THE IMPACT OF INSTITUTIONAL OWNERSHIP ON INCOME ACCOUNTING STRATEGY: EVIDENCE FROM BAHRAIN

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ABSTRACT

The purpose of this paper is to examine the impact of institutional ownership on management's choice of income strategy while controlling the conventional examined factors of Bahrain non-financial listed companies according to positive accounting theory. This study adopts a comprehensive measurement of the income accounting strategy. Furthermore, it uses ordinary least squares technique to test the impact of institutional ownership on income strategy choice, using panel data covering 49 company-years of Bahraini non-financial listed companies that represents 96% of non-financial listed companies. The results show that beside of the influence of conventional factors, the institutional ownership explains management's choice of income strategy; in fact, income-increasing strategy is positively associated with institutional ownership level and directors' paid bonuses, yet negatively associated labor force, leverage and concentration ratio. Overall, these results suggest that, the institutional ownership contribute to agency conflicts in terms of income strategy choice.

The findings have policy implications for IASB, companies' shareholders, investors, management, auditors, academics and Bahrain accounting regulators so as to reach an optimal corporate ownership structure that leads to save minorities' interests and promote investor protection, hence enhance public trust in accounting practices as well as help to improve stock markets. The study makes several contributions. First, this is the first study to empirically produce evidence of the impact of institutional ownership on the choice of income accounting strategy. Second, this is the first study to embed the political cost dimensions simultaneously within the analysis in the context of accounting strategy choice. Finally, it has been conducted in Bahrain, a context that is characterized by high concentrated ownership.

Keywords: Income Accounting Strategy Choice, Positive Accounting Theory, Ownership Structure, Institutional Ownership, Bahrain, GCCs.

INTRODUCTION

Prior accounting choice literatures (e.g. Zmijewski & Hagerman, 1981; Holthausen, 1990; Skinner, 1993; Bowen et al., 1995; Missonier, 2004; Astami & Tower, 2006; Waweru et al., 2011; Jahangir & Kamran, 2017) reveal that management's choice of accounting policies among accounting policies alternatives is a function of some determinants. Furthermore, these choices are result in either increase or decrease accounting results hence affects financial statements users' decisions (Watts & Zimmerman, 1990). However, Field et al. (2001) classify management motivations to exercise accounting choices into three perspectives; contractual motivations, assets pricing motivations and motivation due to impact on third parties. Additionally, there are two propositions under those classifications to explain management's

choices of accounting policies. First, the opportunistic proposition, under which, the management adopts accounting methods in order to meet their own interests. Second, the efficiency proposition, under which, the management adopts accounting methods that best image the underlying financial performance of entity. Yet, Watts & Zimmerman (1990), Fields et al. (2001) and Scott (2009) argue that the opportunistic proposition is the most frequent predicted and prevalent in literatures.

Within the opportunistic proposition, Watts & Zimmerman (1978; 1986 & 1990) developed the Positive Accounting Theory (PAT), based on agency theory, which predicts the opportunism of management in terms of adopting accounting methods. They argue that "manager's choices of accounting policies- as rational individual- are influenced by managerial opportunism", sense that manager's act to maximize their own utility. They suggest some economic factors representing the management incentives influence managers' choices in favour to specific accounting policies among others. These factors are considered as the fundamental hypotheses of PAT; firstly, bonus plan hypothesis: Mangers of companies with bonus plan-based accounting earning indicators are more likely to choose accounting policies that increase the current income. Thus, they might be able to increase their current bonuses by reporting high net income as possible. Secondly, debt covenant hypothesis: Mangers of companies which are close to violate debt covenant-based accounting indicators are more likely to choose accounting policies that increase the related accounting indicators such as current income, thus reduce the probability of technical default. Thirdly, political cost hypothesis: The greater the political cost faced by the companies due to accounting based results, the more likely mangers of those companies choose accounting policies that decrease the related accounting results (e.g. net income) in order to reduce or defer such political cost and/or avoid potential regulation thus increase cash flows.

It is noteworthy that, firstly, vast majority of prior literatures focused on an individual accounting policy choice, which is considered misleading and fruitless to the knowledge. This is consistent with many researchers' confirmations (e.g. Watts & Zimmerman, 1990; Fields et al., 2001; Missonier, 2004; Stent et al., 2015). Therefore, our study will use a cumulative method representing all used accounting policies as a unified measure of the accounting strategy. Secondly, Fields et al. (2001), Missonier (2004) and Waweru et al. (2011) argue that prior studies provided inconclusive conclusions. Furthermore, they had low explanatory power (Tawfik, 2006). Thirdly, the International Financial Reporting Standards (IFRS) offers a range of accepted accounting policies alternatives whereby mangers can choose among them; this in turn may allow managers more potential to manipulate earnings. Thus our study is significantly different from prior studies because to the best of our knowledge, to date there is very few studies that have documented the management choices of accounting policies after the adoption of IFRS. Fourthly, PAT was invented and extensively examined within developed countries such as US, UK, Canada, Swiss, Australia and New Zealand (Zmijewski & Hagerman, 1981; Daley &Vigeland, 1983; Holthausen, 1990; Skinner, 1993; Bowen et al., 1995; Missonier, 2004; Collin et al., 2009). These countries are characterized by wide-spread ownership environment where the classical agency conflict "principal-agent" is prevalence. However, few researches have been conducted within developing countries.

