

# Earnings Management: Obvious Phenomenon in Albanian Market

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## **Abstract**

Fiscal earnings, measures the performance of the company during the financial year. Motivated by different factors such as those related to the capital market, contractual motives etc, managers can manipulate earnings, increasing or reducing them and this phenomenon is recognized as “earnings management”.

If we accept that the initiatives of “earnings management” lead to distortion of the financial results, it means that financial reports can be considered as poor quality reports, and financial information provided to the users and various parties of interest is also of poor quality.

This paper is focused on reviewing the existing literature with regard to the Earnings Management in response to the growing pressure of investors, policy makers, and companies’ governance reform mechanisms to curb opportunistic behavior of the managers of these companies. It also examines the existence of this phenomenon in Albanian context as well as tests the importance of Modified Jones Model as an efficient tool for detection of abnormal accruals, used as a proxy for earnings management.

The results show that firms in the Albanian market are engaged in earnings management initiatives.

**Keywords:** Earnings management; Abnormal accruals; Albanian market

## **Introduction**

Annual earning is an important indicator for investors and other interest parties, and it is reflected in the annual financial reports. It measures the performance of the company during the year and is calculated as the net result of revenues and expenses for the fiscal year. Managers for various reasons can affect the outcome by intervening or “manipulating” the figures reported. This intervention on the accounting earnings by managers is known with the term “earnings management”.

There is a large body of literature that explains this phenomenon. In theory it is not a “bad” phenomenon, and more so in many cases, it is legal. International and national

accounting standards have given accountants a free hand regarding accounting choices and evaluations. So it must be admitted that the results can be managed in many companies, but it is important that they are not classified as “unethical”.

Motivated by this fact, as well as the visible phenomena, similar to earnings management in Albanian market, this paper examines empirically, the existence of this phenomenon in Albanian context.

The content of this paper is organized as follows:

- A brief description of the existing literature on earnings management and hypothesis development
- Definition of methodology and sample selection
- Specification of the model
- Empirical results and discussions
- Conclusions and issues that will be of interest to be treated in the case of Albania.

### **Literature review and hypothesis development**

Accounting is an information system, and serves to financial information users. Financial statements as the product of this system have the main objective to disclose the financial information in the context of economic decision-making. One of the important indicators for investors and other users of financial information is and annual earnings, which measures the performance of the company during the year and is calculated as the net result of revenues and expenses for the fiscal year. Managers for various motives can affect these results by intervening or “manipulating” the figures, reported. This intervention of managers, on the accounting earnings, is known with the term “earnings management”.

As B.Van Praag (2001) defines, the existence of discretion in the reporting process creates a complex interaction between suppliers and users of financial information. The suppliers will take the effects of certain accounting decisions into account when preparing the financial statement. Users of these statements will in turn try to assess the reliability of these statements and attempt to interpret them in the knowledge that the statements are open to management discretion.

In fact, this phenomenon is well known. In theory it is not a “bad” phenomenon, and more so in many cases, it is legal. International and national accounting standards have given accountants a free hand regarding accounting choices and evaluations, so the results may differ. As it is stated in Dachow and Skinner (2000), “some earnings management” is expected and should exist. This is necessary because of the fundamental need for judgements and estimates to implement accruals accounting.

These judgements and estimates produce earnings numbers, as better measure of economic performance than cash flows.

Based on their judgment managers assess the economic life of properties, plant and equipments, affecting not only the earnings of the fiscal year but also the results of the upcoming years, or the election of different methods for assessing inventories such as LIFO, FIFO and average cost, affect the outcomes.

Furthermore, managers can judge differently regarding to working capital (inventory level selection, policies related to receivable accounts), the level of various expenses such as research and development expenses, costs for advertising, promotion etc. All these managers judgments and decisions, affects the calculation of fiscal revenue and expenditure, as well as the fiscal outcome.

If we accept that, the initiatives of “earnings management” lead to distortion of the financial results it means that financial reports can be considered as poor quality reports, and financial information provided to the users and various parties of interest is of poor quality.

Different studies bring different evidences concerning the phenomenon of “earnings management”. So reported earnings can be increased or decreased through earnings management initiatives. Much of the literature shows that “income-decreasing earnings management” is on temporary basis, with the ultimate goal of increased future wealth. The accumulated evidence suggests that “income- increasing earnings management” is more pervasive than “income-decreasing earning management” (paragraph 4, page 11, Benish, 2001). Manager’s income increasing preferences is in conflict with the interests of other stakeholders who prefer timely indication of potential problems. This also conflicts with external auditors who prefer income-decreasing choice out of self –protection.

