# The motivations of the accounting choices adopted by Algerian companies at the time of the application of IFRS

# Les motivations des choix comptables adoptées par les entreprises algériennes au moment de l'application des IFRS

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**Abstract:** This article aims to study and explain theoretically and empirically the portfolios of accounting policy choices adopted by Algerian companies through the positive accounting theory (Watts and Zimmerman, 1978) and institutional theory (DiMaggio and Powell, 1983). Both Casta and researchers Remond (2009) argue that managers use this area of freedom, in a legal framework to shape the form and content of financial statements. The empirical analysis of 68 Algerian public and private companies has led us to confirm that accounting choices are influenced by the executive compensation system and normative pressures consultants and audit firms.

**Keywords:** Choice Accountants, Accountants Theories, Compensation Managers, Institutional Pressures, IFRS, Algerian companies.

**Résumé :** Cet article vise à étudier et à expliquer théoriquement et empiriquement les portefeuilles des choix de méthodes comptables adoptés par les entreprises algériennes à travers la théorie positive de la comptabilité (Watts et Zimmerman, 1978) et la théorie institutionnelle (DiMaggio et Powell, 1983). Les deux chercheurs Casta et Remond (2009) affirment que les managers utilisent cet espace de liberté, dans un cadre licite, pour façonner la présentation et le contenu des états financiers. L'analyse empirique de 68 entreprises publiques et privées algériennes nous a amené à confirmer que les choix comptables sont influencés par le système de rémunération des dirigeants et par les pressions normatives des consultants et des cabinets d'audit.

**Mots-clés:** Choix Comptables , Théories Comptables , Rémunération des Dirigeants , Pressions Institutionnelles , Normes IFRS , Entreprises Algériennes**.**

## Introduction :

The adoption of financial accounting system (SCF) in the Algerian companies from 2010 generates a change in the accounting concepts. Therefore, at the time of the application of the SCF, managers should take a position in the accounting options rules offered by this system.

The objective of our research is to explain the motivation of accounting choices made by managers whose use their discretionary capacities to modify the financial statements result. Consequently, this lead to ask the following main question: what are the factors that influence the accounting choices **made by the Algerians companies**? And what are their determinants since the application of the financial accounting system (SCF)?

For this purpose, we use the positive accounting theory aiming to provide a conceptual framework to analyze the accounting practices trough firms’ characteristics. This theory attempts to measure management earning generated from the adoption of a particular method.

Several studies affirm an explanation limit of this theory, and consider that accounting choices are also affected by external factors of institutions. According to MEZIAS (1990) “The findings indicate that the institutional model adds significant explanatory power over and above the models that currently dominate the applied economics literature.” Therefore, to analyze the accounting strategy, we mobilize the internal factors through positive accounting theory and external factors across institutional theory.

First, according to literature review, we identify our research in a well-defined problematic in a spatio-temporal framework. Then, we address the methodological used tools to test our hypothesis. Finally, we present and discuss our statistics result.

## 1– Literature review :

Holthausen and Leftwich (1983, p:77) consider accounting choices as “… *changes in the rules used to calculate accounting numbers alter the distribution of firms’ cash flows, or the wealth of parties who use those numbers for contracting or decision making*“. Thus, our main objective is to look for the factors that influence these changes. And, to do so, we call two explanatory theories, for instance. Watts and Zimmerman (1978, 86, 90), DiMaggio and Powell (1983, 91.97) Raffournier (1990, 95.2006) Mezias (1990) Casta (2009), Beckert (2010), Dufour and Zamzam (2011) Affes and Hantati-Klila (2012) ... etc. resort to positive accounting theory and institutional theory to explain the accounting choices.

### 1.1- The positive accounting theory approach

“Positive Accounting Theory is concerned with explaining accounting practice. It is designed to explain and predict which firms Will and which Will not use a particular method, but it says nothing as to which method a firm should use.” (Amr Hassan, 2012)

Several studies (Watts and Zimmerman, 1978, 1986, 1990; Hothausen and Leftwich, 1983; Jeanjean and Stolowy, 2008; Jean-François Casta, 2009) mobilize the positive accounting theory to explain the motivations of accounting policy choices through the politico-contractual costs.