Additionally, since Enron and WorldCom scandals, the public attention has been increasing in terms of the credibility of accounting profession and governance mechanisms due to management opportunism to maximize the utility for themselves and/or certain parties at expense of other parties. Thus, many relevant laws and legislations have been enacted in order to

mitigate such conflicts. Moreover, it has been argued that the ownership structure has an important influence on different aspects of the entity such as value, performance, incentives, strategic decisions; social responsibility and governance mechanism (Jensen & Meckling, 1976; Hart & Moore, 1990; Finkelstein, 1992; Oh et al., 2011). Importantly, Carlson & Bathala (1997), Hunt (1990), Dey et al. (2007), Idris (2012), Maki et al. (2016) and Juhmani (2017) argue that ownership structure has intrinsic role on management behaviour in terms of the accounting practices. However, prior accounting strategy literatures (Zmijewski & Hagerman, 1981; Skinner, 1993; Bowen et al., 1995; Inoue & Thomas, 1996; Missonier, 2004; Astami & Tower, 2006; Waweru et al., 2011; Jahangir & Kamran, 2017) empirically did not document the influence of different aspects of ownership structure components and/or only documented the classical agency conflict "principal-agent" within the influence of companies' ownership structure. Therefore, this study tries to fill this gab within Bahraini non-financial listed companies that characterized by concentrated ownership where the second type of agency conflict "principal-principal" is more prevalence.

Bahrain is a unique environment to examine the impact of institutional ownership on income strategy choice and draw conclusions that could be applicable to other Middle Eastern countries, particularly, Gulf Cooperation Council countries (GCCs) being Bahrain is a part of this economic union as well as for diverse reasons. First, unlike developed countries, Bahrain market is characterized by high ownership concentration with large block-holders for instance, approximately on average 45% of Bahraini non-financial listed companies' outstanding shares are owned by institutional investors. Moreover, 45% of Bahraini non-financial listed companies are controlled by large block-holder. Accordingly, one can infer that Bahraini non-financial market is predominated by entrepreneurs, original concentrated owners and institutional investors which rises probability of control-minorities conflict of interests that might reflect on the accounting practices in such context. Second, unlike most developing countries, Bahrain shows stronger growth and pursues an expansionary fiscal policy. Additionally, Bahrain has attained the 44th overall the world and 6th in Middle and North Africa as global competitiveness economy (World Economic Forum, 2014; 2015). Furthermore, it has attained 44th place as the freest economy overall in the world (Index of Economic Freedom, 2017). This progress in Bahrain economy necessitates shedding light on the extant accounting practices. Third, few studies have been conducted regarding the accounting practices in Bahrain (Al-Basteki, 1995; Joshi & Al-Mudhahki, 2001; Joshi & Ramadhan; 2002; Al Shammari et al., 2008; Juhmani, 2017). Moreover, there are no studies have documented the accounting strategy choice particularly within Bahraini non-financial listed companies which officially adopts IFRS. Consequently this study tries to fill this gab.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Bonus Plan Hypothesis

Managers of companies where employ bonus plan-based on income performance, are more likely to choose accounting policies which lead to current income increase thus they may be able to increase their bonuses (Watts & Zimmerman, 1986). Healy (1985 & 1996) finds that mangers of companies with bonus plan-based on income results numbers exercised accounting choices in order to maximize their bonuses protect their job security and create stockholder wealth at the expense of others. Additionally, Zmijewski & Hagerman (1981), Skinner (1993) and Bowen et al. (1995) within US context find consistent results. Missonier (2004) within Swiss

context finds weak evidence supports the bonus plan hypothesis. While, Inoue & Thomas (1996) and Astami & Tower (2006) in Japan and some Asian-Pacific countries, respectively, find that bonus plan hypothesis does not explain the accounting choices. Skinner (1993), Fields et al. (2001), Astami & Tower (2006) and Dey et al. (2007) argue that management bonus plans are frequently positive related and based constructed on reported financial accounting results. Likewise, it is expected to find bonus plan hypothesis valid within Bahraini non-financial listed companies. Yet they do not publicly disclose information regarding their bonus plans, rather they publicly disclose information regarding the paid bonuses of their board of directors. Therefore, the study uses directors' paid bonuses ratio to represent bonus plan variable. Accordingly, it is expected that management of non-financial listed companies might be able to increase their compensation by adopting income-increasing strategy, as follows:

H1: There is a positive relationship between adopting income-increasing strategy and directors' paid bonuses ratio.

