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Procedures for the adoption of the International Financial Reporting Standards for property, plant and equipment in an organisation

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Abstract

Across the business world, private limited and public listed companies were required to strategically adopt international accounting standards for corporate property, plant and equipment in a standards and interpretations as of January 1, 2005. The transition to these standards offers companies several accounting options and maintains a large number of interpretations. These options and estimates were made either for the purposes of the transition (restatement or not of prior acquisitions, measurement of fixed assets at fair value, treatment of actuarial gains and losses, financial instruments and cumulative translation differences), or for subsequent years (valuation of fixed assets, classification of leases, capitalization of development costs). As the outcomes of previous reports are usually mixed as to the economic concerns of the strategic adoption of IFRS on organizational property, plant and equipment, our overall analysis makes a general assumption that there are no simultaneous economic benefits to the preparers and major users of financial data. To this end, we compare different measures of the economic benefits to accountants and users of financial data to analyse the statistical significance of the differences thus calculated. In a second approach, we analyse the factors that explain the presumed profits suggested by the IASB's new theoretical framework, namely the lower cost of capital for companies, ease of analysis and interpretation of financial statements for investors, and improved credit ratings for creditors. This analysis covers 250 companies in Arab countries but especially in Jordan from 2013 to 2018.

Keywords: *Financial Statements, Financial Reporting, International Accounting*

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I. Introduction

The phenomenon of international accounting standard setting has been of continuing interest to accounting researchers. With the mandatory adoption of International Financial Reporting Standards by the EU, Arab countries and other countries as of January2005, certain studies such as the one conducted by Barth et al., (2008) focused on the argument that IFRS improve financial reporting quality. Thus, the major distinction between IFRS and the different standards of accounting is the concept of financial transparency.

However, based on the common theoretical framework between the International Accounting Standards Board (IASB) and the United States Accounting Standards Board of September 2010, "the objective of general purpose financial reporting is to provide useful information about the reporting entity to current and potential investors, lenders and other creditors for their decision-making as providers of resources to that entity. Those decisions include the purchase, sale or holding of debt or equity instruments and the provision of loans or other forms of credit" (IASB, 2013).

In addition, IFRS must meet the qualitative characteristics of financial reporting while respecting the two constraints: materiality and cost-benefit balance. Financial reporting imposes costs and it is important that these costs are justified by the benefits of reporting. Furthermore, the IASB's conceptual framework states that financial information providers put a lot of effort into the collection, verification and dissemination of financial information, but ultimately the users of the information bear these costs in the form of a low cost of capital (Damak, 2009). Users of financial information also bear the costs of analysing and interpreting the information provided. If the necessary information is not provided, users incur additional costs to obtain that information elsewhere or to estimate it.Finally; the conceptual framework for financial information combines the two preceding paragraphs and states that the application of the cost constraint involves assessing whether the benefits of providing financial data justify the costs of producing and using it. Given the significant influence of financial markets in the development of IFRS, the debate is no longer about the factors that justify the diversity of accounting practices such as national culture (Gray, 2008). Rather, the debate is about the economic consequences of their strategic use.

II. Theoretical background

The accounting literature has determined that the reduction in the cost of capital that the international accounting standard-setter is so hopeful about following the adoption of IFRS is mainly an empirical question (Daske et al., 2008). Following the strategical adoption of accounting standards by Arab countries such as Jordan and other countries, some researchers have tested this assertion empirical' validity. Results of the empirical teststo date seem to be divided between a reduction and a non-reduction in capital cost. By separating the cost of capital into its two components (the cost of debt and the cost of equity), certain authors, like Shi and Kim (2007), indicated that the cost of equity has declined, while others, such as Buijink and Cuijpers (2005) and Daske (2006), concluded that it has not. With respect to the second component, the cost of debt, Shi and Kim (2007) found that in countries that adopted IFRS, companies in these countries have low interest rates, high lines of credit, less restrictive credit covenants, and a strong attraction to foreign lenders.

