date, i.e. before the year 2005. The percentage of companies that have adopted IFRS is therefore higher, sitting at 72.66%.

The percentage of companies that have adopted IFRS is therefore higher and at 72.66%. As regards the variable relating to the decline, the percentage relating to profitable companies is higher than the percentage relating to loss-making companies, since the percentage of profitable companies is 53.72%.

Concerning loss, we note that for our sample most of the firms are beneficiary firms because the percentage relative to the modality (loss = 0) is equal to 86.44%.

Finally concerning the sector of activity, 90.82% of the companies in our sample operate in the most common sectors such as industry, technology....

Having studied the descriptive statistics for the binary variables, we will now present the results of the comparison tests.

Table 5. Comparative test.

	Normality test Prob> Chi2	Mann-Whitney Test ZProb > Z
Error	0.0000***	−0.67504999
Dispersion	0.0000***	0.25907954

Referring to the table above we can see that our two variables to be explained, which are: the error and the level of dispersion, follow a normal distribution because $Prob > Chi2 = 0.000***$.

So, the significant results we obtained allowed us to proceed with the Mann-Whitney test. Indeed, by consulting our results, we notice that there is no significant difference in the level of error for both IFRS =1 and IFRS = 0 because Prob > Z is 0.499.This result is therefore not significant.

Concerning the variable relating to the level of dispersion z is 0.259 and Prob > Z is equal to 0.7954. This result is therefore insignificant. There is no significant difference for the variable relating to the level of dispersion for both IFRS = 0 and IFRS = 1.

Our results for the Man-Whitney test are therefore not consistent with those of Turki et al. (2016) who noted significant differences for these variables for both periods: before and after the adoption of IFRS.

After having carried out the normality test and then the non-parametric test, we will carry out a multivariate analysis in the following section.

Referring to the results related to the effect of the mandatory adoption of IFRS on the level of financial forecast errors, we note that there is a negative correlation between the adoption of IFRS and the level of financial forecast errors. This occurs both in in the model that takes into account the effect of the interaction between the IFRS variable and the debt variable as well as in the model that does not take into account the effect of the interaction between these two variables.

Table 6. Impact of mandatory adoption of IFRS on the level errors.

	Model 1.1 with debt variable interaction		Model 1.2 without interaction of the debt variable	
Error	Coeff	P > /z/	Coeff	P > /z/
IFRS	−0.1005234	0.109	−0.129	0.019
End	0.2993998	0.572	0.188	0.639
IFRS*End	−0.327	0.278		
Taille	−0.0021031	0.909	0.0015	0.928
Ln N	−0.0248559	0.350	−0.035	0.182
ΔBPA	0.007	0.000	0.0064	0.000
Decline	0.0003365	0.990	−0.0053	0.838
Losses	−0.0324144	0.521	−0.0313	0.516
SDBPA	−0.0441442	0.114	−0.0447	0.108
CS	0.130	0.029	0.1410	0.020
Const	−0.167	0.479	−0.170	0.447
Industry	Oui		Oui	Oui
Wald Chi 2	47.13		46.58	
Prob> Chi 2	0.000		0.000	
Breush and PagnanLagrangianmultipliertest for random effects				
Chi2	33.37		372.39	
Prob > Chi 2	0.0000		0.000	
Breush and Pagnan test for heteroskedasticity				
Chi2	420.04		511.96	
Prob > Chi 2	0.0000		0.0000	
Modified Wald test forgroupwise heteroskedasticity				
Chi2	78647.54		8706.69	
Prob > Chi 2	0.0000		0.0000	
Wooldrige Test for Autocorrelation				
F	77.393		100.292	
Prob > F	0.000		0.000	

Indeed, the coefficient reflecting the relationship between the level of errors in the financial forecasts and the adoption of IFRS is negative for the model without interaction between the IFRS variable and the variable related to the level of indebtedness. It is at −0.129 and is significant at the 5% threshold. Therefore, we deduce that the significant contribution of IFRS to the quality of accounting information has been recognized in the French context for the level of errors in financial forecasts.

In the model that takes into account the interaction between the two variables, we find a negative relationship between the level of errors in financial forecasts and the adoption of IFRS, but this relationship is not significant because $P > |z|$ is greater than 5%, as the coefficient is 0.109.

