Survey of Relation between Internal Controls and Profit Management in Iran’s Selected Banks

MohammadHamed Khan Mohammadi, Hamidreza Kordloi and Mohammad Reza Yarahmadi*

Islamic Azad University, Qeshm International Branch, Qeshm, Iran

*Corresponding Author: Yarahmadi.m@yahoo.com

Abstract: The purpose of this study is Survey of the relation between internal control actions and profit management in Iran’s selected banks in time period of 2007-2012 using panel data. For this matter estimating abnormal accruals is done by using bank’s financial statement data and Jone’s modified model, and for the sake of relation evaluation between internal audit’s quality and abnormal accruals, questionnaires has been distributed to bank’s internal auditors. The results of estimated models show that internal audit’s quality, experience of internal auditors and qualification of internal auditors have negative and significant effect on profit management. Meaning that if factors or variables of internal audit’s quality, experience of internal auditors and qualification of internal auditors increase so profit's management or profit's manipulation and deviation of actual profits will decrease from report.

Key words: Internal Audit, Profit Management, Iran's Selected Banks, Panel Data.

INTRODUCTION

Nowadays economists don't see economic Sustainability without growth and financial development. Transition from undeveloped economy to developed economy needs fund and investment.

So in this transition process, on one hand securing and equipment of funding sources and on the other hand desirable dedication of these sources are necessary terms for successful economic transition. Investment is one an important factor of development in current century. In this regard, banks are the most important tool that can mobilize funds and lead them to various industries. The importance of banks in industrial countries is to the extent that nowadays bank's financial indicator is one of the most important indicators regarding to these countries economic growth. With growth of business and commercial in today's world and specialization of firm's management, management has become separate from
ownership, and managing banks either domestic trade or international trade has been trusted to professional managers who are aware of complicated economic and financial issues. Owners, for making decisions like keeping or selling investments they entrust their wealth to managers, and evaluating manager's stewardship task for their re-election or replacement, they demand management accountability through presenting information and accountability for their performances.

Therefore accounting information can provide a great deal of information that decision maker needs. In fact accounting is commercial's information system that deals with producing and presenting financial information.

For different reasons business managers try to change profit's financial period to supply their policies and goals by using various methods of accounting.

The purpose of accounting and financial reports is providing consumer's informational demands and needs. The main tools that are used to transfer information to people and external users are basic financial statements. One of the basic financial statements is profit and loss statement that have an important role in evaluation of manager's stewardship task or their accountability regarding the resources that they have.

The ability to make a change in accounting methods, due to unrequired uniform procedures, and possibility of manager's exclusive accessibility to a part of financial information and also accrual accounting features and motivations like job security, reward, breaking the law, avoiding reporting losses and profit's reduction, debt contracts, wealth's increase, achieving shareholder's expectations and anticipated plans, this creates this motivation for management that with applying various methods to their own benefits and in opposite direction of other groups, they can manipulate profit.

Accounting is collecting and evaluating evidences about information in order to determine and report degree of coincidence between these information and predetermined criteria. Accounting should be done by someone who is qualified and independent.

Board of auditing standards define internal audit in their auditing guidance as follows: the independent evaluation task that is created by organization management for handling internal control system.

Internal auditing evaluates, report and test adequacy of internal control system of accuracy and suitable, economical, effectiveness and efficiency of using organization's sources.

Internal auditors are defined as auditors who are employee of firms that they are being audit by themselves and they usually give their reports to superior management or board directly, and regarding to their operating units which they audit are independent. Existence of internal audit unit in organizations and public service institutions is necessary and in some of them, it's a legal requirement. According to mentioned matters, internal auditors usually do a significant amount
of work that is related to financial reporting processes. However, few researches have discussed the effects of internal audit in corporate's financial reporting. This study specifically examine the role of internal auditors in improving the quality of financial reporting and discussing the topic that high quality of internal audit is associated with lower levels of profit management. According to firm's management model, internal audit, board's audit committee, executive managers and external audits are effective factors in management of large corporations. In audit risk model, high level of internal audit quality reduce total risk control, and internal audit function can help to reduce exploration risk. Audit rules, using the work that is done by internal audit, encourage external audits. Also if independent audits can use internal audits work, financial statement's audit expenses often significantly reduces. In accordance with this reasoning, researches shows that external audit's expenses for companies that have strong internal audit are much more less.