The positive accounting theory (PAT) argues that accounting choices are likely to be motivated by factors such as managers' compensation, the firm's debt/equity ratios and the wider political influence of other parties (Watts and Zimmerman, 1978; 1986).

First, managers' compensation concerns executives’ compensation contract based on accounting results. This assumption analyses the managers’ opportunism who handle earning management through accounting practices to increase their self- interest. (Graham et al. (2005), HOLTHAUSEN and LEFTWICH (1983)).

Secondary, the firm's leverage related to debt-equity ratios. Therefore, « firms with higher debt-equity ratios choose accounting procedures so as to shift earnings from future periods to the current period » (H.KABIR, 2010,p :139). The managers try to present an advantageous financial situation to reduce funding costs .

Finally, political costs Concerns the political visibility of companies. Holthosen and Leftwich (1983) argue that managers avoid criticism from unions, employees, consumers, politicians ... etc. whereby « the larger the firm, the more likely the manager is to choose accounting procedures that defer reported earnings from current periods to future periods. » (Watts and Zimmerman, 1986, p: 235).

### 1.2- The institutional theory approch :

Other studies (Dimaggio and Powell, 1983, 1991, 1997; Mizruchi and Fein, 1999; Lounas, 2004; Beckert, 2010; Affes and Hantati-Klila 2012) determine the explanatory factors of accounting practices through the environmental pressure treated by institutional theory.

According to Carpenter and Feroz (2001, p 569) « Institutional theory assumes that organizations adopt structures and management practices that are considered legitimate by other organizations in their fields, regardless of their actual usefulness". It "focuses on the major similarities and homogenization of forms and organizational practices" (Desreumaux, 2004, p. 41).

Beckert (2010), in his paper on the review of institutional theory, cites that "DiMaggio and Powell piece focuses on processes of homogenization via the concept of isomorphism. The authors argue that once organizational models are institutionalized, they become diffused, which causes organizational structures to grow more and more alike." DiMaggio and Powell (1983, p: 150) "identify three mechanisms through which institutional isomorphic change occurs, each with its own antecedents:"

Coercive isomorphism: This appears from political influence and problem of legitimacy. It is the result of formal and informal pressures exerted on organizations by other more powerful organizations or set of organizations. The existence of regulatory organizations, presented through their laws, rules,…etc. Order, affects several angles of the organization.

Mimetic isomorphism: are pressures exerced by organizations (executives or organizations) considered more talented and performing on other organizations in a situation of uncertainty to increase their legitimacy.

Normative isomorphism: are pressures exerced by professional organizations to gather other organizations to make them alike. Also, it is all the efforts of members of a profession to define their requirements and working methods to control production processes, and to establish a basis for legitimizing the autonomy of their activity.

According to the above, the explanatory power of each theory separately is limited. TIXIER and Jeanjean (2000, p.15) point out that the positive accounting theory and institutional theory are complementary rather than competing approaches to the extent that there is no incompatibility of their hard cores. Indeed, Mezias (1990) Tourron (2005) and other researchers demonstrate that the institutional model has a, significant and important additional explanatory capacity to the economic models.

## 2– Conceptual framework of research :

Given the laws of 07/11 November 25, 2007 of the accounting and financial system (SCF) application, Algerian companies must apply the new accounting doctrine inspired from the International Financial Reporting Standards (IFRS).

In order to meet the requirements of accounting transaction, companies are in a position to choose between different accounting methods of the same transaction. This appealed the managers' judgments within their accounting business strategies.

In this context, accounting strategy or policy according to Casta (2009), is all the choices made by the leaders to act on accounting numbers for the purpose of shaping the content or form of published financial statements, whose respecting regulatory constraints. In the same vein, fields and al (2001, p: 256) define an accounting choice as "any decision whose primary purpose is to influence (either in form or substance) the output of the accounting system in a particular way, including not only financial statements published in accordance with GAAP, but also tax returns and regulatory filings"

On the change in accounting regulations occasion of 2010 in Algeria, our research aims to explain the motivations of accounting strategy made by Algerians companies.