Furthermore, IFRS are characterized by three major changes, which some, such as Disle and Noël (2007), describe as an accounting revolution in relation to the professional practice of certain countries, particularly in Middle Eastern. These changes are: the designation of investors and creditors as primary users of financial information, the replacement of historical cost by fair value and the primacy of economic substance over legal form. Of the three fundamental shifts in financial accounting, the most striking is the dramatic shift to fair value, which some authors such as Ledouble (2005) describe as a paradigm shift. While the strategic adoption of IFRS by some economic entities is characterized by managerial opportunism, strategic adoption is justified by an assumed reduction in the cost of capital, which is itself a consequence of the high quality of IFRS (Barth et al., 2008). More specifically, the quality of IFRS should ensure the linkage between accounting and finance. To date, all studies on the strategic adoption of IFRS have focused separately on one or the other of the stakeholders: accountants of financial information and investors in the national context. Our study differs from the latter in that we focus on certain determinants at the enterprise level while analysing the economic impact on each of the three stakeholders, including creditors.

III. The determinants of strategic adoption of international financial reporting standards for property, plant, and equipment

Dumontier and Raffournier (1998) point out that compliance with international standards is costly since it involves additional disclosures and a waiver of a high level of discretion in the accounting practices of code-law countries (Jordan is one of them). Ashbaugh and Pincus (2001) also demonstrate that the adoption of international standards leads to higher levels of disclosure compared to national standards.

Based on explanations proposed by agency theory, signal theory and information cost theory, and from previous studies on the determinants of strategic disclosure and the determinants of strategic adoption of international accounting standards for companies' property, plant, and equipment, we have identified the following factors that could explain the procedures (Cuijpers and Buijink, 2005).

3.1 Dependency to international markets

We analysed the following two factors: the quotation on financial foreign markets and the level of foreign sales.

3.1.1 Foreign financial markets listing

Listing on foreign exchanges often has positive impacts on the level of strategic disclosure of information by listed companies (Ding and Stolowy, 2003). Indeed, companies that are listed on several financial markets are likely to have a larger number of shareholders and will have to bear a higher cost of control than corporations registered only on their financial home market. Moreover, most foreign investors are not familiar with Jordan accounting rules and do not have easy access to other sources of information (Joachim and Thorsten, 2006).

Regarding the influence of quotation on foreign markets on the decision to strategically adopt international standards, the majority of previous studies have also found a positive and significant impact of this factor. Among these studies are those of Raffournier and Dumontier (1998), El-Gazzar et al (1999), Murphy

(1999), Ashbaugh (2001), Cuijpers (2001). Buijink (2005) and Thorsten and Joachim (2006). In our research, we tested the following hypothesis:

H1: The probability of strategic adoption of IFRS is positively related to the number of foreign financial markets listings.

For the measurement of the listing status variable, we used the number of the organization's listings on foreign financial markets. This measure has also been used by Ashbaugh (2001),Buijink and Cuijpers (2005) and Thorsten and Joachim (2006).

3.1.2 The level of foreign sales

Companies with operations that are widely distributed geographically must meet the information needs of their local partners, especially those of potential investors. According to Raffournier (1995) and Depoers (2000) argue that companies that operate internationally are much more concerned about foreign markets than those operating domestically. These companies are then motivated to publish more information to satisfy the needs of these foreign users. In addition, MNCs have often developed a significant part of their business abroad and are therefore dependent on resources other than domestic ones (they may employ foreign employees, produce abroad, etc.) (Joachim and Thorsten, 2006).

Foreign financing can also be obtained from banks and other foreign financial institutions. In order to obtain these resources at lower cost and to respond to increased demands for information, MNEs need to adopt high quality accounting standards. On the other hand, pressure to provide more financial information may also come from competition among MNCs to gain the confidence of foreign investors and lenders (Zhou, 2007). Therefore, managers of these multinationals should be encouraged to report the quality of their companies to international investors and creditors through strategic adoption of IFRS.

As regards the influence of the internationalization of the company's activities on the decision to strategically adopt international standards, the majority of previous studies found a significant positive influence of this variable. These include research by Murphy (1999), El-Gazzar et al (1999), Buijink and Cuijpers (2005). In our research, we tested the following hypothesis:

H2: The probability of strategic adoption of IFRS isrelated positively to the percentage of foreign sales.