Debt Covenants Hypothesis

Mangers of companies which are close to violate debt covenants based constructed on accounting indicators (e.g. income numbers), are more likely to choose accounting policies that increase those indicators thus reduce the probability of technical default (Watts & Zimmerman, 1986). Most debt contracts comprise covenants that companies must meet during debt period; otherwise they will face costs imposed by debt suppliers. Thus to avoid such situation, managers resort to use income-increasing policies (Holthausen, 1990; Scott, 2009) since debt covenants are frequently constructed based on reported financial accounting results (Fields et al., 2001; Waweru et al., 2011). Within US context, Zmijewski & Hagerman (1981), Skinner (1993) and Bowen et al. (1995) find evidences confirming the positive association between companies' leverage as a proxy of debt covenants and the choice of income-increasing strategy. Also in Japan, consistent result is found (Inoue & Thomas, 1996). Additionally, to some extent, Missonier (2004) find that managers of Swiss companies may select accounting methods to decrease debt costs. While Astami and Tower (2006) and Jahangir & Kamran (2017) within some Asian-Pacific countries and some South-Asia countries find inconsistent results. Other literatures find no relationship between companies' debt covenants and the accounting choices (Aitken & Loftus, 1994; Waweru et al., 2011; Isa, 2014). However, it is expected to find debt covenant hypothesis valid within Bahrain context. Yet the non-financial listed companies do not publically disclose information regarding debt contract covenants, thus we follow most preceding literatures by using companies' leverage as a proxy of debt covenants variable. Accordingly, it is expected that management of high leveraged companies are more likely to adopt income-increasing strategy to avoid violating such covenants, as follows:

H2: There is a positive relationship between adopting income-increasing strategy and the companies' leverage.

Political Cost Hypotheses

The greater the political costs companies might face, the more likely managers of those companies choose accounting policies that decrease the income results in order to reduce, defer such political costs and/or avoid potential regulation, thus increases their cash flows (Watts & Zimmerman, 1986). El Habashy (2004) argues that large companies might be less likely to adopt

income-increasing policies than smaller companies since the former tend to be closely followed by outsider stakeholders such as powerful lobby groups, politicians and trade union officials. Moreover, large companies may be required to incur higher performance standards such as environmental and social responsibility. Consequently, companies might resort to influence the political process by adopting income-decreasing policies in order to convince stakeholders that profits are suffering (Scott, 2009). However, Rahman & Scapens (1988), Ashari et al. (1994) and Waweru et al. (2011) have questioned the universal application of the political cost theory. They argue that large companies have less incentive to smooth income because more information is known about them. Thus, they are exposed to more scrutiny from stakeholders.

Importantly, according to literatures, the political pressure has multifaceted dimensions that are government pressure on management against negative wealth movement represented by company size, government pressure on management against monopoly activates represented by concentration ratio and labour force pressure on management against low salaries and wages represented by labour force intensity ratio. Yet none of prior accounting strategy studies have addressed the three dimensions simultaneously to better reflects the whole influence of political pressure on accounting strategy choice. Therefore, our study simultaneously will control the effect of the three dimensions of political pressure.

First dimension of political pressure is government pressure against negative wealth movement. In fact, company size is the prominent proxy represents such political pressure. Zmijewski & Hagerman (1981), Skinner (1993) and Bowen et al. (1995) within US find that large companies are less likely to adopt income-increasing policies in order to avoid such political costs. Inoue & Thomas (1996) and Isa (2014) in Japan and Nigeria, respectively, find consistent results. Missonier (2004) in Swiss, to some extent, finds consistent results. By contrast, Waweru et al. (2011) and Jahangir & Kamran (2017) within Tanzania and some South-Asia countries, respectively, find that large companies are more likely to adopt income-increasing strategy. However, Astami & Tower (2006) within some Asia Pacific countries find that the companies' size does not explain accounting policies selection. Within Bahrain context, the government adopts pursuing expansionary fiscal policies and provides encouraging investment policies to stimulate economic growth, for instance, companies benefit different kinds of tax exemptions and particularly companies' income in Bahrain are not subject to tax (Government of Bahrain, 2017). Thus, Bahrain environment is stimulating environment to invest and operate with loose levels of political pressures on management. In other words, one might expect that such government pressure is to be confounded. However, we stated the size hypothesis according to classical PAT prediction (negative relationship), as follows:

H3a: There is a negative relationship between adopting income-increasing strategy and companies' size.

Second dimension of political pressure is government pressure on management against monopoly activities. In fact, companies' concentration ratio is the widely used measure to represent companies' ability to earn monopoly rents. Hagerman & Zmijewski (1979) and Zmijewski & Hagerman (1981) argue that management is self-interest motivated to thwart any additional competition because that may shrink the value of company as well negatively affects the expected benefits that might gain in the future. Therefore, companies, which announce higher profit, might be exposed to anti-trust actions or some governmental reactions that would decrease the monopolization level. In addition, when new competing companies enter the industry, the abnormal profits of current companies will decline, thus managers of the current companies will have to concede some of their benefits. Within Bahrain context, despite of the government

investment encouragement policies, the concentration ratio of non-financial companies on average is amounted 85% that is considered relatively high, suggesting that the Bahraini non-financial market is a monopolistic market. Therefore, it is expected that companies which belong to monopolized industry (high concentration ratio) are less likely to adopt income-increasing strategy in order to avoid anti-trust litigation and thwart any prospect new competition in future, as follows:

H3b: There is a negative relationship between adopting income-increasing strategy and companies' concentration ratio.