Accounting choices has been the subject of considerable research since the 70s. “Research has focused on the impact of compensation schemes, lending agreements and political visibility. More recently researchers have emphasized the role of institutional factors in shaping management incentives”(HJELSTROM and SCHUSTER, 2011).

According to our literature review, to solve our problem, we based on two complementary parties of explanation. First, The accounting strategies are determined through political-contractual characteristics of the company, explained by the positive accounting theory. The second, they are determined through environmental institutional pressures that have suffered by the company such as professional organizations, the judiciary and regulatory institutions ... etc, explained by the institutional theory.

## 3– Research Methodology :

In order to answer our main addressed problem, we discuss a portfolio of accounting choices (accounting policies) within a framework of dual theories in order to establish an explanation of manager’s positions.

### 3.1- Sample :

To determine our sample, it is necessary that the companies studied are of different sizes and industry to test the effect of these factors, on one hand. Also made by most previous studies that analyze public companies, we combined public and private companies to test the effect of legal status on the choice of accounting portfolio. On the other hand, the sample must be large enough to trace a general trend. For this, we got up to 68 Algerian companies adoptive SCF.

Our study targeted the Algerian economic enterprises. We eliminated companies belonging to the insurance and banking sector, given the peculiarities of application of accounting standards and rules for presenting their accounts.

### 3.2- Data Collection :

To understand the nature of the relationship between accounting strategy and companies’ characteristic and environment pressures, we have established a questionnaire that submitted to general managers and financial and accounting directors of firms. The first part of this questionnaire concerns accounting methods choices made by companies. The second part concerns the factors determinant of these choices.

### 3.3- Variables :

#### 3.3.1- Dependent Variable :

Fields and al (2001, p:288) cite in their paper “Most of the work discussed in Section 4 examines the choice of a particular accounting method within the context of the goals driving the accounting choice, whereas managers may make multiple accounting method choices to accomplish a specific goal. As a result, examining only one choice at a time may obscure the overall effect obtained through a portfolio of choices. The most common method used in the literature to avoid this problem is to examine the net effect of all accounting choices on the accruals of the firm for the period under consideration.” The research bases on a single accounting choice have low explanatory power since the leaders are affected by the overall portfolio accounting choices (Watts and Zimmerman, 1990).

In this study, the dependent variable differentiates between accounting portfolio taken by managers. The dependent variable, called portfolio, is coded (1,2,3,4,5) according to earning management during the year in question.

### 3.3.2- Independent Variable :

Positive accounting theory variables:

- Political cost: "predicts that large firms rather than small firms are more likely to use accounting choices that reduce reported profits. Size is a proxy variable for political attention. » (Watts and Zimmerman, 1990, p:139).

We chose to take the logarithm of total assets to avoid discrepancies between observations.

- Contractual cost :

- Leverage: "predicts the higher the firm's debt/equity ratio, the more likely managers use accounting methods that increase income." (Watts and Zimmerman, 1990, p: 139). The companies that have difficulties in repaying their debts due, opt for an increase in its accounting results in order to avoid debts constraints violation and reduce financing costs.

  The ratio most commonly used in previous studies as a proxy to measure the extent of constraints contracts debt, is financial debt / equity.

- Contractual compensation: a dichotomous variable (0/1) can be used to encode the presence or absence of such a contract. The advantage of this method is that it allows to model the behavior of the manager at the least cost, the information is generally public. (Thomas Jeanjean, 1999).

*Institutional theory variables:*

- Legal status: companies subject to isomorphic institutional pressures are influenced by public policies (J.Defourny M.Nyssens, 2010). According to P.Lünnemann and T. Matha (2002), to analyze the differential effects between firms, we must examine the companies legal status role.

- Accompanying accountant: "In professional training, institutional entrepreneurs learn the cognitive and normative frames that shape their perspectives on regulative goals and the likely means to achieve them. Socialization leads to routines and taken-for-granted institutionalized practices."(Jens Beckert , 2010 , p.156)

The external auditors or consultants contribute to strengthen the trust of users and published digits, and state discretionary accounting choices of firms (Janin, Piot and Dumontier, 2012). In this regard, the implementation of new methods or choose between two or several, create real technical difficulties that requires accompanying accountant.