To evaluate the degree of internationalization variable, we used the ratio of total foreign sales divided by total sales. This measure has also been used by Raffournier (1995), Murphy (1999), El-Gazzar et al. (1999) and Thorsten and Joachim (2006).

3.2 Corporate governance

Three factors of corporate governance are analysed in this study: the type of audit firm, the level of debt and the concentration of ownership.

3.2.1 The type of audit firm

Within the framework of signal theory, several researchers, including Singhvi and Desai, (2001) and Wallace and Naser (1995), suggest that large firms encourage their clients to disseminate as much information as possible. They will also encourage their clients to adopt internationally accepted accounting standards, which would spread the quality and volume of disclosed information.

Indeed, according to Dumontier and Raffournier (1998), it is in the interest of large audit firms to encourage their clients to comply with IFRS for two main reasons. On the one hand, by forcing their clients to apply strict and quality accounting standards, large audit firms prove their seriousness and strengthen their reputation. On the other hand, they are in the best position to apply IFRS because of the high qualification of their employees in the field of international accounting.

The results of the studies that have dealt with the influence of the type of audit firm on the strategic adoption of international standards are disparate. Indeed, Murphy (1999) and Dumontier and Raffournier (1998) do not confirm the influence of the type of audit firm on the decision to strategically adopt international standards by Swiss companies. On the other hand, Al-Basteki (1995) finds that the strategic adoption of international standards is linked to the type of audit firm chosen. Street and Gray (2002), on the other hand, demonstrated that the type of audit firm is positively and significantly associated with the degree of compliance with international standards. Finally, Glaum and Street (2003) point out that compliance with international and US standards is positively associated with the type of audit firm. In our research, we tested the following hypothesis:

H3: The likelihood of early adoption of IFRS is positively related to the type of audit firm.

Concerning the measurement of the external audit quality variable, we have to take into account a specific feature of Jordan accounting law, namely the existence of two statutory auditors. So to evaluate this variable, a binary variable was used to select the value 1 if the organization was audited by minimum one of the Big four accounting audit company and 0 if that’s not the case. This measure was used by Dumontier and Raffournier (1998), Murphy (1999) and Street and Gray (2002).

3.2.2 The level of indebtedness

According to Jensen and Meckling (2006), external financing can become an opportunity for shareholders to transfer wealth into their own accounts at the expense of creditors. Indeed, shareholders have an incentive to invest the borrowed funds in risky projects in order to increase the expected profitability without incurring any additional costs. Therefore, the more indebted the corporation becomes, the greater the need for effective control of the agency relationship between creditors and shareholders. Strategic information disclosed in financial statements can be used by creditors to control shareholders. The results of studies that have analysed the influence of debt levels on strategic disclosure are mixed. Indeed, Wallace et al. (1994), Raffournier (1995) and Prencipe (2004) did not find a significant relationship, while Hossain et al. (1995), Botosan (1997), Naser (1998) and Xiao et al. (2004) found a positive and significant relationship between indebtedness and the level of strategic disclosure. On the other hand, the results of previous studies dealing with the influence of indebtedness on the strategic adoption of international standards are not significant (such as the study by Dumontier and

Raffournier, (1998) and Murphy (1999). However, it should be noted that in the Jordan context and in studies on strategic disclosure, Michaïlesco (1998) and Chavent et al (2005) find a positive relationship between indebtedness and strategic disclosure. In thisinvestigation, the following hypothesis was tested:

H4*:* The probability of early adoption of IFRS isrelated positively to the level of indebtedness.

For the measurement of the debt level variable, the ratio of total long-term debt to total assets was used. This measure was also used by Dumontier and Raffournier (1998) and Cuijpers and Buijink (2005).

3.2.3 Concentration of ownership

According to agency theory, agency costs are very high in managerial societies characterized by a wide diffusion of capital. These costs can be kept under control by setting up a monitoring system that involves, among other things, the strategic production and dissemination of information.

Moreover, according to signal theory, the strategic publication of information is a means of reducing the asymmetry of information between managers and shareholders in managerial companies.