Third dimension of political pressure is labour force pressure on management against low salaries and wages. In fact, salaries and wages ratio is widely used measure to capture such pressure. Missonier (2004) argues that high profit companies are exposed to employees and unions pressures to increase their salaries and wages thus substantial reduction in shareholders wealth is predicted. Thus managers are more likely to adopt income-delaying strategies in order to avoid such pressures. Waweru et al. (2011) also find consistent result. Likewise, Bahrain is not a country without such conflicts, given that the employees' income is generally correlated to companies' earnings. Accordingly, employees and related unions in Bahrain are likely to focus on companies' reported earnings. Therefore, it is expected that companies with labour force intensity are less likely to adopt income-increasing strategy in order to limit the intensity of wage and salaries demands, as follows:

H3c: There is a negative relationship between adopting income-increasing strategy and companies' labour force intensity.

Institutional Ownership Hypothesis

In fact, the institutional investors "ownership" have incremental role influencing business organization. Where, Idris, (2012) argues that investee companies usually arrange meetings with their large institutional investors on a one-to-one basis to discuss issues including companies' performance and quality of management. Yet, prior literatures provide mixed results in terms of their influence on the agency conflicts.

Under prospect opportunistic perspective; Porter (1992), Bushee (1998), Chung et al. (2002), Graham et al. (2005) and Bowen et al. (2008) argue that institutional investors might be a "transient owners" sense that they excessively focus on short-term earnings and thus pressure investee' management to improve current profitability and deliver higher earnings. Therefore, investee companies' management might resort to adopt income-increasing accounting strategy to meet the institutional investors' aspirations. Bearing in mind, management, according to PAT's prediction, opportunistically seeks to adopt income-increasing strategy. Consequently, the opportunistic perspective role of the institutional investors suggests a positive association between income-increasing strategy choice and institutional ownership. By contrast, under prospect monitoring role (mitigating agency conflicts); Bartov et al. (2000), Chung et al. (2004), Ronen & Yaari (2008), Cheng & Reitenga (2009) and Abdul & Rahman (2009) argue that since institutional investors are sophisticated investors and having high processing capacities of information than individuals, they efficiently monitors management. In other words, they work as a governance mechanism restricting management opportunism. Bearing in mind, management, according to PAT's prediction, opportunistically seeks to adopt income-increasing strategy. Consequently, efficient monitoring role of the institutional investors suggests a negative

association between income-increasing strategy choice and institutional ownership. In passing, some studies (e.g. Peasnell et al., 2005; Al-Fayoumi et al., 2010) failed to find evidence supporting such relationship.

Within Bahrain context, the institutional investors have incremental role. In fact, they own, on average, 45% of non-financial listed companies' shareholding which is considered relatively high and influential. The increasing institutional investors' shareholding induce them to monitor efficiently and reduce agency costs because of their higher stakes and relatively lower coordination costs compared with more dispersed individual owners (Shleifer &Vishny,1997). Therefore, we expect to find negative relationship between level of institutional ownership and managerial opportunism in terms of adopting income-increasing strategy, as follows:

H4: There is a negative relationship between adopting income-increasing strategy and institutional ownership level.

RESEARCH METHODOLOGY

Data Collection

The data are collected from two sources that are companies' annual reports appearing on Bahrain Bourse Market (http://www.bahrainbourse.com) and OSIRIS database of financial information. Companies' annual reports are used to collect manually the disclosed accounting policies and the ownership level regarding the institutional investors. Companies those included in the study are all non-financial listed companies on Bahrain Bourse Market. Consequently, the study population consists of 17 non-financial listed companies (Appendix A) that belong to industrial, hotels and tourism, services and telecommunication sectors for the fiscal year-ends ranging from 2013 to 2015 that resulted in 51 company-years observations. This time window was chosen since it is the most stable period in terms of security and economic situation for the last 10 years as well as due to the data availability. We exclude company-years that are missing values needed to calculate variables used in empirical models (2 observations). This yields final sample of 49 company-years observations which represent 96% of the population.

Income Strategy Measurement

Our study follows most preceding accounting strategy literatures that adopt a comprehensive measurement of the income strategy as main dependent variable. The income strategy is defined as a combination of accounting policies that may increase or decrease the reported income. Particularly, we adopted Waweru et al. (2011)'s income strategy measurement that is the increasing-income strategy ratio as the dependent variable. This ratio is calculated as follow; the aggregate number of income-increasing policies divided by the aggregate number of all disclosed accounting policies (i.e., income-increasing plus income-decreasing policy). The denominator varies according to the total number of relevant disclosed accounting policies. Additionally, based on Bahraini non-financial listed companies' financial statements, we identified twelve relevant disclosed accounting policies that can affect companies' income strategy as shown in Table 1. All these measurement methods are promulgated by the regulatory bodies which are based on the IFRS. Each accounting policy is classified as either income-increasing or income-decreasing policy. For instance, in terms of the depreciation method; when a company adopts the straight line method means that it adopts accounting policy that leads to increase company's income, while if it adopts the accelerated method means that it adopts

accounting policy that leads to decrease company's income. Furthermore, the income strategy methodology is based on Zmijewski & Hagerman (1981)'s assumption that each accounting policy has an equal effect on the reported income.

