© 2014, World of Researches Publication

Am. J. Life. Sci. Res.
Vol. 2, Issue 1, 168-179, 2014

American Journal of Life Science Researches
www.worldofresearches.com

Investigating the Effect of Internal Audit on Smoothing Results of Operations (Earnings Management) in Selected Iranian Banks

Farzin Haj Mohammad Ali*, Zahra Moradi and Shohreh Yazdani

Department of Accounting, Damavand Science and Research Branch, Islamic Azad University, Damavand, Iran
*Corresponding Author: Farzin.h@gmail.com

Abstract: The purpose of the current study was to examine the effect of internal audit on smoothing results of operations (earnings management) in selected Iranian banks. To this end, the relationships between earnings management and three variables which are internal audit quality, internal auditors' specialty, and internal auditors' effectiveness have been investigated. The research has a correlational design, and the population of the study is all the state and private Iranian banks (which are Bank Melli Iran, Bank Mellat, Bank Maskan (also known as Housing Bank), Keshavarzi Bank (also known as Agribank), Karafarin Bank, Bank Sanat Va Madan, Bank Saderat Iran, Sina Bank, Sarmayeh bank, Bank Sepah, Saman Bank, Bank Refah Kargaran (also known as Bank Refah), Export Development Bank of Iran, Tejarat Bank, Post Bank of Iran, Bank Pasargad (also known as BPI), Parsian Bank, and Eghtesad Novin Bank). Also, because of the partial limitation of the scope of the research population and for the purpose of increasing research validity and decreasing sampling error, all of these banks were investigated. The temporal span of this research was the year 1389 of Farsi calendar (corresponding to 20th of March 2010 to 20th of March 2011). The data necessary for testing the research hypotheses were collected by examining the financial statements of the considered banks as well as the information gathered from the questionnaire used in the study, which was designed and constructed by the researcher. For the purpose of estimating the reliability of the questionnaire Cronbach Alfa was used whose result gave an 88% reliability coefficient, and face validity was considered as the validity of the questionnaire. In order to analyse the obtained data SPSS software was used, and for inferential statistics, the test of coefficient of correlation and regression analysis were used. The result of testing the hypotheses of the study showed meaningful and significant relationship between the variables of the study.
Key Words: Internal Audit Quality, Internal Auditors' Specialty, Internal Auditors' Effectiveness

INTRODUCTION

Nowadays economists do not deem stable economic development possible without the presence of financial development and growth. The transition from undeveloped economy to developed economy needs capital and investment. In this line and in the process of this transition, providing and equipping capital resources, from one respect, and appropriate allocation of these resources, from another respect, form the sine qua non for success in economic transition. It is clear, then, that, in current century, investment is one of the important elements of development. In this line and with the growth of banks' business and commercial matters and with the specialization in the management of companies in general, management has been separated from ownership, and the management of companies, whether in the form of internal (national) businesses or international businesses, has been given to skilled managers who are cognizant of complicated economic and financial issues. In this light, owners entrusted their fortunes and assets to managers. However, for the decision making reasons concerning a number of issues such as preservation or selling of capitals, or evaluating the consulting responsibility of managers, which can influence them being reselected or replaced, owners demand managers to be answerable to them by giving correct information and by being accountable for their operation or performance. In this line, accountancy information satisfies a major portion of the decision makers' information needs. In fact, accountancy, which provides and presents financial information, is the 'information system' of business units. The users of financial statements, for the purpose of making correct economic decisions, give their full attention to interest rates. However, with regard to the existing inadequacies or shortcomings in the process of measuring earnings, such as the utilization of estimations and anticipations, as well as managers' right to schedule business transaction and their right to make a choice concerning the use of different methods of accountancy, the incompatibility of real earnings and the reported earnings is probable. This by itself can result in the decrease of the quality of the reported earnings, which, in this study, is considered as smoothing the results of operations, or to put another way, it is considered as 'earnings management'. That is to say, the managers of business units, for different reasons and by adopting different methods of accountancy, try to alter the earnings of the financial periods for the purpose of meeting their own aims and policies [1].