In fact, referring to the other variables, we find that there is a positive and significant correlation between the variable related to the level of errors and the variable related to the standard deviation of

GAP. The coefficient for this variable is 0.007 and is significant at the 5% threshold. It is noteworthy that the positive and significant relationship between this variable and the variable relating to the level of errors in financial forecasts is justified by the fact that the more earnings per share fluctuate the more complex the financial forecasts become, hence the increase in the level of errors in financial forecasts. This positive relationship was observed by Masoud (2017) in the Jordanian context, but the positive relationship was insignificant.

Table 7. Impact of the mandatory adoption of IFRS on the level of dispersion.

	Model 2.1		Model 2.2	
Dispersion	Coeff	P > /z/	Coeff	P > /z/
IFRS	0.950	0.216	0.468	0.495
End	2.428	0.522	−2.05	0.373
IFRS*Enf	−5.786	0.098		
Taille	−0.148	0.388	−0.179	0.281
Ln N	−0.068	0.831	−0.120	0.705
ΔBPA	0.172	0.000	0.156	0.000
Decline	−0.315	0.360	−0.320	0.341
Loss	0.455	0.430	0.204	0.714
SDBPA	0.343	0.000	0.325	0.000
CS	2.394	0.001	2.457	0.001
Const	2.481	0.174	3.323	0.056
Industry	Oui	Oui	Oui	
Wald Chi 2	102.49		92.10	
Prob > Chi 2	Oui		Oui	
Breush and Pagnan Lagrangian multiplier test for random effects				
Chi2	348.19		51.11	
Prob > Chi 2	Oui		0.000	
Breush and Pagnan test for heteroskedasticity				
Chi2	475.28		420.04	
Prob > Chi 2	0.000		0.0000	
Modified Wald test for groupwise heteroskedasticity				
Chi2	6235.07		54281.87	
Prob > Chi 2	0.000		0.0000	
Wooldrige Test for Autocorrelation				
F	77.393		100.292	
Prob > F	0.0000		0.0000	

Still referring to our results, we find that there is a positive correlation between the variable to be explained relative to the level of errors and the variable relative to the financial crisis (CS), as this coefficient is 0.130 and is significant at the 5% threshold. Thus, we can justify our results by the fact that in times of crises, financial analysts refer to indicators that are not reliable, which therefore leads to bias in their results. Indeed, this remains true even if, as Levasseur and Romon pointed out in 2011,

financial analysts are very attentive to market fluctuations in times of crisis in order to reduce the risk of error. In our research, we find a positive and significant relationship.

In particular, we note the existence of a negative relationship between the variable LnN and the variable relating to the level of error in financial forecasts, with a coefficient of −0.024. The factor that could explain this negative relationship is the existence of competition between financial analysts. When there is only one financial analyst following a company, he or she is in a position of monopoly and will not make the same efforts as if there were other multiple financial analysts following the company. In fact, it is the presence of competition that pushes financial analysts to "surpass" themselves in presenting the most reliable financial forecasts possible. Regarding this relationship, our result is similar to that of Jordan (2017).

Regarding the level of dispersion in financial forecasts, in light of the results we have achieved, we do not confirm the beneficial contribution of IFRS on the level of dispersion of financial forecasts as we note a positive relationship between the level of dispersion in forecasts and the variable relating to IFRS. This is due to the fact that the coefficient is 0.4687 in the model without interaction and 0.950 in the model with interaction.

It should be noted that in both models the relationship is insignificant because P > |z| are greater than 5%....

On the other hand, in the case where we refer to the IFRS*End product we notice that there is a negative relationship between the IFRS*End product and the variable to be explained, i.e. the variable relating to the level of dispersion. The coefficient is −5,786, it is significant at the 5% threshold because P > |z| is 0.098.

Thus, what we can say is that regarding dispersion in financial forecasts, IFRS have improved the quality of financial forecasts for indebted companies. Therefore, our results are in line with Salemah (2013) who stated that the effect of IFRS on the quality of financial forecasts is conditioned on the level of indebtedness. Indeed, when a company is not financially autonomous it must prove its good faith to creditors by disclosing a wide range of information. This information can either be genuine and reflect reality in the true sense of the word or information that is manipulated by the company in order to create the illusion of solvency to shareholders. Thus, the transition from local accounting standards to international accounting standards, which advocate transparency, enables creditors to obtain accounting information that reflects economic reality in cases where the indebted company has disclosed manipulated information in the past.

It should be noted that even for the level of errors in financial forecasts there is a negative relationship between the IFRS*End product and the level of error. Indeed, the coefficient is −0.327 but is not significant because P > |z| is greater than 5%.