Table 1
THE DISCLOSED ACCOUNTING POLICIES AND THEIR EFFECT ON COMPANIES' INCOME

Policy	Income-increasing	Income-decreasing
Depreciation (DP)	Straight line	Accelerated
Pension (P)	Disclosed in the notes	Recorded in the balance sheet as a provision
Marketable securities (MS)	Fair value	Cost
Freehold land and buildings (L&B)	Revaluation	Cost
Inventory (IVT)	FIFO	Weighted average cost
Property, plant and equipment (PPE)	Revaluation	Cost
Goodwill (GWL)	Revaluation	Cost
Intangible assets (IA)	Fair value	Cost
Software expenses (SE)	Capitalized and then amortized	Recorded directly as expenses
Investment Property (IP)	Fair value	Cost
Assets renewal expenses (ARE)	Capitalized and then amortized	Recorded directly as expenses
Interest costs on new assets (ICNA)	Capitalized and then amortized	Recorded directly as expenses

Regression Model and Variables Definition

To test our hypotheses, we specify the following ordinary least squares (OLS) regression model:

$$\text{INCOME STRATEGY}_{it} = \alpha_0 + \alpha_1 BONUS_{it} + \alpha_2 LEVER_{it} + \alpha_3 SIZE_{it} + \alpha_4 CONC_{it} + \alpha_5 LABOR_{it} + \alpha_6 INSOWN_{it} + e \quad (1)$$

The variables are as defined in Table 2.

Table 2
VARIABLES DEFINITION

Variable	Method of computation
INCOME STRATEGY it	Number of disclosed accounting policies that increasing the income divided by total disclosed accounting policies, for company i in year t.
BONUS it	Directors' paid bonuses divided by retained earnings, for company i in year t.
LEVER it	Total debt divided by total equity, for company i in year t.
SIZE it	Natural logarithm of total assets for, company i in year t.
CONC it	Top 50% of corporate sales within a single sector divided by the total sales of that sector, for company i in year t.
LABOR it	Cost of labor force divided by net sales, for company i in year t.
INSOWN it	Proportion of shares owned by institutions, for company i in year t.

EMPIRICAL RESULTS AND DISCUSSION

Descriptive Statistics

Table 3 presents a summary of the descriptive statistics of dependent and independent variables.

Table 3
DESCRIPTIVE STATISTICS

Variable	Mean	Median	Std. Dev.	Maximum	Minimum
INCOME STRATEGY	0.558	0.546	0.094	0.750	0.429
BONUS	0.015	0.010	0.019	0.084	0.001
LEVER	0.289	0.143	0.273	0.905	0.016
SIZE(Log TA)	8.274	8.162	0.546	9.498	7.529
TA (000)	508000	145000	931000	3140000	33840.426
CR	0.853	0.837	0.092	1.00	0.764
LABOR	0.158	0.140	0.081	0.415	0.033
INSOWN_P	0.452	0.510	0.299	0.90	0.043

Table 3 shows that income-increasing strategy ranges between about 75% and 43%, the mean and standard deviation for it are about 56%, 9%, respectively. Indicating that, on average, the non-financial listed companies have tendency to adopt income-increasing strategy. This is initially consistent with positive accounting theory that management resorts to exercise increasing-accounting policies in order to serve their interests (e.g. maximize their accounting based compensation). The mean and the standard deviation of non-financial listed companies' leverage ratio are about 29% and 27%, respectively. Furthermore, its maximum and minimum are about 91% and 2%, respectively. Indicating that, only some of non-financial listed companies rely on high (low) debt financing. The concentration ratio on average is about 85% which is relatively high. Furthermore, the standard deviation is about 9%. Indicating that, the non-financial market is a monopolistic market. In terms of the institutional ownership, on average, it owns 45% of non-financial listed companies. This high ratio indicates that the institutional investor has significant role within Bahraini non-financial market.

Table 4
CORRELATION MATRIX FOR DEPENDENT AND INDEPENDENT VARIABLES

Variable	INCOME STRATEGY	BONUS	LEVER	SIZE	CR	LABOR	INSOWN_P
INCOME STRATEGY	1						
BONUS	0.347**	1					
LEVER	-0.134	0.215	1				
SIZE	0.025	-0.360**	0.452***	1			
CR	-0.215	-0.104	-0.233	-0.093	1		
LABOR	-0.157	-0.072	-0.357**	-0.263	0.244	1	
INSOWN_P	0.052	-0.360**	-0.128	0.368**	0.685***	0.371**	1

Note: ***, **, * Significant at the 1%, 5% and 10%, respectively (two-tailed level)

These statistics are not surprising due to nature of emerging markets investing. Roughly, 50% of Bahraini non-financial listed companies are owned by block-holder-institutional investor that might raise controlling-minority conflict of interests.