In Iran, because of the absence of, laws, and rules and regulations governing internal audit, and also because of the absence of the association of internal audit as well as professional institutes with the exclusive function of internal auditing, in the state section and its related companies and firms, the internal audit units are formed and supervised according to the relevant administrative guidelines. However, in private sections and with regard to organizational chart of some economic units (which form a small percentage of active units), the internal audit units are formed, and these units then perform their role according to defined responsibilities. The audit of a company's activities is considered an important controlling method because this audit is a means that can be used to evaluate the correctness of the processes of these activities from different aspects [2] .

Strong internal control, which includes internal audit and independent external audit, is a part of proper Corporate Governance. This controlling is important to the well-being and credibility of companies' operations, and is conducive to effective and constructive work relationships between supervisors and companies' managers. Therefore, the main question this research pursuits is 'What is the relationship between internal audit quality and the smoothing of the results of operations (i.e. earnings management?).

With regard to the above-mentioned considerations the purpose of this study is to examine the role of internal auditors in the improvement of the quality of financial reports by providing new evidence for the capability of internal audit to reduce earnings management. It is a fact that, most often, the aims of the providers of essentials of financial statements, (or managers' aims), are not the same as the aims of the users of the numbers and figures written in these statements or reports. This naturally stems from the existing incompatibility between these two groups' (managers and users') interests. Moreover, from one respect, potential and actual investors as well as other interested parties rely on the reported audited earnings, and from another respect, financial analysts usually consider and involve the earnings as one of the important criteria for their decision making and determining a company's values. Therefore, determining the role of internal audit in earnings management can greatly help to increase the awareness and understanding of the users of accounting information, to clarify the essential financial statements, and to recognize the status of organizations' internal audit .

Additionally, the obtained results of internal audit can be used by many groups such as investors, people in charge of the Central Bank, Supreme Audit Court, audit organization, senior financial managers, and senior bank managers. In this light, the results can be used to examine the operation of the managers of different bank regions and branches, as well as other interested parties and the supervising organizations and institutes of the country. While in western countries investigations related to earnings management allocate to themselves an important section of research in accountancy and financial sciences, in Iran there are few studies in this regard. Therefore, the main reason for embarking upon this research was the paucity of prior studies in relation to earnings management in general, and more specifically in relation to examining the effect of internal audit on earnings managements.

Review of the related literature

According to Tseng and Lai [3] and concerning accountancy of management, internal audit has an effect on the reduction of earnings management. Their study also showed that there was a significant negative relationship between Company Profitability and income smoothing. Also, Hunt et al., [4] found that income smoothing strengthens the relationship between equity value and earnings volatility, and therefore they claimed that income smoothing improves the in formativeness of earnings. Jensen [5] also in a study which investigated the relationship between internal audit quality and earnings management, explored the role of internal audit in earnings management by considering a number of variables, which were internal auditors' effectiveness, expertise and specialty, as well as considering discretionary accruals and analysts' anticipated profits .

Castello and Wittenberg [6] in another study showed that the end of fiscal year and the end of auditing work have important roles in reducing earnings management and minimizing managers' opportunities for earnings management in the fourth quarter of the year, while the high internal audit quality had a positive role in supervising managers' performance during the year .

Ghosh and Moon [7] also found that companies exercise income smoothing for the purpose of reducing business risks. The companies, whose ratio of debts to their total assets is high, resort to income smoothing in order to assure lenders about their ability to pay back the loans and their accompanying interests as well as received credits. De Fond and Park [8] also asserted that managers' main motive for income smoothing is to tighten their job security. Taktak et al.,[9] showed that a significant proportion of active commercial banks in OECD countries smooth their earnings by the use of nonaccrual loan loss or by selling exchangeable securities .

In a similar way, Hashemi and Samadi [10] found two main occasions in which managers exercise income smoothing. First, when managers are in weakened situations or are caught in moral scandals, and second, when there is information asymmetry between shareholders and managers .

In a rather recent study, Mulford and Comiskey [11] used the ten year period data for detecting the existence and determining the average of companies' development rate. They also used the subsidiary branches of these companies in order to make sure of earnings management. The results of their study showed that smoothing was exercised insignificantly .