Therefore, when the company's capital is concentrated, there is no strong informational asymmetry and managers should have less incentive to strategically disclose accounting information.

The results of studies that have examined the influence of ownership on the strategic adoption of international standards are also disparate. Buijink (2005) found no link between concentration and the adoption of alternative standards. On the other hand, Raffournier and Dumontier (1998), Gaeremynckand Renders (2007) and Thorsten and Joachim (2006) found significant results between the concentration of ownership and the decision to strategically adopt international standards. We tested the following hypothesisinthis research:

H5: The probability of early adoption of international accounting standards is negatively related to concentration of ownership.

Concentration of ownership is measured in our research by the shareholders’ percentage of capitalizing more than 5% of the capital. This measure has also been used by Buijink (2005) and Joachim and Thorsten (2006).

3.3 Operational characteristics

Two operational characteristics are analysed in our study: the size of the organization and the level of profitability.

3.3.1 The size of the organization

According to Jensen and Meckling (2006), agency costs increase with firm size. Larger firms will therefore disclose more information than others in order to reduce their agency costs.

On the other hand, smaller firms, whose financial statements are the main source of information for competitors, should be more reluctant to disclose additional information which may place them at a competitive disadvantage as of Singhvi and Desai (2001), Firth (2009) and Craswell and Taylor (2002).

With regard to the influence of company size on the decision to strategically adopt international standards, the majority of previous studies have shown a significant positive influence. Among these studies are those by Dumontier and Raffournier (1998), Ashbaugh (2001), and Cuijpers and Buijink (2005). We tested the following hypothesis in our research:

H6: The probability of strategic adoption of international accounting standards is related positively to the organizations size.

We used the logarithm base 10 to measure the size of total assets for the year under review.

Raffournier (1995), Dumontier and Raffournier (1998), El-Gazzar et al. (1999), Street and Bryant (2000), Street and Gray (2002), Redis (2004), and Damak (2009) also used this measure.

3.3.2 The level of profitability of the organization

According to Singhvi and Desai (2001), the higher the rates of return, the more likely it is that executives will publish as much information as possible about their skills and managerial qualities in order to improve their compensation. Bourmont (2006) states that to obtain a more advantageous cost of capital, managers of performing companies should be encouraged to signal the quality of their companies to investors seeking to correctly evaluate the securities offered, through strategic publication of information. On the other hand, the decision by Jordan groups to adopt IFRS early is costly since they are obliged to present two sets of accounts and the measurement rules and accounting disclosure requirements are very different from those required by international standards (Piget, 2007).

The results of studies on the influence of cost-effectiveness on the strategic adoption of international standards are also ambiguous. Raffournier and Dumontier (1998), found no significant correlation between profitability and the strategic adoption of international accounting standards.

On the other hand, Leuz and Verrecchia (2000) find that profitability positively affects the strategy for choosing international standards. In our research, we test the following hypothesis:

H7: The probability of early adoption of IFRS is positively related to the level of profitability.

As a measure of this variable, we used the return on equity ratio. This measure was also used by El-Gazzar et al (1999), Dumontier (1999) Raffournier (1998) Street and Gray (2002).

IV. The sample selection procedure

Initially our sample consisted of the 250 listed Jordan groups belonging to the Amman Stock Exchange as of December 31, 2018. From this sample, we eliminated: financial institutions (37) because of the specificity of their activities; groups with a non-Jordan parent company (14) because they are not subject to Jordan accounting regulations; groups whose annual reports are not available (44); and finally groups whose closing date is not December 31, 2018 (28). Consequently, the final sample is made up of 127 groups (see Table 1 below).

For our research, the sources of data are the annual reports obtained from the Jordan’s private limited and public listed companies' websites and the Jordan Business Directory.