Table 4 presents the Pearson's correlation matrix for the dependent and independent variables. This table shows that the highest correlation exists between concentration ratio and institutional ownership level with a correlation value of 0.685. This coefficient is below the threshold level of 0.8. Furthermore, the variance inflation factor (VIF) in Table 5 for each variable is less than the thump role of 10 (Gujarati, 2009) which lessens multicollinearity concerns.

Multivariate Analysis

Table 5 presents multivariate regression results. The residuals of the regression were checked to ensure the normality assumption which is met, the probability of Jarque-Bera statistic (1.78) is 0.408 which is bigger than 0.05 thus we cannot reject the normality assumption. Additionally, in order to overcome heteroskedasticity and autocorrelation concerns all reported t-statistics are based on standard errors adjusted for clustering at the company level (Petersen, 2009). Table 5 in column 1 only includes the conventional examined factors. Column 2 includes institutional ownership while controlling the conventional examined factors. In addition, Column 2 of Table 5 presents the main thrust of this study.

Table 5
OLS REGRESSION RESULTS OF INCOME ACCOUNTING STRATEGY

Variable	Predicted sign	Column 1	Column 2	VIF
BONUS	+	2.894*** (5.65)	3.019*** (4.91)	1.40
LEVER	+	-0.184*** (-2.79)	-0.146*** (-2.74)	1.75
SIZE	-	0.069* (1.66)	-0.018 (-0.49)	3.52
CR	-	-0.227 (-1.32)	-0.808*** (-2.69)	2.75
LABOR	-	-0.128 (-0.47)	-0.367* (-1.59)	1.71
INSOWN_P	-		0.278** (2.29)	4.10
Adjusted- R^2		0.296	0.493	
F-value		16.83	7.82	
p-value		0.0000	0.0005	
n		49	49	

Note: Coefficients of the intercept are suppressed for expositional convenience. T-statistics in parentheses are based on robust standard errors clustered by companies (Petersen, 2009).*, **and***denote 10, 5 and 1% significance levels, respectively (one-tailed when coefficient sign is predicted; two-tailed otherwise).Variables definition is described in Table 2

As shown in Table 5, all regression models have significant explanatory power that F-values are significant at 1% level or better. The adjusted-R2 of regression model in column 1

"conventional factors" is about 30%. Moreover, when adding the institutional ownership to the conventional factors (Column 2), the adjusted-R2 rose to become 49% indicating that the model explains 49% of the variation in income strategy measure. Suggesting that, Bahraini non-financial listed companies' accounting strategy choice is subject to institutional ownership influence.

In terms of the explanatory factors, directors' paid bonus is significantly and positively (in all models) related to the choice of income-increasing strategy as expected. Consequently, H1 is supported. This is consistent with (Skinner, 1993; Bowen et al., 1995). This significant positive relationship suggests that directors whose bonus payments tied to income accounting numbers are more likely to adopt income-increasing strategy that results in maximize their benefits. Implicitly, it indicates that the directors' bonus payments of non-financial listed companies are based-constructed on income accounting performance.

In terms of leverage, the result shows that the leverage is significantly and negatively (in all models) related to the choice of income-increasing strategy. This is contrary to our expectation and thus to PAT. Consequently, H2 is rejected. This result is consistent with (Astami & Tower, 2006). However, this result is inconsistent with those done by (Skinner, 1993; Bowen et al., 1995; Inoue & Thomas, 1996; Missonier, 2004) who find significant positive association between companies' leverage and the choice of income-increasing strategy. Our result suggests that high (low) leveraged companies are less (more) likely to adopt income-increasing strategy. Two explanations are plausible due to the lack of debt covenants detailed information being the non-financial listed companies do not publicly disclose such information. The first explanation is that companies' management are more concerned about their balance sheet than income statement attributes, thereby they might choose to re-evaluate its fixed assets since asset revaluations might decrease the reported income yet definitely increase the assets (hence reducing the leverage). Thus, company management might try to reduce the leverage ratio by increasing asset value. This is consistent with (Aboody et al., 2000; Astami & Tower, 2006)'s arguments. Second explanation is that since Bahraini non-financial market is monopolistic market with concentrated ownership environment, one might infer existence of a close relationship between companies' management and debt suppliers. Thus, companies might have looser debt covenant restrictions. Suggesting that, high leveraged companies do not have tendency to adopt income-increasing strategy in order to avoid violating such covenants. Moreover, the average debt to equity ratio is amounted 29% in Bahraini non-financial listed companies, thus, it might be that many companies have a distance from debt covenant restrictions.