- The industry: According Affes and Hentati-Khila (2012, p: 9), "Companies that are moving in areas heavily exposed to environmental perspective are subject to special attention from the public."[1] For this, the companies of sectors most exposed tend to adopt practices that reduce their results in order to avoid state pressure on the implementation of the general economic policy.

The criterion for measuring this variable used by many researchers, is often the level of environmental exposure (Rockness and al, 1986 **;** Patten, 1991 ; Ness and Mirza, 1991 ; Deegan and Gordon, 1996 ; Adams, Hill and Roberts, 1998 ; Backer et Naser 2000 ; Gray and al, 2001 ; S.Damak-Ayadi, 2005; Affes and Hentati-Khila ,2012).

[1] « The companies argue that in highly exposed areas from an environmental point of view are the subject of special attention from the public.»

## 4– Results and Discussion :

First, we are interested to the presentation of preliminary descriptive statistics. Second, we test the presence of multicolinearity between the independent variables on one hand and all the variables on the other hand. Finally, we interpret and discuss the results.

### 4.1- Descriptive Statistics :

Multiple variable of accounting strategy follows the following statistical distribution:

**Table 1:** Frequency table of accounting strategy

| *Y* | *Frequency* | *percentage* |
|---|---|---|
| ***Strategy 1*** | ***07*** | ***10,29%*** |
| ***Strategy 2*** | ***15*** | ***22,07%*** |
| ***Strategy 3*** | ***13*** | ***19,12%*** |
| ***Strategy 4*** | ***07*** | ***10,29%*** |
| ***Strategy 5*** | ***26*** | ***38,23%*** |
| ***TOTAL*** | ***68*** | ***100%*** |

**Source:** Authors

The table results show a dispersion of firms in our sample, where the strategy 5 whose minimize the earning management, take the dominant part by *38.23%*. Consequently, strategies 2, 3 and 4 that are a combination of accounting choices increasing earning management and others reduced it by *22.07% and 19.12% and 10.29%*. Last, strategy 1 that maximize the earning management by *10.29%*.

### 4.2- Correlations results of the independent variables :

In general, there is a weak correlation between the explanatory variables that mean the absence of multicolinearity between these variables.

**Table 2:** Results table of correlations between the independent variables

| | **LOG(ACT)** | **DF/CP** | **RD** | **SAC** | **ACOMP** | **SJ** |
|---|---|---|---|---|---|---|
| **LOG(ACT)** | 1.000000 | | | | | |
| **DF/CP** | -0.019679 | 1.000000 | | | | |
| **RD** | 0.196198 | 0.008052 | 1.000000 | | | |
| **SAC** | 0.192859 | -0.115852 | -0.103429 | 1.000000 | | |
| **ACOMP** | -0.065823 | -0.173367 | 0.241664 | 0.219394 | 1.000000 | |
| **SJ** | -0.482262 | 0.010401 | -0.380717 | 0.088061 | 0.069567 | 1.000000 |

**Source:** Authors

### 4.3- Correlations results of the all variables :

**Table 3:** Results table of correlations between all variables

| | **STR** |
|---|---|
| **LOG(ACT)** | -0.003806 |
| **DF/CP** | -0.123554 |
| **RD** | 0.315190 |
| **SAC** | 0.127964 |
| **ACOMP** | 0.383013 |
| **SJ** | 0.109251 |

**Source:** Authors

It is appropriate to point the highest correlations between variables:

- First, the correlation between legal status and firm size can be explained by larger companies are public companies while private enterprises have a small and medium size.
- Secondly, the correlation between legal status and managers compensation system affirms the existence of the remunerations 'contract based on the accounting results for the public companies'.

Both variables size and leverage don't show significant results. In Algeria, the lack of an active market and stock exchange motivate the company to focus just on tax side without its size and funding criteria.