In Iran because of absence of law and requirements governing internal audit and lack of Internal audit community, and privation of professional institutions with specific function of internal audit; in government section and firms, internal audit units are formed and monitored according to relevant administrative guidelines. But in private section according to organization chart of some units or economy of internal audit units they are formed and they act relevant to their defined duties in organization chart. These units don't comply with specific and coordinate rules and regulation of professional conduct, so the role of internal audits in different economic units, with various functions has been defined.

Because auditing of companies activities is a tool for evaluation of its process accuracy from different aspects, it is considered as one of the important controlling methods. Strong internal control, including internal audit and external independent audit, is a part of appropriate corporate governance. These controls are important for security and reliability of corporate operations and they can be helpful with effective and productive working relationships between management and supervisors.

Internal audit report, presents the demand of performing continues and independent internal audit in all companies and guidance in relation to internal audit. This report as a starting point, emphasize on boards and senior manager's tasks in internal control field, measuring risk and it's adjustment with terms and conditions. The importance of internal audit's independence is memorable. Hereupon for preformatting position and legal authorization of internal audit, each company should have an internal audit section which has been approved by superior manager and also the board support it too. Because the operations of modern companies increasingly get more complicated, internal auditors must have professional capability and skills, and use these approaches according to their field of work. Internal auditor's reports mainly stress on that the work of companies' internal audit can support companies' observers work. So firm's observers with the goal of interlocution about recognized danger zones and
actions that has been done, periodic should have consultation with each companies’ internal audit.

Considering the mentioned subjects, the purpose of this research is study of internal audit's role in improving financial report's quality by gathering new evidences about internal audit capability in reducing profit management.

Thus the main question of presented research for the sake of answering to mentioned problems, as followed are proposed and investigated that if higher quality of internal audit has direct connection with lower levels of profit management?

For this matter, these derivative questions will also be answered in this research.

• The quality of internal audit has significant relation with profit management?
• The qualification of internal auditors has significant relation with profit management?
• The experience of internal audit has significant relation with profit management?

since goals of basic financial statement producers(managers) usually is not the same with users of numbers in these reports and this matter is because of revenue's conflict between groups and referring that potential investors and other beneficiary people depend on reported accounting profits, and financial analyzers often use profit as one of the important standards in their decision making and companies’ valorization, so determining the role of internal audit on profit management help user's awareness about accounting information and clarity of basic financial statement and according to organization's internal audit position, and the results can be used by many groups including investors, officials of central company, court of countries‘audit, audit organization, financial senior officials, and senior managers to investigate functions of area's managers and branches and other stakeholders and state’s regulatory bodies.

On the other hand in western countries studies in relation with profit management devote an important part of their research to accounting and financial sciences. But in Iran only few researches has been done in this field so the main reason for choosing the topic of this research is because of lack of considerable researches in profit's management field and studying internal audit effect specifically on profit management.

Research literature

Due to companies’ activities audit is a tool for evaluating accuracy of activities process from different aspects, it's an important controlling method.

Internal audit is a secure, consultative and independent activity that is designed for improving operations or increasing values of organization's operations. This matter help an organization to achieve their goal using an
organized approach, measuring risk management, efficiency of risk management, and improving control and management’s processes.

Myers et al.\textsuperscript{1}, Tendello and Vanstraelen\textsuperscript{2} and Francis et al.\textsuperscript{3} (have) studied the role of internal audit and its effect on risk management using experience variables, professional knowledge and internal audit capabilities and discussing accruals and analyzer's predicted profit, that resulted in recognizing negative effect of knowledge and qualification on risk management.

Kellog and Kellog\textsuperscript{4} in order to collect information, questionnaire has been presented to audit's senior executives. And for investigating non-discretionary accruals, Jone's model has been used for estimation of data from 528 firms listed on the New York stock exchange during 2000-2005, and for reviewing analyzer's predicted profit to 244 companies' information at the same time, and the result of this research is negative connection between internal audit and risk management.

Ball and Shivakumar\textsuperscript{5} showed that internal audit plays an important role in reducing risk management in management accounting.

Becke et al\textsuperscript{6} argue that companies for reducing risks try to smooth the profit. companies that have a high ratio of debt to total earnings, in order to ensure the creditors they attempt to smooth the income which is based on ability to pay principal and interest on loans and received credits\textsuperscript{6}.

Lack of significant fluctuations in profit provides this certainty for trusted that business unit will be able to pay their demands in the future.

Burgstahler et al.\textsuperscript{7} specify that risk management is an action from manager that if it happens, it will result in standard's profit debilitation in decision making or its performance is in conflict with standard's purpose.

Chen et al.\textsuperscript{8} define two main motivations for risk management, encouraging investors to buy companies' stock and raising companies' market value.

