



# The Impact of Conservatism in Financial Reporting On the Relationship Between Managerial Overconfidence and The Accuracy of Profit Forecast in Banks Listed on the Tehran Stock Exchange

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**Abstract:** The main purpose of this study was "The impact of conservatism in financial reporting on the relationship between Managerial Overconfidence and the accuracy of profit forecast in banks listed on the Tehran Stock Exchange during 2010 to 2014". The method of implementation: in this regard, Managerial Overconfidence and conservatism are independent variables and the accuracy of profit forecast in banks is the dependent variable. The statistical population of the research is 17 banks over the above 5 year that due to the limited number of banks listed on the Tehran Stock Exchange all the banks including 85 samples were selected. A descriptive correlational research method was used with the practical approach. Methods of Library research and document mining of financial statements were used for gathering information respectively in the fields of theoretical foundations and hypotheses testing. In general, correlation method and multiple regressions is the statistical method that was used in this research. Conclusion: based on the results of the first research hypothesis, conservatism in financial reporting strengthens the impact of managerial overconfidence on the accuracy of profit forecast. According to the second research hypothesis, managerial overconfidence has a reverse and significant impact on the accuracy of profit forecast in the banks listed on the Tehran Stock Exchange.

**Key words:** financial reporting, profit forecast, conservatism, managerial overconfidence

## INTRODUCTION

Since in the economic theories, the value of the bank is based on the present value of its future cash flows and the profit is used as a substitute for cash flows, profit forecast is of particular importance. Accordingly, helping the investors and creditors to predict future cash flows is one of the objectives of financial reporting. Also, Iran's International Accounting Standards Committee in the theoretical concepts of financial reporting has stated that: making economic decisions by users of financial statements requires the assessment of business unit to generate cash and certainty of its creation...., evaluating the power of creating cash will be facilitated by focusing on the financial position, financial performance and cash flows of business units and using them to predict the expected cash flows and assess financial flexibility.

Preparing useful information to facilitate decision-making is one of the purposes of accounting and providing financial statements. The power of predicting financial statement items is among the effects of this usefulness. Accounting profit forecast and its changes as an influencing factor on economic decisions has been the favorite of investors, managers, financial analysts, researchers and the creditors from long time ago. This attention is due to the use of profit in models of stock valuation, contributing to the

function of capital markets, assessing the payment ability, risk assessment, evaluating the performance of economic unit and the use of profit forecast in the discussion of income smoothing for management decisions as well as economic research, finance and accounting.

**Research purposes:**

Investigating the effects of conservatism in financial reporting on the relationship between managerial overconfidence and accuracy of profit forecast in banks listed on the Tehran Stock Exchange

**Research questions**

- 1: whether conservatism in financial reporting leads to the stronger impact of managerial overconfidence on accuracy of profit forecast?
2. Whether managerial overconfidence has a significant impact on accuracy of profit forecast?

**Method of information gathering**

In this study library research will be used to collect information related to the theoretical foundations and the research's literature. Necessary information for this section will be collected by referring to books, articles and dissertations. And data and figures available in Tehran Stock Exchange will be used for collecting financial information. Therefore, the required information is extracted from the financial reports published by the banks, the official website of the Tehran Stock Exchange and also the Rahavard Novin's database application.

**Research history**

Kordestani (2012) has explored profit's ability to predict future cash flows and interests. The related results showed that increasing profits as an explanatory variable in the prediction model would lead to achieving better predictions.

Nicomaram and Rezai (2013) in a study have examined the accuracy of profit forecast in 45 banks of Tehran Stock Exchange. The results of this research showed that accuracy of profit forecast has a reverse relationship with stock price changes and a direct relationship with the size of the banks.

Abbasi et al (2013) have investigated the role and ability of profit, profit forecast and future cash flows from investing. The results show that there is a significant relationship between past profits, profits of coming period and also between the profits and the past cash flow with future cash flows.