Table 1. Steps in the selection of the sample for our study

Total number of selected companies at Amman Stock Exchange in 2018	**250**
Elimination of Financial Institutions	(37)
Elimination of groups with a non-Jordan parent company	(14)
Elimination of groups whose annual reports are not available	(44)
Elimination of groups with a balance sheet date other than December 31, 2018	(28)
Final Sample	**=127**

In order to identify the groups that have decided the adoption of international accounting standards for property, plant, and equipment, we analysed the annual reports of the 127 Jordan private limited firms as well as the documents appended to these reports collected from their websites and from the Jordan Business Directory. Based on this analysis, we obtained the following results:

61 groups prepared financial statements under IFRS in addition to financial statements prepared under Jordan accounting standards, representing an adoption rate of 48.03%;

66 groups did not publish IFRS financial statements, representing a 51.97% non-adoption rate. These are the groups that have not published any information on the impact of IFRS and those that have published only some unaudited narrative and/or quantitative information on the impact of some IFRS without publishing IFRS financial statements.

V. Empirical results

5.1 Univariate analysis

Subsequent logistic analysis is heavily influenced by inconsistent observations. Before beginning the descriptive analysis, we evaluated values that could bias the logistic regression model. We eliminated from our sample 14 extreme observations with standardised residuals exceeding the 2 standard deviations on either side of the mean that constitute the usual level of elimination. We also eliminated 13 groups with missing data. After these eliminations, our final sample consisted of 100 Jordan companies: 44 firms that planned the adoption of IFRS for their property, plant and equipment and 56 groups that did not.

The univariate analysis' purpose is to match the features of both of the selected groups. Nevertheless, prior to starting this study, it is significant to verify the independent variables' normality in order to be able to select the statistical tests appropriate.

5.1.1 Test of normality

To test the hypothesis of normality, in our study, the test of Kolmogorov-Smirnov for the independent variables was used. In table 2 below results of this test are presented.

From this table, it can be seen that the variables company size; concentration of ownership; debt level and foreign sales' level follow a normal distribution. Hence, the test of means' equality for these variables on two independent samples was used.

Table 2. Test of normality of independent variables (Kolmogorov-Smirnov test)

		Foreign financial markets listings	Foreign sales	Long term debts	Concentration of ownership	Logarithm of total assets	Efficiency
N		100	100	100	100	100	100
Normal settings	Average	4,69	49,163	15,47451	45,22902	6,24419	5,9998
	Standard deviation	3,155	27,3757	11,854933	27,267944	0,868077	58,78603
Most extreme differences	Unmitigated	0,149	0,098	0,096	0,072	0,079	0,327
	Positive	0,149	0,064	0,074	0,072	0,079	0,288
	Negative	(0,121)	(0,098)	(0,096)	(0,070)	(0,063)	(0,327)
Z of Kolmogorov-Smirnov		1,490	0,982	0,959	0,720	0,791	3,267
Asymptotic meaning (bilateral)		0,024	0,290	0,317	0,678	0,559	0,000

Table 3. Results and descriptive statistics of the two groups univariate analysis (IFRS group/non-IFRS group)

Variables	Groups	N	Average	Standard deviation	Mean	t Test	Wilcoxon test	X2 test
Number of quotations	IFRS Group Non IFRS Group	44 56	A = 7,000 A = 2,880	S = 2,949 S = 1,869	M = 6,000 M =	–	z = 6,663 *** p = (0,000)	–

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					2,000			
% Foreign sales	IFRS Group Non IFRS Group	44 56	A = 59,776 A = 40,823	S = 19,548 S = 29,820	M = 64,435 M = 41,395	t = 3,643 *** p = (0,000)	–	–
Audit	IFRS Group Non IFRS Group	44 56	–	–	–	–	–	χ2= 5,760 ** p = (0,016)
% Debt	IFRS Group Non IFRS Group	44 56	A = 20,119 A = 11,830	S = 9,481 S = 12,324	M = 19,462 M = 9,440	t = 3,687 *** p = (0,000)	–	–
% Concentration of ownership	IFRS Group Non IFRS Group	44 56	A = 29,637 A = 57,479	S = 24,29 S = 23,017	M = 23,173 M = 55,575	t =-5,822*** p = (0,000)	–	–
Logarithm (total assets)	IFRS Group Non IFRS Group	44 56	A = 6,904 A = 5,725	S = 0,733 S = 0,558	M = 7,086 M = 5,700	t = 9,132 *** p = (0,000)	–	–
% Efficiency	IFRS Group Non IFRS Group	44 56	A = 10,157 A = 2,733	S = 17,677 S = 77,145	M = 10,275 M = 11,775	–	Z = 0,167 P = (0,868)	–

IFRS Group: this is the group formed by the companies that have anticipated the adoption of IFRS standards.