Healy and Wahlen\textsuperscript{9} argue that risk management happens when manager use their personal judgments in financial reporting and manipulate transactions construction to change financial reports. This action happens for two reasons, to mislead some of the investors about companies' economic operation or with the purpose of affecting results of contracts that their conclusion will lead to personal profit.

Dechow et al.\textsuperscript{10} define risk management as the altered profit by management to access part of judgments in relation with expected profit (analyzer’s prediction, management's prior estimation, and reducing profit's scattering).

**MATERIALS AND METHODS**

location domain includes government and private selected banks (Melli, Mellat, Sepah, saderat, Tejarat, Pasargad, Parsian, Maskan, Saman, Keshavarzi, EN, Refah, Karamfarin, Sina, Industry and Mine, Sarmayeh, Postbank, Tose'e Ta'avon). as for research’s purposes, time period has been determined from 2006 to 2010, in this research we study the relation between internal control operations and profit management in Iran’s selected banks. Researcher’s theories are considered by the following:
1. Internal audit's quality has a significant relation with profit management.
2. Qualification of internal auditors has a significant relation with profit management.
3. Experience of internal auditors has a significant relation with profit management.

For this study and accurate result of this research, information plays an important role. The data used in this research are categorized in two groups. First Group; information that are in correlation with theoretical foundation and research literature which has been collected from Iranian and foreign article and essays on the internet and through library. Second Group; is information about research's variable data, the data that we need for this study are gathered through bank's financial statements and information that are extracted from questionnaire to test the hypotheses.

Research’s models are express as below:

Estimation of abnormal accruals using Jone’s altered model has been performed by Koutari et al.

\[ TA_{it} / A_{i,t-1} = \alpha + \beta_1 (1 / A_{i,t-1}) + \beta_2 ((\Delta REV_{it} - \Delta AR_{it}) / A_{i,t-1}) + \beta_3 (PPE_{it} / A_{i,t-1}) + \beta_4 (NI_{it} / A_{i,t-1}) + \varepsilon_{it} \]

In this equation variables are described as follows:

- \( TA_{it} \): Earnings before extraordinary items minus cash flow's operation for bank \( i \), earning in period \( t \).
- \( \Delta REV_{it} \): Absolute earning changes for bank \( i \), earning in period \( t \).
- \( \Delta AR_{it} \): Absolute receivable account changes for bank \( i \), earning in period \( t \).
- \( PPE_{it} \): Impure earning and equipment for bank \( i \), earning in period \( t \).
- \( NI_{it} \): Impure earning for bank \( i \), earning in period \( t \).
- \( A_{i,t-1} \): Average of overall belongings for bank \( i \), earning in period \( t-1 \).

And for measuring the relation between quality of internal audit and abnormal accruals we use this model:

\[ AbnAcrr_{it} = \alpha + \beta_1 AQuality_{it} + \beta_2 Specialist_{it} + \beta_3 Effectiven ess_{it} + \beta_4 Asset_{it} + \beta_5 CFO_{it} + \varepsilon_{it} \]

- \( AbnAcrr_{it} \): estimated unusual accruals for bank \( i \), earning in period \( t \).
- \( IAQuality_{it} \): Quality of internal audit for bank \( i \), earning in period \( t \).
- \( Specialist_{it} \): Experience of internal auditors for bank \( i \), earning in period \( t \).
- \( Effectiven ess_{it} \): Qualification of internal auditors for bank \( i \), earning in period \( t \).
Survey of relation between internal controls and profit ...

$Asset_{it}$: earning for bank $i$, earning in period $t$

$CFO_{it}$: Cash flow's operation form for bank $i$, earning in period $t$

It has to be mentioned that other than three information of estimated abnormal accruals, quality of internal audit and experience of internal auditors which are collected through questionnaire, information of other variables are extracted from bank's data.

These models are estimated by using panel data regression method.

With studying repeated cross-sectional observations, we can see that panel data is more suitable and better for dynamic study of changes.

Assessment of regression model depends on our assumption of intercept, coefficients and error term.

- Intercept and coefficient during time and area are constant and error term is different during time and for various factors.
- Coefficients are constant, but intercept is different for various factors.
- Coefficients are constant, but intercept is different during time and for various factors.
- Intercept and all coefficients are different for various factors.
- Intercept and coefficients are different during time and for various factors.

For estimating Bivariate and multivariate linear regression patterns we often use Ordinary least squares method (OLS). This method have desirable statistical features like: benign biased, best linear estimator without BLUE or bias. But for resolving problems such as autocorrelation of waste terms and heteroscedasticity we use generalized Least Square (GLS).