Noravesh and Gholamzadeh (2012) in exploring the behavior of accounting profit by using time series of Box-Jenkins it was showed that the previous profits do not provide much information about future profits.

Shahbeygi and Mirsepassi (2013) have evaluated the factors affecting the profit forecast ability in a study and the results showed that information related to financial leverage, accruals, the rate of return on investment, growth of fixed assets, changes in operating cash, market value of the bank, debt-to-equity ratio, the cost of borrowing and cash distribution of profits affect the profits and abnormal stock return.

Pourheydari and Aflatoni (2013) have examined the motivations of income smoothing in banks listed in the Tehran Stock Exchange. The research results show that profits volatility is not one of the important motivations of income smoothing in Iranian banks.

Rezai and Akbar (2014) examined forecasting models of cash flows. Evaluation of Spearman correlation showed that the variability of operating profits has had an impact on absolute error of models and the models' predictability will decline by increasing the flexibility.

Hosseini et al (2014) studied the effect of dealing with future financial information in section 340 of auditing standards on the quality of profit forecasts. The results show that implementation of this part of the auditing standards do not reduce forecast error and change in the stock price.

Foroughi and Fallah (2014) have investigated the relationship between overconfidence and conditional and unconditional conservatism. The research results showed that overconfidence in the behavior of managers will decrease conditional and unconditional conservatism in audit reporting.

Hasas Yeganeh et al (2015) have investigated the impact of management overconfidence on audit wage. The results show a significant negative relationship between managerial overconfidence and audit wage.

Based on further investigations, managerial overconfidence had no significant effect on using industry specialist auditor.

Dichow and Tong (2008) carried out a study entitled "the relationship between the quality of matching and features related to accounting profit in the past four decades". Simultaneously, profit's volatility has increased and on the other hand, profits stability has decreased by the growth of weakness in compliance over the past four decades. In fact, in this study, it was announced that poor compliance has a positive relationship with profit's volatility and a negative relationship with profit's stability.

Dicho and Tang (2009) suggest that the experiences of utilizing some patterns such as the pattern of the present value of cash flows or the remaining profit shows that there is not much difference between them. But the important thing about these patterns is the expected profit. If the market is able to completely rejection the characteristics of profits time series, more accurate predicting models can be achieved by relying on them.

Nakora (2011) determined the efficient factors on volatility in profits report by survey of 401 chief financial officers. Their findings indicate that managers at 97% of cases are elusive from highly volatile profits reports and therefore tend to smooth the profits. They believe that reporting highly volatile profits will drastically reduce the possibility of predicting them. So this study empirically deals will such common claims.

Meyer and Leim (2012) believe that profits volatility is one of the incentives of profit smoothing. They stated that institutional investors normally move away from banks with high volatility and are more willing to invest in banks with smooth profits.

Kramer and Liao (2012) have evaluated the effect of managers' overconfidence on the viewpoint of analysts by using overconfidence measurement criteria in relation to the time of applying transaction's authority in the hands of management. The results of this study showed that analysts optimistically consider the profits of banks that have high confidence managers.

Ben-David et al (2013) showed that those banks with more arrogant managers have higher capital costs than other banks.

Fang (2013) studied the role of accuracy of management forecast in estimating the profit forecast error. He concluded that there is a significant and negative relationship between forecast accuracy and forecast error of management.

Jensen and Mclink (2014) examined the features of recorded forecasts of the bank and how prediction accuracy of previous profits affects the investors' response towards future profits predictions. In their study, they concluded that the behavior of the bank's previous forecasts allows enough credits for prediction.

Ricardo (2015) explored that how forecasting management profits have influenced on the reflection of accruals in the next year. He found that to what extent the biased predictions of accruals are related to the opportunism of managers and fear of litigation. According to the results of this study, incorrect pricing of accruals applies for banks that broadcast a range of predictions and doesn't apply for banks that release dotted forecast.