Non-IFRS Group: this is the group formed by companies that have not anticipated the adoption of IFRS.

N: number of firms in the corresponding group.

**: the coefficient is significant at the 5%

*** : the coefficient is significant at the 1%

On the other hand, the two variables, company performance and number of capital market listings, do not follow a normal law. In this case, results of the non-parametric Wilcoxon test were presented. For the discrete explanatory variable (Audit), the results of the Chi-square independence test (χ^2) was presented.

5.1.2 Results of the univariate analysis

The results and descriptive statistics of the univariate analysis of both groups such as the IFRS group and non-IFRS group which are exhibited in the above Table 3.

The t-test allows validating the assumption of zero equality of the averages of the group of companies adopting IFRS and the group of companies not adopting IFRS. The results show the significance of the

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variances between both groups in terms of the percentage of foreign sales, the level of indebtedness, the concentration of ownership and the size. The t-test is significant at the 1% level for all these variables.

Wilcoxon's non-parametric test shows the importance of differences between the two groups in the number of foreign financial market listings. On the other hand, the return variable is insignificant.

For the discrete variable (audit), the χ^2 test is significant at the 5%. The proportion of companies that have been audited by at least one Big 4 firm is higher for the group of companies adopting IFRS than for the group not adopting IFRS.

The results of the univariate analysis support, the assumptions we have developed previously. Meanwhile, the groups that have led the IFRS adoption:

- have a higher number of listings on foreign financial markets;
- have a higher percentage of foreign sales;
- are very likely to be audited by at least one Big Four Accounting Firm;
- are more leveraged and have a concentration percentage of the weaker property;
- are greater than those that have not adopted IFRS.

5.2 Testing of research hypotheses and multivariate analysis

We showcase in this partour model of research prior to verifying the absence of multicollinearity and lastly we highlight the core findings.

5.2.1 Presentation of the model

Based on our conceptual framework and the assumptions defined, the conceptual model of adoption procedure can be articulated as follows:

Adoption procedure of IFRS = f

1) International market dependency characteristics;
2) Corporate governance characteristics and
3) Operational characteristics of the company.

Our research' dependent variable is a dichotomous variable that holds the value 1 if the organization adopts the IFRS in 2018 and 0 if that's not the case. The model of logistic regression is hence adequate for our study. The logistic measure is conditioned neither by the normality of the dissemination of error terms nor by the homoscedasticity assumption. Linearity is not required between the independent and dependent variables. For the purpose of our study, the subsequent logistic model of regression is tested:

P(IFRS ADOPTION)=β0+β1FFM Listings

+β2Foreign sales+β3Audit

+β4 Long termdebt +β5 Concentration of Ownership

+β6 log (TA)+ β7 ROE + ε

With:

P (IFRS Adoption):from our research perspective the dependent variable is as shown. As binary variable it holds the value 1 if the firm adopts IFRS in 2018 and 0 otherwise.

FFML istings: is the listings quotation on foreign financial markets.

Foreign Sales: is the ratio of total foreign sales to total sales.

Audit: is a binary variable that holds the value 1 if the organizationundergo a thorough audit conducted by minimum one the Big Four accounting firm and 0 if it's not the case.

LT Debt: is the ratio of total long-term debt to total assets.

Concentration of Ownership: is the percentage of shareholders owning over 5% of the capital.

Log (TA): is the log base 10 of all assets combined.

ROE: is the ratio return on shareholders' equity.

5.2.2 Verification of the absence of multicollinearity between independent variables

To test the absence of multicollinearity, Pearson correlation coefficients between the explanatory variables were calculated, as shown in the table below (Lewis-Beck, 1991).From Table 4, it can be seen that all coefficients of correlation are below 0.8: the limit at which one begins to have a serious multicollinearity problem (Kennedy, 2003).