In investigating the relationship between income smoothing and the efficiency of a number of companies, Noravesh et al., [12] concluded that income smoothing did not have any statistically significant impact on the companies' efficiency. In another study under the title of "Effect of accrual quality on the cost of common stock", Rahmani and FallahNezhad [13] examined the consulting function of internal audit by defining internal audit according to internal audit institute as "an independent, objective assurance and consulting activity designed to add value and improve an organization's operations." Their study showed that from one respect, consulting activity contributes to and enriches the reassuring function of auditing, and from another perspective, their study emphasized that consulting activities should not harm or damage the independence and neutrality of internal audit. In investigating the motives for income smoothing in the companies listed in Tehran Stock Exchange, Pourheydari and Aflatooni[14] examined Iranian managers' incentives to smooth income using discretionary accruals in the companies listed in Tehran Stock Exchange. They used regression analysis to test the relationship between the income smoothing behavior and factors that can influence income smoothing and came to this conclusion that five elements can affect income smoothing, which are company size, income tax, debt to total asset ratio (or debt contracts), deviation in operational activities, and finally interest rate fluctuation .

Research Hypotheses

The major hypothesis: There is a negative relationship between internal audit and earnings management.

The minor hypothesis 1: There is a negative relationship between internal audit quality and earnings management.

The minor hypothesis 2: There is a negative relationship between internal auditors' specialty and earnings management.

The minor hypothesis 3: There is a negative relationship between internal auditors' effectiveness and earnings management.

MATERIALS AND METHODS

The design of the current study is correlational and descriptive in nature .

The population of the study is all the state and private Iranian banks active in the year 1389 of Farsi calendar (corresponding to 20th of March 2010 to 20th of March 2011). These banks are Bank Melli Iran, Mellat Bank, Bank Maskan (also known as Housing Bank), Keshavarzi Bank (also known as Agribank), Karafarin Bank, Bank Sanat Va Madan, Bank Saderat Iran, Sina Bank, Sarmayeh bank, Bank Sepah, Saman Bank, Bank Refah Kargaran (also known as Bank Refah), Export Development Bank of Iran, Tejarat Bank, Post Bank of Iran, Bank Pasargad (also known as BPI), Parsian Bank, and Eghtesad Novin Bank. Also, because of the partial limitation of the scope of the research population and for the purpose of increasing research validity and decreasing sampling error and other negative effects of sampling, all of these banks were investigated .

Data Collection and Instrumentation

The data necessary for testing the research hypotheses were collected by examining the financial statements of the considered banks as well as the information gathered from the questionnaire used in the study, which was designed and constructed by the researcher. For the purpose of estimating the reliability of the questionnaire, Cronbach Alfa was used whose result gave an 88% reliability coefficient. For the purpose of estimating the validity of the questionnaire, the questionnaire was reexamined by three experts in order to reduce, as much as possible, the ambiguities and flaws of the questionnaire and to increase its validity. Therefore, face validity has been considered as the validity criterion of the questionnaire.

The Models and Variables of the Research

For estimating abnormal accruals, Jones (1991) modified model has been used.

$$TA/A = \alpha - \beta_1(\Delta REV) - \beta_2(\Delta AR) + \beta_3(PPE) + \beta_4(NI) + \varepsilon$$

In this equation, the variables are defined as follows.

TA = total accruals (calculated as net income before extraordinary items less cash flow from operations)

ΔREV = change in revenue

ΔAR = change in net accounts receivables
PPE = gross property, plant and equipment
NI = Net Income

For the purpose of measuring the relationship between internal audit quality and abnormal accruals, the following model has been used.

$$AbnAcrr = \alpha + \beta_1 AQuality + \beta_2 Specialist + \beta_3 Effectiveness + \beta_4 Asset + \beta_5 CFO + \varepsilon$$

AbnAcrr = abnormal accruals
IAQuality = internal audit quality
Specialist = internal auditors' specialty
Effectiveness = internal auditors' effectiveness
Asset = Asset
CFO = cash flow operation

It is to be noted that, apart from the three variables of internal audit quality, internal auditors' specialty, and internal auditors' effectiveness, which are all derived from the utilized questionnaire, the data concerning other variables have been collected from banks' databases. Also, the two variables of size and cash flow have been considered as control variables.

RESULTS

In this study, in order to analyse the obtained data SPSS software was used, and for inferential statistics, the test of coefficient of correlation and regression analysis have been used. Also, for estimating the normal distribution of the data, Kolmogorov–Smirnov test has been used.