**RESULTS**

For unstable test based on Dickie-Fuler's united root test we assume that the involved time period have a first-order auto statement process and then $\rho = 1$ theory is tested based on this. Now if under study time period includes P-order auto statement process, then estimated relation for P test will not have accurate specification, so generalized Dickie-Fuler's united root test should be used so the limiting distribution and critical parameters we achieve could still be predictable.

Generalized Dickie-Fuler's united root test can be accomplish from basic variables (in two states of with flow and without flow). If variables were stable in level, then that variable will be filled with zero-order or $l(0)$. But if variables didn't become stable in level, then the united root test will be done on first-order difference; if variable become stable after first-order difference, this variable will be filled with first-order or $l(1)$. We do this to make sure that variables are not filled with second-order, because in this state studying the relation between variables will not have validity. The results of united root test in first-order level and difference is presented in table (1):


<table>
<thead>
<tr>
<th>variable</th>
<th>result</th>
<th>Test’s statistic</th>
<th>level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>First-order</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>difference</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>With flow</td>
<td>Without flow</td>
</tr>
<tr>
<td></td>
<td></td>
<td>With flow</td>
<td>Without flow</td>
</tr>
<tr>
<td>$TA_{it}$</td>
<td>l(1)</td>
<td>-5.7206</td>
<td>-5.5249</td>
</tr>
<tr>
<td>$\Delta REV_{it}$</td>
<td>l(1)</td>
<td>-3.8206</td>
<td>-3.5226</td>
</tr>
<tr>
<td>$\Delta AR_{it}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$PPE_{it}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$NI_{it}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$A_{it-1}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$TA_{it} / A_{it-1}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$1 / A_{it-1}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$(\Delta REV_{it} - \Delta AR_{it}) / A_{it-1}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$PPE_{it} / A_{it-1}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$NI_{it} / A_{it-1}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$IAQuality_{it}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$Specialist_{it}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$Effectiveness_{it}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$Asset_{it}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>$CFO_{it}$</td>
<td>l(0)</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

MacKinnon's critical value in critical level is %5 for variable in level (without flow) = -2/9434

MacKinnon's critical value in critical level is %5 for variable in level (with flow) = -3/45366
Survey of relation between internal controls and profit ...

MacKinnon's critical value in critical level is %5 for variable's first-order difference(without flow) =-2/9458

MacKinnon's critical value in critical level is %5 for variable's first-order difference (with flow) =-3/5403

as for results of united root test we can conclude that previous earning variables are from extraordinary items minus cash flow's operation and absolute earning changes are unstable and the rest of variables are.stability of variables means that if a variable is stable, then it's average will be constant during time and if its unstable, that variable doesn't have a constant flow and during time it will be along with severe increase or reduction.

In this part we estimate regression models.in first step we compute models with random effects so by using Housman test we will be able determine that this model works better with random effects or constant effects.

<table>
<thead>
<tr>
<th>Table 2. Housman test for first model</th>
</tr>
</thead>
<tbody>
<tr>
<td>abnormal accruals estimation</td>
</tr>
<tr>
<td><strong>Hausman test</strong></td>
</tr>
<tr>
<td>result</td>
</tr>
<tr>
<td>= this model is better with constant effects</td>
</tr>
</tbody>
</table>

Source: output of Eviews6 software.

Considering that critical level (Prob) is less than 5%, so in this stage we estimate models with constant effects. First model's assessment is presented in table (3):

<table>
<thead>
<tr>
<th>Table 3. Fitted model's coefficient for first model</th>
</tr>
</thead>
<tbody>
<tr>
<td>first model's estimation</td>
</tr>
<tr>
<td>variable</td>
</tr>
<tr>
<td>intercept</td>
</tr>
<tr>
<td>$\Delta \text{REV}_{it}$</td>
</tr>
<tr>
<td>$\Delta \text{AR}_{it}$</td>
</tr>
<tr>
<td>$\text{PPE}_{it}$</td>
</tr>
<tr>
<td>$\text{NI}_{it}$</td>
</tr>
</tbody>
</table>

In trust level significant is 95%
In these estimations, the achieved results show that all variable except for absolute earning have a significant effect on dependent variable. Also Watson's long-sighted statistic in estimated research model corroborant that in the research model there is no autocorrelation.
For second model we estimate model with random effects so by using Hausman test we can determine that model is better with random effects or constant effects. Results of Hausman test for second model is presented in table (4).