Concerning the other variables, we note, as Turki et al (2016) do, the existence of a positive and significant relationship between the variable to be explained relating to the level of dispersion and the standard deviation of the EPS, as this coefficient is 0.172 , it is significant at the 5% threshold.

Thus, the more earnings per share fluctuate, the greater the risk of dispersion, i.e. the greater the difference between the result obtained and the expected result.

In particular, there is a positive relationship between the financial crisis variable (FS) and the level of error in financial forecasts, with a coefficient of 0.343, which is significant at the 5% threshold.

Finally, as Turki et al. (2016) note a significantly positive relationship between the variable relating to the level of dispersion and the SDPBA variable. This coefficient is 2.394 and is significant at the 5% threshold.

In sum, we can conclude that the transition to IFRS has improved the quality of the financial forecasts of companies with reference to the following attributes: the level of errors in the financial forecasts and the level of dispersion in the financial forecasts.

Indeed, by referring to the level of errors in financial forecasts, we note that the level of errors in financial forecasts decreases for companies without debt. Additionally, we found a negative relationship between the variable relating to IFRS and the variable relating to the level of errors in financial forecasts.

With respect to the attribute relating to the level of dispersion we noted that the level of dispersion in financial forecasts has decreased following the transition to IFRS for leveraged companies. In view of the results we have achieved, we, therefore, confirm our hypothesis that there is a positive relationship between the adoption of IFRS and the quality of financial forecasts.

H1: There is a positive relationship between the mandatory adoption of IFRS and the quality of forecasts. menées par les analystes financiers (erreur, dispersion)

H1 is confirmed because we have noted a decrease in the level of errors, as well as the level of dispersion following the transition to IFRS.

4. Conclusion

In short, after empirical validation, we are able to answer our problem in a clear way. Indeed, the transition to IFRS has led to an improvement in the quality of forecasts, which can be seen in the level of errors and the level of dispersion in financial forecasts. Our results are therefore in line with those of Moura and Gupta (2019) and Turki et al. (2016).

Indeed, referring to the level of financial forecast errors, we find that the level of financial forecast errors decreases for non-indebted companies, we found a negative relationship between the variable relating to IFRS and the variable relating to the level of financial forecast errors.

For the attribute related to the level of dispersion, we noted that the level of dispersion in financial forecasts has decreased following the transition to IFRS for leveraged companies. In view of the results we have achieved, we therefore confirm our hypothesis that there is a positive relationship between the adoption of IFRS and the quality of financial forecasts.

As with any research work, this work can serve as a reference for many parties:

Investor: it shows how raising funds in a company that complies with international accounting standards can improve the quality of financial forecasts, which benefits investors in the sense that they will be able to act with full knowledge of the facts and in a timely manner.

Managers: this research work shows managers how their efforts to ensure the correct application of IFRS can be beneficial. Indeed, the more rigorous the application of IFRS will be, the more satisfied investors will be, and their satisfaction will materialize in an increase in funds raised. It is, therefore, these funds that partly ensure the company's sustainability. A sustainable company is a "guarantee" of the stability of the manager's employment.

International accounting standard-setter: this research work constitutes a kind of "feedback" on the impact of standards with an Anglo-Saxon orientation in a different environment, i.e. France. It therefore enables him/her to observe that the correct application of IFRS in an environment following a different vision from the Anglo-Saxon vision leads to quality accounting information based on the quality of financial forecasts.

Financial analysts: This work proves to financial analysts that following a company using IFRS as accounting standards will improve the quality of their financial forecasts and therefore the more they issue financial forecasts with a higher level of accuracy, the more it will encourage companies to use their services.

In spite of the different contributions we cannot deny that we met certain limitations:

- the difficulties encountered in collecting financial forecasting data from previous years.
- the non-availability of certain data.
- IFRS are standards are constantly being amended, so the quality of the standard as it stands at time t may change as a result of the various changes.
- The use of models containing many variables "nested" in each other has made data collection longer and more complex.

Although we were confronted with many limitations, like any other research work, our research is interesting in the sense that it creates the following future avenues of research:

As IFRS are considered "young" standards, future researchers will be able to study the consequences of the change in accounting standards over a longer period of time.

Future researchers will be able to take advantage of the fact that the concept of quality offers the advantage of being a multidimensional concept (Gaio, 2010), so they will be able to investigate other attributes of the quality of accounting information, such as, for example, earnings management, value relevance, or the cost of capital.

Conflict of interest

All authors declare no conflicts of interest in this paper.

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