Examining the test of normality of the data

Table 1 shows the result of Kolmogorov–Smirnov test for estimating the normal distribution of the data.

Table 1. The result of Kolmogorov–Smirnov test

	earnings management
Mean	0.023
Std. Deviation	0.066
Kolmogorov–Smirnov Z	0.690
Asump. Sig. (2-tailed)	0.728

As can be seen, the z value is not significant at 0.05 significance level. Therefore, the null hypothesis is not rejected. It means that the data form a normal distribution and consequently the condition concerning the normality of the data in relation to the dependent variable have been met.

Estimating the main model

For the purpose of estimating abnormal accruals, Jones [15] modified model has been used.

$$TA/A = \alpha - \beta_1(\Delta REV) - \beta_2(\Delta AR) + \beta_3(PPE) + \beta_4(NI) + \varepsilon$$

Table 2. Regression Coefficients of the main model

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	0.958	0.285		2.487	0.404
DREV	-0.100	0.023	-0.214	-4.537	0.001
DAR	0.635	0.133	0.713	4.772	0.000
PPE	0.679	0.192	0.297	3.540	0.007
IN	-0.056	0.116	-0.250	-3.115	0.006

Dependent Variable: AT/A

As it can be seen in table 2, for all the variables, the t value is significant at 0.05 significance level and therefore the null hypotheses are rejected.

Also, Durbin-Watson test statistic is estimated in the research model, which shows that there is no autocorrelation in the research model.

With regard to the magnitude of the adjusted R square, it can be said that 83.8 % of the relevant changes related to the dependent variable is determined by the variables of the model, and with regard to this model the equation of linear regression is estimated by the use of the following formula.

$$TA/A = 0.458 - 0.100(\Delta REV) - 0.635(\Delta AR) + 0.769_3(PPE) + 0.056(NI) + \varepsilon$$

Testing the hypotheses

The minor hypothesis 1 was that there is a negative relationship between internal audit quality and earnings management.

Table 3. Estimations of Regression Coefficients

Durbin-Watson	Std. Error of the Estimate	Adjusted R Square	R Square	R
1.94	0.037	0.678	0.739	0.859

Table 3 shows that the coefficient of the adjusted R square equals 0.678, indicating that 67.8 % of the variables in earnings management is accountable by internal audit quality. Also, Durbin-Watson test statistic equals to 1.94, indicating that there is no autocorrelation in the model.

Table 4. Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	0.308	0.092		3.344	0.005
Aquality	-0.043	0.009	-0.736	-5.048	0.000

ASSET	0.006	0.004	0.202	1.356	0.198
CFO	0.027	0.011	0.354	2.409	0.032

Dependent variable: earnings management

Table 4 shows the results of the regression analysis, according to which we can write the regression line equation as:

$$ABN = 0.308 - 0.043_1(Aquality) + 0.006(Asset) + 0.027(Cfo) + \varepsilon$$

These results show that internal audit quality has a significant and predictable effect on earnings management. Based on Beta value it can be said that with every one added statistical value in internal audit quality, earnings management will be reduced 0/736. And with every one added value in cash flow from operation, earnings management will be increased 0/354. This probability with regard to the t value in table 4 is meaningful at 0/05 significance level, yet the asset variable has not had predictability power in this analysis.

The minor hypothesis 2: There is a negative relationship between internal auditors' specialty and earnings management.

Table 5. Estimations of Regression Coefficients

Durbin-Watson	Std. Error of the Estimate	Adjusted R Square	R Square	R
1.92	0.037	0.677	0.737	0.859

The results shown in table 5 show that the value of adjusted R squared equals to 0.677, indicating that 67.7 % of the variables in the earnings management is accountable by internal audit qualification/effectiveness. Also, Durbin-Watson statistic equals to 1.92, which shows that there is no autocorrelation in the model.