Regarding of company size "first dimension of political cost", we find that the coefficient on company size has negative sign yet not significant to explain income-increasing strategy in the full model (Column 2). Consequently, H3a cannot be supported. In addition, it is significantly positive in Column 1. These results are inconsistent with those done by (Zmijewski & Hagerman, 1981; Watts & Zimmerman, 1990; Skinner, 1993; Bowen et al., 1995; Inoue & Thomas, 1996; Missonier, 2004) who find (significant negative relationship) that large companies are more likely to adopt income-decreasing policies in order to avoid the political related costs. However, the insignificant negative result regarding the full model (Column 1) implies that large companies do not adopt much income-decreasing strategies. Our explanation is that: Since Bahraini government adopts economic encouraging policies, which mean low levels of government pressure on companies' management, as well the owner concentrated companies are better connected to politicians and related government circles than widely held companies

(Morck, 1996). So, management of large companies might not have intensive tendency to adopt income-decreasing strategies in order to avoid such political pressure. This is an important conclusion because in a context where government pressure on management against negative wealth movement might be confounded, the management's incentives to adopt income-increasing strategy would be more intense as long as their compensations are income result-based constructed.

In relation to concentration ratio "second dimension of political cost", we find that companies' concentration ratio is significantly and negatively in the full model (Column 2) related to the choice of income-increasing strategy. Furthermore, it is insignificant yet negative in Column 1. Consequently, H3b cannot be rejected. This is consistent with PAT as well as with those done by (Hagerman & Zmijewski, 1979; Zmijewski & Hagerman, 1981). Our finding suggests that companies which belong to monopolized industries are less likely to adopted income-increasing strategy.

Similarly, the result shows negative and significant relationship in the full model (Column 2) between labour force intensity "third dimension of political cost" and income-increasing strategy. Furthermore, it is insignificant yet negative in Column 1. Consequently, H3c cannot be rejected. This is consistent with PAT as well as with those done by (Missonier, 2004; Waweru et al., 2011). Our finding suggests that intensive labour force companies are less likely to adopt income-increasing strategy.

In terms of institutional ownership, we find that institutional ownership level is significantly and positively (Column 2) related to the choice of income-increasing strategy. This is contrary to our expectation. Consequently, H4 is rejected. This significant positive relationship suggests that, non-financial listed companies with higher levels of institutional ownership are more likely to adopt income increasing accounting strategy. This result supports the opportunistic perspective of the institutional investor. Our explanation is that, since Bahrain has different institutional sittings. In fact, it is characterized by low levels of government pressure where Bahraini government adopts pursuing expansionary fiscal policies and provides encouraging investment policies e.g. income tax exemptions (Government of Bahrain, 2017). Thus, Bahrain environment is stimulating environment to invest and operate with loose levels of political pressures on investors. Therefore, within such context it is not uncommon for institutional investors, as a major investor in Bahraini non-financial listed market; to adopt income increasing accounting policies in order to meet their benefits e.g. reflect favoured performance and maximize their representatives (directors and executives) remunerations. This explanation is consistent with (Watts, 2003)'s explanation in terms of why companies adopt accounting conservatism policies. Watts (2003) argue that companies resort to adopt decreasing accounting policies (conservative policies) in order to avoid taxation, policy cost and regulation, which are de facto relaxed within Bahraini context.

Robustness Tests

We use another proxy of company size (log of sales). It provides equivalent results Table 6.

As mentioned earlier, bonus plans are not publicly disclosed in companies' financial statements. Instead, they disclose the total bonus amounts paid to directors and executives. Thus, another proxy of bonus plan variable is used to run the analysis, which is the directors and executives' paid bonuses to the retained earnings ratio. It provides equivalent results Table 7.

Table 6 ROBUSTNESS CHECK			
Variable	**Predicted sign**	**Column 1**	**VIF**
BONUS	+	3.059*** (5.17)	1.32
LEVER	+	-0.143** (-2.5)	2.00
SIZE	-	-0.012 (-0.42)	2.75
CR	-	-0.768*** (-2.71)	2.09
LABOR	-	-0.369* (-1.53)	1.77
INSOWN_P	-	0.26*** (2.64)	2.41
Adjusted- R^2		0.49	
F-value		8.29	
p-value		0.0003	
N		49	

Notes: Coefficients of the intercept are suppressed for expositional convenience. T-statistics in parentheses are based on robust standard errors clustered by companies (Petersen, 2009).*, ** and ***denote 10, 5 and 1% significance levels, respectively (one-tailed when coefficient sign is predicted; two-tailed otherwise).Where: SIZE = log of sales; other variables definition is described in Table 2

Table 7 ROBUSTNESS CHECK			
Variable	**Predicted sign**	**Column 1**	**VIF**
BONUS	+	0.977*** (2.60)	1.67
LEVER	+	-0.192*** (-2.59)	2.25
SIZE	-	-0.017 (-0.37)	3.65
CR	-	-0.732** (-2.30)	2.75
LABOR	-	-0.443* (-1.66)	1.67
INSOWN_P	-	0.258** (1.98)	4.09
Adjusted-R^2		0.43	
F-value		4.97	
p-value		0.0047	
n		49	

Notes: Coefficients of the intercept are suppressed for expositional convenience. T-statistics in parentheses are based on robust standard errors clustered by companies (Petersen, 2009). *, **and***denote 10, 5 and 1% significance levels, respectively (one-tailed when coefficient sign is predicted; two-tailed otherwise). Where: BONUS= directors and executives' paid bonuses to the retained earnings ratio; other variables definition is described in Table 2

Finally, the debt contracts covenants are not publicly disclosed companies' financial statements. Thus, another proxy of debt covenants variable is used to run the analysis that is total debt divided by total assets. It provides equivalent results Table 8.