Also, environmental exposure is not an explicative variable of accounting policy in Algerian companies. This is an unexpected finding. The institutional theory purposes that firms in exposure sectors minimize their accounting management. This means that companies less exposed also tend to adopt strategies that minimize earning management.

More managers' compensation contracts are based on accounting results over the accounting practices tend to strategy5, ie to minimize earning management. This result is inconsistent with the predictions of managers' opportunism of positive accounting theory. The influence of managers' compensation contract on the accounting policy is limited by economic and social circumstances of the company. For example, European managers are not motivated to manipulate earning management to increase their own interest by the same degree as USA managers. In this regard, the variable part of the remuneration of American managers according to their contracts is much higher than European managers (Charreaux, 1997).

In our sample, 24 companies have compensation contracts based on accounting results, of which 19 are public companies. So, the most of the manager's compensation systems according to accounting result exist in the public companies. Thus, the terms of compensation contracts do not stipulate a threshold of positive accounting results. Also, the variable portion based on accounting results of these contracts is minimal and does not exceed 20%.

Finlay, most companies supported during the transition to the SCF, adopts the accounting strategies that minimize earning managements. Because of resistance to changes from tax accounting to financial accounting, professional actors (auditors, consultants etc.) in Algeria legitimize these practices (reducing accounting results) and breathe as rational.

## Conclusion:

The main objective of our study tests whether the predictors of positive accounting theory and institutional theory motive the company to choose an accounting strategy that increases its earnings or reduced. Our research has investigated the link between firms' size, leverage, managers' compensation, legal status, industry, accompanying accountant and accounting strategy.

We can say that both the positive accounting theory associated with the institutional theory have a strong explanatory power for determining the factors affecting the choice of accounting strategy for Algerian companies.

## Notes and References:


- Adams C.A., Hill W.Y. et Roberts C.B., (1998), "Corporate social reporting practices in western europe : legitimating corporate behaviour ?", British Accounting Review, vol. 30.
- Affes and Hantati-Klila (2012), "les determinants de l'offre volontaire des informations societales et l'analyse du niveau de divulgation : cas des entreprises canadiennes" Comptabilités et innovation, Grenoble : France.
- Ahmad-Zaluki NA, Campbell K & Goodacre A (2011) Earnings management in Malaysian IPOs: the East Asian crisis, ownership control and post-IPO performance, International Journal of Accounting, Vol.46, N°2.
- Baker, N.A., Naser, K. (2000). "Empirical evidence on corporate social disclosure practices on Jordan". International Journal of Commerce and Management Vol.10.
- Beckert.J , 2010, "Institutional Isomorphism Revisited: Convergence and Divergence in Institutional Change", Sociological Theory, Vol. 28, No. 2.
- Carpenter and Feroz (2001) "Institutional theory and accounting rule choice: an analysis of four US state governments' decisions to adopt generally accepted accounting principles" Accounting, Organizations and Society, Vol 26.
- Casta, J. F., (2000), "Théorie positive de la comptabilité". In Encyclopédie comptabilité, contrôle de gestion et audit, Ed. Economica.
- Charreaux, G. (1997), "Le gouvernement des entreprises, corporate governance: théories et faits", Economica, collection: Recherche en Gestion, pp. 540.
- Damak-Ayadi. S , 2005 " Analyse des facteurs explicatifs de la publication des rapports sociétaux en France", Comptabilité et Connaissances, France.
- Deegan C. et Gordon B., (1996), "A study of the environmental disclosure practices of Australian corporations", Accounting and Business Research, vol. 26, n° 3.
- Defourny and Nyssens (2010) "Conceptions of Social Enterprise and Social Entrepreneurship in Europe and the United States: Convergences and Divergences", Journal of Social Entrepreneurship, Vol.1, n°1.
- Desreumaux, A., (2004), "Théorie néo-institutionnelle, management stratégique et dynamique des organisations", In Institutions et gestion, HUAULT. Ed. Vuibert
- DIMAGGIO, P., POWELL, W., (1983), "The iron cage revisited : institutional isomorphism and collective rationality in organizational fields", American sociological review, Vol.48, n°2.
- Dimaggio, P., Powell, W., (1991), "The New Institutionalism in Organizational Analysis", University of Chicago Press.
- Dimaggio, P., Powell, W., (1997), "Le néo-institutionnalisme dans l'analyse des organisations (Traduction de l'introduction de l'ouvrage de 1991)", Politix, Vol.10, n°40.
- Fields, Lys and Vincent (2001), "Empirical research on accounting choice", Journal of Accounting and Economics Vol.31.
- Grahama, Harveya and Rajgopal (2005) "The economic implications of corporate financial reporting" Journal of Accounting and Economics Vol. 73, No. 3.
- Gray, Javad, Power and Sinclair (2001), "Social and environmental disclosure and corporate characteristics: A research Note and extension", Journal of Business Finance and Accounting, Vol.8, n°2.
- Hjelström and Schuster (2011), "Standards, Management Incentives and Accounting Practice – Lessons from the IFRS Transition in Sweden, Accounting in Europe", Vol.8, n°1
- Hassan, (2012), "The Positive Accounting Theory" http://www.archive.org/details/AccountingChoicesDeterminantsUnderlying
- HOLTHAUSEN and LEFTWICH (1983), "The economic consequences of accounting choice", Journal of Accounting and Economics Vol.5.
- Janin, Piot and Dumontier, (2012), " Les IFRS et l'utilité informationnelle du résultat global en Europe : le rôle des cabinets d'audit". Comptabilités et innovation, Grenoble, France.
- Jeanjean and Stolowy (2008), "Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption", Journal of Accounting and Public Policy, Vol. 27, No. 6.