Table 6. Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.123	.063		1.957	.072
Specialist	-.021	.004	-.736	-5.031	.000
ASSET	.006	.004	.199	1.333	.206
CFO	.028	.011	.358	2.429	.030

Dependent variable: earnings management

Table 6 shows the results of the regression analysis, according to which we can write the regression line equation as:

$$ABN = 0.123 - 0.021(specialty) + 0.006(Asset) + 0.028(Cfo) + \varepsilon$$

These results show that internal auditors' specialty has a significant and predictable effect on earnings management. Based on Beta value it can be said that with every one added statistical value in internal auditors' specialty, earnings management will be reduced 0/736. And with every one added value in cash flow from operation, earnings management will be increased 0/358. Although this probability with regard to the t value in table 6 is meaningful at 0/05 significance level, yet the asset variable has not had predictability power in this analysis.

The minor hypothesis 3: There is a negative relationship between internal auditors' effectiveness and earnings management.

Table 7. Estimations of Regression Coefficients

Durbin-Watson	Std. Error of the Estimate	Adjusted R Square	R Square	R
1.94	0.038	0.679	0.739	0.860

The results shown in table 7 show that the value of adjusted R squared equals to 0/679, indicating that 67.9 % of the variables in the earnings management is accountable by internal auditors' effectiveness. Also, Durbin-Watson statistic equals to 1/94, which shows that there is no autocorrelation in the model.

Table 8. Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.125	.063		1.994	.068
Effectiveness	-.011	.002	-.736	-5.060	.000
ASSET	.006	.004	.203	1.371	.194
CFO	.027	.011	.349	2.379	.033

Dependent variable: earnings management

Table 8 shows the results of the regression analysis, according to which we can write the regression line equation as:

$$ABN = 0.125 - 0.011(Effectiveness) + 0.006(Asset) + 0.027(Cfo) + \varepsilon$$

These results show that internal auditors' effectiveness has a significant and predictable effect on earnings management. Based on Beta value it can be said that with every one added statistical value in internal auditors' effectiveness, earnings management will be reduced 0.736. And with every one added value in cash flow from operation, earnings management will be increased 0.349. Although this probability with regard to the t value in table 6 is meaningful at 0/05 significance level, yet the asset variable has not had predictability power in this analysis.

The major hypothesis: There is a negative relationship between internal audit and earnings management.

Table 9. Estimations of Regression Coefficients

Durbin-Watson	Std. Error of the Estimate	Adjusted R Square	R Square	R
2.15	0.038	0.667	0.751	0.866

The results shown in table 9 show that the value of adjusted R squared equals to 0/667, indicating that 66.7 % of the variables in the earnings management is accountable by internal audit. Also, Durbin-Watson statistic equals to 2.15, which shows that there is no autocorrelation in the model.

Table 10. Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.148	.071		2.081	.060
Specialist	-.840	.328	.504	-2.567	.015
Effectiveness	-.635	.171	.736	-3.793	.000
Aquality	-.024	.010	.535	-2.661	.009
CFO	.036	017	.238	2.231	.029

Dependent variable: earnings management

Table 10 shows the results of the regression analysis, according to which we can write the regression line equation as:

$ABN = 0.148 - 0.840(Effectivness) - 0.635(Aquality) - 0.024(spacialist) + 0.036(cfo) + u$

These results show that internal audit has a significant and predictable effect on earnings management. Based on Beta value it can be said that with every one added statistical value in internal auditors' specialty, earnings management will be reduced 0.840. With every one added statistical value in internal auditors' effectiveness, earnings management will be reduced 0.635, and with every one added statistical value in internal audit quality, earnings management will be reduced 0.024. With regard to the t value, this probability value at the 0.05 significance level is meaningful. Also, among the control variables, the relationship between cash flow from operation and earnings management is meaningful in the manner that the more the cash flow from operation, the more earnings management. However, the asset variable, because of not having any significant or meaningful effect, was excluded from the regression model.

DISCUSSION

Earnings quality is one of the factors that help investors (or owners) to make right economic decisions. Because of the incompatibility between managers' interests and those of the investors, managers try to maximize their interests by exerting their power in using revenue realization principle and matching principle as well as in estimates and anticipations, and therefore influence earning quality. Consequently, companies' earning quality is under the influence of reporting principles as well as managers' determined expediency. Because of the existence of information asymmetry between managers and investors, the latter group is not cognizant of the aforementioned situation, and this fact results in an increase in agency expenditures. One of the supervising techniques, which are used by investors to decrease agency expenditures, is auditing. Auditing, by reducing information asymmetry and the incompatibility between managers' and investors' interests, reduces agency expenditures, and provides investors with more reliable information. In this study, abnormal accruals have been used for measuring earnings management. The results of this study show that with the increase of internal audit quality as well as internal auditors' effectiveness and specialty, the rate of smoothing the results of operation (or the incorrect reportage of earnings) is reduced. This can, then, result in guiding investors in their investment and in helping them to make informed selections of the banks which provide higher interests.