Motives that may lead to initiatives of “earnings management” are those related to capital market, contractual motives etc. (Healy and Wahlen, 1999). So investors use accounting information to asses their stock, and often can be involved in earnings management initiatives. Empirical results show that these initiatives are met rather frequently. Such a situation can be the case of Initial Public Offerings in the capital market (IPO) (Teoh 1998). Earnings can be managed deliberately to favour or not contractual relations with third parties. So earnings figures and other accounting information are widely used in both “explicit” and “implicit” contract to align the incentives of management and external stakeholders. For example certain studies highlight cases of earnings management initiatives in order to avoid obstacles in relation to informal lending (Benish and Press, 1993; DeFond and Jiambalvo, 1994; Sweeney, 1994). Others bring argument that managers may increase earnings in order to increase their current or forthcoming remuneration or to increase their job security (Healy 1985; Dechow

and Sloan, 1991; Gaver et al., 1995; Holthausen 1995). In addition P.Sercu, H. Vander Bauwhede and M. Willekens (2002) bring evidence concerning earnings management in order to reduce taxes also regarding credit policies affecting relations with banks or other creditors.

Considering the purpose of this paper, which seeks to obtain evidence of “earnings management” initiatives in entities that operate in the Albanian market, the research question provided is:

*Are managers involved in earnings management initiatives?*

To answer the research question, a testable hypothesis is developed on earnings management phenomenon in Albanian Market, and it is formulated as below:

*H-Companies that operate in the Albanian market involve in “earnings management” initiatives.*

If we refer to previous studies, many of them examine the use of absolute value, of discretionary accruals, or abnormal accruals to make possible to displace income in different fiscal years. Models used to estimate accruals are different and aim to separate them in to discretionary and nondiscretionary components. The most popular models are DeAngelo (1986) Model, Healy (1985) Model, the Jones (1991) Model, the Modified Jones Model (Dechow, Sloan, and Sweeney 1995), the Industry Model (Dechow, Sloan, and Sweeney 1995), and the Cross-Sectional Jones Model DeFond and Jiambalvo 1994). Dechow, Sloan, and Sweeney (1995) evaluated the performance of these models to identify the phenomenon of “earnings management”, also stated that the Modified Jones Model provides the most powerful test of earnings management. In addition, different authors have defined this model as an efficient tool in the detection of abnormal accruals, which shows that companies (managers) involve in earnings management practices. Based on these results Modified Jones Model is used to test the hypothesis developed in this paper.

## **Methodology and sample selection**

Empirical analysis is based on a valid sample of 75 firm year observation. It consider historical data for a three-year period (2009-2011) from entities selected, mainly from the private sector.

The reason of choosing private companies is that they are more closely held, have greater managerial ownership, major capital providers often have insider access to corporate information and capital providers take a more active role in management. Moreover, their financial statements are not widely distributed to the public and are more likely to be influenced by tax objectives (Ball and Shivakumar, 2005).

The selection criteria for the companies included in the sample are listed as follows:

- Companies should have financial statements for the period of 2009-2011.
- Companies with less than three years of activity, exclude from the sample
- Consistent with previous research, firms in banking and insurance industry exclude from the sample, because of the different industry characteristics.

### **Model specification**

Based on the results of the above-mentioned literature, Modified Jones Model is used to provide evidence of earnings management phenomenon in the Albanian context.

The modified Jones model (Dechow, Sloan and Sweeney, 1995) is one of the models used to determine quality of earnings (earnings management). Accounting fundamentals are used to separate accruals into nondiscretionary (normal) and discretionary (abnormal) components. The absolute value of the abnormal component determines the quality of earnings. Larger the absolute value of discretionary accrual, lower the quality of earnings (Dechow et. al., 1995).

Opportunistic earnings management is manifested by the estimates made in reporting accruals. Change in total accruals (TA) over time can correspond to manipulated earnings. However, as Jones (1991) suggested, the non-manipulated earnings may not be constant over time and be driven by some accounting fundamentals (such as revenues adjusted for receivables, property, plant and equipment). In this approach, opportunistic earnings management is captured by the residuals from a regression of total accruals (TA) on accounting fundamentals, referred to as discretionary accruals or abnormal accrual.