- Jeanjean, T., (1999), "La théorie positive de la comptabilité : une revue des critiques", CEREG, Cahier 99-12, n°1.
- KABIR. H (2010) "positive accounting theory and sciences" Journal of CENTRUM Cathedra ™.
- Lounas. R (2004) "Théorie des Institutions et Applications aux Organisations" HEC Montréal, Cahier de recherche N° 04-01, ISSN: 1711-6309.
- Lünnemann and Mathä (2002) "monetary transmission: empirical evidence from Luxembourg firm-level data" Central Bank of Luxembourg , working paper n°5.
- MIZRUCHI, M., FEIN, L., (1999), "The social construction of organizational knowledge : a study of the uses of coercive, mimetic, and normative isomorphism." Administrative science quaterly, Vol.44.
- Ness K.E. et Mirza A.M., (1991), "Corporate social disclosure : a note test of agency theory", British Accounting Review, vol. 23, n° 3.
- Patten D.M., (1991), "Exposure legitimacy and social disclosure", Journal of Accounting and Public Policy, vol.10.
- MEZIAS, S., (1990), "An institutional model of organizational practice : financial reporting at the fortune200", Administrative science quarterly, Vol.15, n°1990.
- Raffournier, (1990), "La théorie positive de la comptabilité : une revue de la littérature", Economie et sociétés, n°16.
- Raffournier, (1995), "The determinants of voluntary financial disclosure by Swiss listed companies", European accounting review, Vol.4, n°2.
- Rockness J., Schlachter P., Rockness H.O., (1986), "Hazardous waste disposal, corporate disclosure, and financial performance in the chemical industry", Advances in Public Interest Accounting, vol. 1.
- Tixier, J., Jeanjean, T., (2000), "La méthodologie des programmes de recherche : présentation, évaluation et pertinence pour les Sciences de Gestion", Cahier de Recherche du CREPA, Vol.65.
- Touron, P., (2005), "The adoption of US GAAP by French firms before the creation of the International Accounting Standard Committee: an institutional explanation", Critical perspective on accounting, Vol.16, n°3.
- Watts and Zimmerman (1978), "Towards a Positive Theory of the determination of accounting standards", The Accounting Review, Vol. 153, No. 1.
- Watts and Zimmerman, (1986), "Positive accounting theory", Ed. Prentice-Hall.
- Watts and Zimmerman (1990), "Positive Accounting Theory: A Ten Year Perspective", The Accounting Review, Vol. 65, No. 1.