Table 8 ROBUSTNESS CHECK			
Variable	**Predicted sign**	**Column 1**	**VIF**
BONUS	+	3.041*** (4.64)	1.45
LEVER	+	-0.264** (-2.30)	1.95
SIZE	-	-0.014 (-0.35)	3.84
CR	-	-0.786** (-2.53)	2.77
LABOR	-	-0.356* (-1.51)	1.71
INSOWN_P	-	0.271** (2.09)	4.20
Adjusted- R^2		0.47	
F-value		7.47	
p-value		0.0006	
N		49	

Notes: Coefficients of the intercept are suppressed for expositional convenience. T-statistics in parentheses are based on robust standard errors clustered by companies (Petersen, 2009). *, ** and ***denote 10, 5 and 1% significance levels, respectively (one-tailed when coefficient sign is predicted; two-tailed otherwise). Where: LEVER= total debt divided by total assets; other variables definition is described in Table 2

CONCLUSION

Unlike prior accounting strategy choice studies that exploring some determinants away from ownership structure and generally concentrating on the accounting strategy choice within principal-agent framework. Furthermore, most conducted studies were performed before the IFRS adoption. We examine the impact of institutional ownership on management's choice of income accounting strategy while controlling the conventional examined factors: Bonus plan, debt covenant as well as political cost dimensions-within Bahraini non-financial listed companies. In terms of the conventional factors: Bonus plan hypothesis is found to be consistent with PAT. While contrary to expectation- we find negative relationship between adopting income-increasing strategy and companies' leverage. Moreover, partially consistent results are found in terms of political cost hypotheses. In terms of the first dimension of political cost "company size", it is found insignificant to explain income accounting strategy. Second and third dimensions of political cost concentration degree and labour force intensity are found to be consistent with PAT. Consequently, the positive accounting theory has some relevance to explain Bahraini non-financial listed companies' income accounting strategy choice. Contrary to our expectation, we find that non-financial listed companies with higher levels of institutional ownership are more likely to adopt income increasing accounting strategy. This supports the opportunistic perspective of the institutional investor.

This study contributes to the literature on the unity, feasibility and hence validity of Positive Accounting Theory from several aspects. First, it is the first study to produce evidence of the impact of institutional ownership while controlling the main conventional examined factors on the choice of income accounting strategy. Second, this is the first study to embed the political cost dimensions simultaneously within the analysis in the context of accounting strategy choice. Third, it has been conducted in Bahrain, a context that is characterized by high concentrated ownership. Finally, in light of international accounting convergence and best

governance practices, the findings have policy implications for International Accounting Standards Board, companies' shareholders, investors, management, auditors, academics and Bahrain accounting regulators so as to reach an optimal corporate ownership structure that leads to save minorities' interests and promote investor protection, hence enhance public trust in accounting practices as well as help to improve stock markets. Importantly, IFRSs have flexible range of alternative accounting policies that in turn create incentives to managers and prepares of accounting financial statements to choose among them in order to maximize their own benefits at the expense of other stakeholders which lead to erosion the quality of financial reporting. Furthermore, one can conclude that beside the intrinsic role of cultural and institutional environment in a context, the accounting practice also is a function of the ownership structure.

However, the obtained findings have certain limitations that must be considered. A study sample size of 49 company-years is too small to provide conclusive evidence. Furthermore, the obtained findings are conditional to the disclosed accounting policies in companies' financial statements. Finally, it may be interesting to investigate the impact of other types of ownership norms such as managerial ownership, type of institutional ownership, family ownership and government ownership on the accounting strategy choice.

Appendix
BAHRAINI NON-FINANCIAL LISTED COMPANIES

N	Company name	Symbol
1	ZAIN BAHRAIN B.S.C.	ZAINBH
2	BAHRAIN TOURISM COMPANY	BTC
3	BMMI B.S.C.	BMMI
4	GULF HOTEL GROUP B.S.C.	BHOTEL
5	AL-MATAHIN COMPANY B.S.C	BFM
6	BAHRAIN CINEMA COMPANY BSC	CINEMA
7	BAHRAIN CAR PARKS COMPANY B.S.C.	CPARK
8	BAHRAIN DUTY FREE SHOP COMPLEX B.S.C.	DUTYF
9	BAHRAIN SHIP REPAIRING & ENGINEERING COMPANY B.S.C.	BASREC
10	DELMON POULTRY CO. B.S.C	POLTRY
11	TRAFCO GOUP B.S.C.	TRAFCO
12	NATIONAL HOTELS COMPANY B.S.C.	NHOTEL
13	ALUMINIUM BAHRAIN B.S.C	ALBH
14	NASS CORPORATION	NASS
15	SEEF PROPERTIES B.S.C.	SEEF
16	BAHRAIN TELECOMMUNICATIONS COMPANY B.S.C.	BATELCO
17	BAHRAIN FAMILY LEISURE COMPANY BSC	FAMILY

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