The formula used for total accruals calculation is:

$$TA = \Delta CA_{it} - \Delta CL_{it} - \Delta Cash_{it} + \Delta STD_{it} - Dep_{it} \quad (1)$$

where:

$\Delta CA$  = the change in current assets from year t-1 to t

$\Delta CL$  = the change in current liabilities from year t-1 to t

$\Delta Cash$  = the change in cash and cash equivalents from year t-1 to t

$\Delta STD$  = change in debt included in current liabilities from year t-1 to t (which in fact belongs to current liabilities but that is determined by any short-term or long-term bank loan, its repayment ends in the year t.

Dep = depreciation and amortization expense

After calculating Total accruals Jones Modified Model is used, regressing total accruals scaled by lagged total assets, with other variables as expressed in equation (2). The variables in the accrual expectation model are scaled by lagged total assets to allow for any heteroskedasticity being present in the regression.

$$\frac{TA_{it}}{A_{i,t-1}} = \beta_0 + \beta_1 t \frac{1}{A_{i,t-1}} + \beta_2 t \frac{\Delta Rev_{it} - \Delta AR_{it}}{A_{i,t-1}} + \beta_3 t \frac{PPE_{it}}{A_{i,t-1}} \quad (2)$$

where:

$A_{i,t-1}$  = total assets in the beginning of the year

$\Delta Rev$  = change in sales from year t-1 to t

$\Delta AR$  = change in receivable accounts from year t-1 to t

PPE = property plant and equipment

$\varepsilon$  = statistical error

Jones Modified Model calculate the discretionary accruals (DA) or abnormal accrual (used as a proxy for earning management) as residuals from a regression of TA (expressed from the equation 3)

$$DA_{it} = \frac{TA_{it}}{A_{i,t-1}} - \left( \beta_0 + \beta_1 t \frac{1}{A_{i,t-1}} + \beta_2 t \frac{\Delta Rev_{it} - \Delta AR_{it}}{A_{i,t-1}} + \beta_3 t \frac{PPE_{it}}{A_{i,t-1}} \right) \quad (3)$$

Error term determines exactly abnormal accruals, whose absolute value is used as an indicator of “earnings management.” The larger this value, lower is the quality of reported earnings.

### Empirical results and discussions

Table 1 and table 2 provide a summary of statistics and analysis of variance regarding the dependent variable and the other variables considered in OLS model used for calculation of total accruals scaled by total lagged assets, using 75 firm-year observations, including 25 cross-sectional units.

Table 1: Summary of statistics

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
const	0.206336	0.085308	2.4187	0.01814	**
1/ Ai,t-1	-366.921	31.9084	-11.499	<0.00001	***
( $\Delta$ Rev it - $\Delta$ AR it)/ Ai,t-1	0.13111	0.0115484	11.3531	<0.00001	***
PPE/ Ai,t-1	-0.732708	0.142384	-5.146	<0.00001	***

Mean dependent var	0.043002
Sum squared resid	24.78364
R-squared	0.688482
F(3, 71)	52.30529
Log-likelihood	-64.89647
Schwarz criterion	147.0629
S.D. dependent var	1.036871
S.E. of regression	0.590817
Adjusted R-squared	0.675319
P-value(F)	5.92E-18
Durbin-Watson	1.455382
rho	-0.092066

White's test for heteroskedasticity
Null hypothesis: heteroskedasticity not present
Test statistic: LM = 44.3404
with p-value = P(Chi-square(9) > 44.3404) = 1.2215e-006

Model 1: Pooled OLS, using 75 observations

Included 25 cross-sectional units

Time-series length = 3

Dependent variable: RT/Ai,t-1

Table 2: Analysis of Variance

	Sum of squares	df	Mean square
Regression	54.7739	3	18.25
Residual	24.7836	71	0.349065
Total	79.5575	74	1.0751
$R^2 = 54.7739 / 79.5575 = 0.688482$			
$F(3, 71) = 18.258 / 0.349065 = 52.3053$ [p-value 5.92e-018]			

This model accounts for significantly more variance in the criterion variable than would be expected by chance, since the p value of the  $F(3,71)=0$ . In addition, considering the goodness of fit test, it can be observed that the regression model can explain 68.84 of the variation of the dependant variable. Furthermore, Durbin–Watson statistic used to detect the presence of autocorrelation in the residuals (prediction errors) from the regression analysis, stands less than 2 (Durbin–Watson statistic = 1.455382) indicating that there is little evidence of positive serial correlation, but also this value is more than 1, so there is no cause for concern. While White test shows that heteroskedasticity is not present. From the table of statistics it can be seen that all the estimators considered in the model appears to be reliable and statistically significant at 95% level of confidence. So, the coefficient for the change in revenues, reduced by change in receivable accounts, scaled by lagged total assets, is positive (0.13) and statistically significant for the average regression. Also, as expected, the coefficient for property, plant and equipment scaled by lagged total assets is significantly negative (-0.73).