Table 4. Multicollinearity test between independent variables (Pearson Correlation Coefficients)

	Foreign financial markets listings	Foreign Sales	Audit	Long Term Debts	Concentration of Ownership	Logarithm of Total Assets	Efficiency
Foreign financial markets listings	1,000	0,265	0,064	0,177	-0,570	0,656	0,115
Foreign Sales		1,000	0,058	0,059	-0,311	0,256	0,047
Audit			1,000	0,168	-0,001	0,048	-0,148
Long Term Debts				1,000	-0,189	0,262	-0,386
Concentration of					1,000	-0,439	-0,094

Ownership							
Logarithm of Total Assets						1,000	0,147
Efficiency							1,000

We also computed the VIF "Variance Inflation Factor" aimed for testinga potential co-linearity among explanatory variables. The highest VIF is equal to 2.133. The VIFs are less than 4 and therefore well below 10, the limit at which we begin to have a serious multicollinearity issue (Myers, 1990).

Based on the correlation tests and the VIF, we can conclude that there is no multicollinearity problem for our independent variables. After verifying the absence of multicollinearity among our explanatory variables, we present the results of the logistic regression.

5.2.3 Logistic regression results

According to Hosmer & Lemeshow (2000) this method is intended to measure a model of regression in which a DV is dichotomous and the IV are categorical or continuous. Each IV's weight is labelled by a coefficient of regression and with an index similar to the coefficient of determination (R^2), it is then possible to measure the model's size effect (Peng and Stage, 2002). Thetest of χ^2validates the null hypothesis as follow: H0:$\beta1=\beta2=\beta3=\beta4=\beta5=\beta6=\beta7=0$

Table 5 highlights the results of the logistic regression model used to test our hypotheses of research

Variables	Forecasted Sign	β Coefficient	Wald Test	Significance level (p)
Foreign financial markets listings	+	0,622	5,395	0,020 **
Foreign Sales	+	0,036	4,291	0,038 **
Audit	+	2,788	8,069	0,005 ***
Long Term Debts	+	0,074	3,736	0,053 *
Concentration of Ownership	_	-0,020	1,049	0,306
Logarithm of Total Assets	+	2,240	7,550	0,006***
Efficiency	+	0,012	0,370	0,543

Number of companies = 100
chi-square ($\chi 2$) = 94.226 with p = 0.000
R2 from Nagelkerke = 81.8%.
*** : the coefficient is significant at the 1%
** : the coefficient is significant at the 5%
* : the coefficient is significant at the 10%

From Table 5, it can be concluded that overall the model is significant on the test. Undeniably, the Chi-square test (χ^2), for model fit, has a value of 94.226 and is significant (p = 0.000). The null hypothesisis then rejected and all coefficients are equal to zero. The Nagelkerke R^2 indicates that 81.8% of the adoption probability of IFRS is explained by the seven variables included in the model. Concerning the explanatory variables, our findings revealed a very significant and positive impact of the type of audit firm and the size of the company on the decision of strategic adoption of IFRS accounting standards by Jordan groups during the transition period. As for Table 5, the coefficient for the audit variable is positive (2,788) and significant at the 1% (p= 0,005). The major firms in Jordan have therefore encouraged their clients to anticipate the adoption of IFRS. By forcing their clients to strategically initiate the adoption of these standards, these firms are proving their seriousness and strengthening their reputation. Moreover, the large international audit firms are in the best position to proceed with the adoption of these international accounting standards thanks to the high qualification of their employees in the field of international accounting.

For the company size variable, the coefficient is positive (2.240) and significant at the 1% (p = 0.006). Indeed, the largest Jordan groups are more dependent on resources acquired on the financial markets, so they have a greater incentive to signal the quality of their groups to investors through strategic adoption of IFRS. They are also better able to bear the cost of adoption of these standards.

Table 5 also shows a significant and positive impact:

The listings number on foreign financial markets reveals that the coefficient is positive (0.622) and significant at the 5% (p = 0.02).