<table>
<thead>
<tr>
<th>Table 4. Hausman test for second model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relation between quality of internal audit and abnormal accruals</td>
</tr>
<tr>
<td>Hausman test results</td>
</tr>
<tr>
<td>Model is better with constant effects.</td>
</tr>
</tbody>
</table>

Since critical level (Prob) is less than 5%, so in this stage we estimate models with constant effects. Second model's assessment is presented in table (5):

<table>
<thead>
<tr>
<th>Table 5. Fitted model coefficient for second model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second model's estimation</td>
</tr>
<tr>
<td>variable</td>
</tr>
<tr>
<td>intercept</td>
</tr>
</tbody>
</table>
| IAQuality
  it | significant | 0.0000 | -40.7613 | 0.002149 | -0.08761 |
| Specialist
  it | significant | 0.0005 | -3.66085 | 0.000836 | -0.00306 |
| Effectiveness
  it | significant | 0.0001 | -4.04657 | 0.000369 | -0.00149 |
| Asset
  it | significant | 0.0054 | 2.876416 | 2.20E-17 | 6.32E-17 |
| CFO
  it | Insignificant | 0.7839 | -0.27535 | 5.28E-10 | -1.45E-10 |

modulatory determination coefficient 0.91 Watson's long-sighted statistic 1.81

In Confidence level of 95%

In this estimations these results are achieved that quality of internal audit, experience of internal auditors and qualification of internal auditors have negative and significant effects on profit's management. Which means that if factors or variables of quality of internal audit, experience of internal auditors and qualification of internal auditors increases, profit's management or manipulation of profit and actual profit's deviation will reduce from presented report. Also if earning has a positive and significant effect on profit's management, it means that increase in earnings could be a factor and motivation for management’s profit and deviation. Adapted determination coefficient in this model is equal to 0/99 which means a good fit. Also Watson's long-sighted statistic shows that there is no autocorrelation in this model.
DISCUSSION

In this research three theories are presented, the first theory was that quality of internal audit has a negative significant relation with profit's management. According to results quality of internal audit's variable have negative and significant effect on profit's management and dependent variable. Meaning that with increase of internal audit's quality, reported unrealistic profits will significantly reduce. This means that this research's hypothesis has been confirmed.

Second theory of research, With regard to the results of the second regression model, coefficient of this variable is reported negative and significant. Namely whatever the qualification of internal auditor's increase, on the other hand profit's management will decrease and reported profits will be closer to actual profits. so this theory is also confirmed.

And for third theory we see that experience of internal auditors in this model have negative and significant effect, so with increase of internal auditor's experience which is followed by discovering more ways to manipulate profit by managers, the possibility of manipulating profits will significantly decrease. This theory is also supported.

Quality of profit is one of the main factors that help investors in making economic optimum decisions. Thereupon firm's profit quality is affected by reporting basics and discretion because of lack of information polarity between managers and investors, investors are not in the process of these factors which leads to increase in agency's costs. One of the regulatory solution that investors use to reduce agency costs is audit.

Audit with reducing information asymmetry and resources polarity between managers and investors, which will result in reducing agency costs and availability of more reliable information to investors. In this study we use abnormal accruals to evaluate profit management. The results show that with the increase of internal audit's qualification, experience and quality, level of unrealistic profit reports will reduce and this matter can lead to correct guidance of investors and selecting right firms with higher profit and earning. This conclusions propose that investors when they're making profitable decisions for investing, they should pay specific attention to auditors opinion and when auditors' opinion is reported depending on unrealistic profits, the possibility of manipulating profit in these firms through accruals is higher, thus the profit's quality is lower, so the reported profit is not a dependable choice for making profitable decisions.

During this research there were limitations for researchers that we name a few of them:

When we try to reach a goal, limitations as a fact will slow the process. Research is an action and process in order to solve a problem or answer a question. Therefore, most of studies face limitations and this research isn't an exception. Some of the limitations and problems in present study that we should consider them in studies 'Interpretation'. The problem that this research faced was that accessing firm's information was problematic and time consuming.
Few suggestions are proposed for future work:

1. Considering that in this study Jone's modified model variable was used for abnormal accruals, we can also use it for other models.

2. The model that we used in this research was panel data, if we need to examine these variables for a firm or one year, if it's necessary, this process can be studied by using other econometric techniques.

3. Since in this study's variables are considered for some selected banks, we can use this research for all banks.

4. In this research macro variables and their effectiveness is not used; if necessary, the effect of macro variables like Inflation ratio and liquidity on accruals can be studied.

REFERENCES