After confirming the importance of the OLS Modified Jones Model, the next step in the processing and analysis of data coincides with the division of total accruals in discretionary and nondiscretionary accruals. The difference between total accruals scaled to total lagged assets in the beginning of the year and accruals under the Modified Jones Model, or in other words, the error term (in absolute value) is the indicator used to identify “earnings management”. From estimates, these values shows that entities in the Albanian market are involved in earnings management initiatives.



Table 3: The absolute values of abnormal accruals according Jones Modified Model

firm-year observation	Abnormal Accruals (the residual) according Jones Modified Model			Absolute value of abnormal accruals		
	I	II	III	I	II	III
1	-0.09	0.24	0.1	0.09	0.24	0.1
2	-0.05	-0.14	0.66	0.05	0.14	0.66
3	-0.19	0.44	0.04	0.19	0.44	0.04
4	-0.41	0.1	-0.12	0.41	0.1	0.12
5	-0.04	0.21	-1.7	0.04	0.21	1.7
6	0.48	0	0.4	0.48	0	0.4
7	-0.35	-0.13	0.08	0.35	0.13	0.08
8	-0.31	2.68	0.14	0.31	2.68	0.14
9	0.06	-0.39	-0.1	0.06	0.39	0.1
10	-0.04	0.4	-2.96	0.04	0.4	2.96
11	0.44	0.43	0.44	0.44	0.43	0.44
12	0.08	-0.55	-0.09	0.08	0.55	0.09
13	0.56	-0.18	0.01	0.56	0.18	0.01
14	0.26	0.28	0.39	0.26	0.28	0.39
15	-0.22	-0.09	-0.4	0.22	0.09	0.4
16	-0.25	-0.12	-0.18	0.25	0.12	0.18
17	0.08	0.31	0.21	0.08	0.31	0.21
18	-0.05	-0.59	0.17	0.05	0.59	0.17
19	-0.25	0.28	0.23	0.25	0.28	0.23
20	-0.15	-0.11	-0.17	0.15	0.11	0.17
21	-0.12	-0.12	0.22	0.12	0.12	0.22
22	-0.14	-0.05	-0.66	0.14	0.05	0.66
23	0.22	0.43	0.25	0.22	0.43	0.25
24	0.23	0.24	0.2	0.23	0.24	0.2
25	0.19	0.19	0.17	0.19	0.19	0.17

The results expressed in the table 3 shows that 36 from 75 observation, which means in 48% there is income decreasing earnings management. It seems that companies mostly prefer to manage earnings upwards so avoid small losses and report small profits instead.

## Summary and Conclusions

Literature review shows the importance of the “earning management and its implications, since it has been of concerned by many researchers. These studies are focused mainly in developed countries and only a few of them analyses this phenomenon in emerging countries or developing economies..

This paper investigates the earnings management initiatives in the Albanian market as well as the importance of Jones Modified Model application, based on a sample of 75 firm-year observation, for fiscal years 2009-2011. The results of this study show that management engage in earnings management initiatives. In addition, as shown in the results of Dechow, Sloan, and Sweeney (1995), Modified Jones Model, provides a powerful test of earnings management and efficient in identifying abnormal accruals.

The model works better than chance – meaning that, on average, the predictors considered in the model are expected to estimate earning management better than just assigned by the chance. In addition, while an  $R^2$  of .688 is usually grounds for much celebration, the model accounts for more than 68% of the variance.

Therefore, this paper provides evidence of earnings management in the Albanian market, while it is needed further research to consider earnings management, and its relations with factors such as ownership, corporate governance, firm size, financial leverage etc. Since the quality of reported earnings is subject of audit process, it would be also of interest to analyse the relation between earnings management and internal and external audit quality, in the Albanian context.

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