The percentage of foreign sales (the coefficient is positive (0.036) and significant at the 5% (p = 0.038); of the debt ratio (the coefficient is positive (0.074) and significant at the 10% (p = 0.053), on the decision to adopt the new law of IAS/IFRS standards by Jordan groups.

Jordan private firms that are listed on several financial markets have a higher level of foreign investors expecting the maximum amount of information about the impact of IFRS on their financial statements. As a result, executives of Jordan private listed firms abroad have been encouraged to report the quality of their company's property, plant, and equipment to international investors through adoption of IFRS.

These groups are more motivated to publish more information in order to satisfy the needs of foreign users and gain their confidence. Jordan organisations, which are the most indebted, have sought to reduce the asymmetry of information between shareholders and creditors by adopting international accounting standards. Furthermore, through thorough adoption, these groups sought to give their creditors a better image by reassuring them about their ability to comply with repayment terms. Finally, Table 5 shows that the variables, percentage of ownership concentration and profitability of the company, did not have a significant effect on the decision to adopt international accounting standards.

Our results are consistent with previous studies that have shown that the procedure of total adoption of international accounting standards is influenced by listing in foreign financial markets. Therefore, the listing on foreign financial markets, the percentage of foreign sales and the size of the organization are common features in the Jordan, UK and UAE environments of companies that have decided the adoption of international financial reporting standards. Conversely to previous studies led by Buijinkand Cuijpers (2005) and Thorsten and Joachim (2006), our results confirm the influence of indebtedness on the decision to adopt international standards in the Jordan environment. Moreover, and in contrast to the previous factors, which have been used in most previous studies, the influence of audit firms on the decision to adopt IFRS for property, plant, and equipment has only been examined by Dumontier and Raffournier, (2015) and Murphy (2017) in the Arab context. At this level and conversely to the American environment, our results confirm the influence of the type of audit firm on the decision to strategic adopt IFRS in the Jordan environment. The use of big 4 audit firms has therefore favoured the strategical adoption of IFRS standards by Jordan groups. Consequently, debt and the type of audit firm are two factors explaining the late adoption of international standards specific to the Jordan environment.

In this respect, our results are of interest since they make it conceivable to categorise the features that differentiate the Jordan market from other parts with regard to the decision to adopt international accounting standards for equipment, plant and property in private limited and public listed companies. They may also provide a response to auditors, standard setters, financial analysts and international investors as to the type of motivations that led Jordan executives to decide to adopt IFRS at a strategic time despite the requirement to present a double set of accounts. And finally, the findings contribute to apprehending the procedures and dynamics of adopting international accounting standards in environments for which cultural, economic and professional characteristics are diverse from countries like US and EU.

VI. Conclusion

The objective of our research was to analyse the determinants of the adoption of international accounting standards for equipment, plant and property by Jordan private limited and public listed firms. Our analysis covered a final sample of 127 companies belonging to the Amman Stock Exchange at 31 December 2018. Our study's results reveal a very significant and positive impact of the type of audit firm on the decision to adopt international accounting standard for property, plant, and equipment by Jordan private listed firms during economic challenges and market breakthrough. The major firms in Jordan have therefore encouraged their clients to adopt IFRS to sustain their property, plant, and equipment. The findings also show a very significant and positive effect of firm size on the decision of Jordan private firms to adopt IFRS. Indeed, the largest groups, which are more dependent on the resources acquired on financial markets, have a greater incentive to signal the quality of their groups to investors through adoption of IFRS. They are also more likely to bear the cost associated with a strategic and a step-by-step adoption process.

The results of this research also reveal a significant and positive influence of the listings' number on the debt ratio, the percentage of foreign sales and foreign financial markets on the decision to adopt the international accounting standards for property, plant, and equipment. On the other hand, the percentage of concentration of ownership and the profitability of the company did not have a significant impact on this decision. In other words, the Jordan firms which have anticipated the adoption of IFRS for property, plant, and equipment are more likely to be audited by a Big 4 audit firm, are larger, have a higher listings' number of foreign financial markets, have a higher foreign sales' percentage and are more indebted than those which have not adopted IFRS.

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