Moreover, the results of this research suggest that investors should pay special attention to auditors' reports and viewpoints in order to make right decisions for investment. When auditors' views indicate that the reported earnings are unreal, and that there is therefore a high probability that in such companies or banks there is manipulation of earnings through discretionary accruals, then the earnings quality of these companies or banks would be low. Thus, the reported earnings are not reliable for the purpose of right decision making. It is to be noted too that the results of this is study is congruent with a considerable number of studies, conducted in Iranian context and non-Iranian contexts. For example, Ghosh and Moon [7] and also Tseng and Lai [3] in non-Iranian contexts as well as Pourheydari and Aflatooni [14] in Iranian context draw the same conclusion concerning the relationship between internal audit and earnings management[16].

REFERENCES

1. Pourheydari, O. & Koopaee Haji, M. (2010). Predicting of firms financial distress by use of linear discriminant function the model. Journal of Financial Accounting Research, 2 (1):33-46 .
2. Mashayekhi, B., Mehrani, S., Mehrani, K. & Karami, Gh.R. (2013). The role of discretionary accruals in earnings management of listed companies in Tehran Stock Exchange (TSE). The Iranian Accounting and Auditing Review, p.61-74.
3. Tseng, L.J. & Lai, C.W. (2007). The Relationship between Income Smoothing and Company Profitability: An Empirical Study. International Journal of Management, 24(4): 727-823.
4. Hunt, A., Moyer. S.E. & Shevlin, T. (1997). Earnings Volatility, Earnings Management, and Equity Value, January, Working Paper.
5. Jensen, M. (1986). The Agency Costs of Free Cash Flows, Corporate Finance and Takeovers. American Economic Review, (76):323-329.
6. Castello, A. & Wittenberg, R. (2011). The Impact of Financial Reporting Quality on Debt Contracting: Evidence from Internal Control Weakness Reports. Journal of Accounting Research, 49:97-136.
7. Ghosh. A. & Moon, D. (2010). Corporate Debt Financing and Earning Quality. Journal of Business Finance & accounting, 37: 538-559.

8. De Fond M.L. & Park, C.W. (1997). Smoothing Income in Anticipation of Future Earnings. Journal of Accounting and Economics, 23: 115-139.
9. Taktak, N.B., Shabou, R. & Dumontier, P. (2010). Income Smoothing Practices: Evidence from Banks Operating in OECD Countries. International Journal of Economics and Finance, 2(4): 140-150.
10. Hashemi, A. & Samadi, V. (2009). The effect of income smoothing on its information content in accepted firms in Tehran stock exchange. Accounting investigations, 1(1): 148-167.
11. Mulford, C.W. & Comiskey, E.E. (2002). The Financial Numbers Game detecting Creative Accounting Practices, New York, John Wiley & Sons .
12. Noravesh, E., Mashayekhi, B. & Baraghi, Z. (2009). Investigating the impact of discretionary accruals on earnings quality in the companies listed in Tehran Stock Exchange. Journal of Financial Accounting, 31-53 .
13. Rahmani A. & Fallahnezhad, F. (2010). Effect of Accrual Quality on the Cost of Common Stock (Text in Persian). Journal of Financial Accounting Research, 2 (1):17-30.
14. Pourheydari, O. & Aflatooni, A. (2006). Investigating Iranian managers' incentives to smooth income using discretionary accruals. 3(13): 55-57.
15. Jones, J.J. (1991). Earnings Management during Import Relief Investigations. Journal of Accounting Research, 29: 193-228.
16. Park, J.C., Hasan, I. & Wu, Q. (2012). The Impact of Earnings Predictability on Bank Loan Contracting. Journal of Business Finance & Accounting, 39: 1068–1101 .