### **The research findings:**

In this section, for the research hypotheses, the required pattern is determined to estimate the model and then, the estimated model and its results are interpreted. Also, the related statistical assumptions are investigated including the examination of remaining's normality, identical variance of the remaining; independency of remaining and linearity of the model.

The purpose of testing the first hypothesis is to evaluate the effects of conservatism and overconfidence on the accuracy of profit forecasts and the second hypothesis of the research aimed to investigate the impact of managerial overconfidence on the accuracy of profit forecasts. These assumptions are estimated by using the following model as the panel data and will be approved if the variables' coefficient is significant at a confidence level of 95%.

$$1) PP_{i,t} = \alpha_0 + \beta_1 OC_{i,t} + \beta_2 CONS_{i,t} + \beta_3 FL_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 ACC_{i,t} + \beta_6 CFO + \varepsilon_{i,t}$$

$$2) PP_{i,t} = \alpha_0 + \beta_1 OC_{i,t} + \beta_2 FL_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 ACC_{i,t} + \beta_5 CFO_{i,t} + \varepsilon_{i,t}$$

$$\begin{cases} H_0 : \beta_1 = 0 \\ H_1 : \beta_1 \neq 0 \end{cases}$$

In which:

PP = accuracy of profit forecast, OC = managerial overconfidence, CONS = conservatism, Size = size of the bank, Fl = financial leverage, ACC = ratio of accruals, CFO = operating cash flow ratio

To determine whether using the panel data method in estimating the desired model would be effective or not Chow test or F is used and in order to detect which method is more suitable for determination (fixed or random effects) Housman test will be used. The results of these tests are presented in Table 1.

Table 1 the test results of Chow and Housman model (1)

Test	Number	Statistic	Statistic value	Degree of freedom	P-Value
Chow	85	<i>F</i>	3.336	6	0.000
Housman	85	$\chi^2$	3.194	6	0.0492

Table 2 the test results of Chow and Housman model (2)

Test	Number	Statistic	Statistic value	Degree of freedom	P-Value
Chow	85	<i>F</i>	3.0932	6	0.0284
Housman	85	$\chi^2$	3.0705	6	0.0394

According to Chow test results; because P-Value of both models is less than (0.05), the  $H_0$  hypothesis of the test is rejected at the 95% confidence level and indicates that the panel data method can be used. Also according to Housman test results; because P-Value for both models is less than 0.05, the  $H_0$  hypothesis of the test is rejected at 95% and  $H_1$  hypothesis is accepted. Therefore, models need to be estimated by using fixed effects. Also, Durbin-Watson (D-W) is used in this study for testing the non-correlated remaining that is one of the assumptions of regression analysis called autocorrelation. According to the preliminary results of the model, the value of Durbin-Watson statistic for both models is between 1.5 and 2.5 that can be concluded that the remaining is independent. Moreover, code test has been used for examining models that have linear relations and to know that whether the desired model of the research has been explained properly in terms of having linear or non-linear relations. With regard to the fact that the level of code test's importance is larger than 0.05 for both models, therefore, the null hypothesis of this test, based on the model's linearity, is confirmed and models do not have clear error.

Table 4 test results related to statistical assumptions of model 1

Jarque-Bera statistic		Breusch-Pagan statistic		Durbin-Watson statistic	Ramsey statistic	
<i>P-Value</i>	$\chi^2$	<i>P-Value</i>	<i>F</i>	D	<i>P-Value</i>	<i>F</i>
0.3412	1.3435	0.0302	1.0845	2.42	0.6238	3.4722

Table 5 test results related to statistical assumptions of model 2

Jarque-Bera statistic	Breusch-Pagan statistic	Durbin-Watson statistic	Ramsey statistic
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<i>P-Value</i>	$\chi^2$	<i>P-Value</i>	<i>F</i>	D	<i>P-Value</i>	<i>F</i>
0.4482	1.4814	0.0022	1.936	2.28	0.487	3.113

According to the results of Chow and Housman tests and also the test results of statistical assumptions of classic regression, the research model will be estimated by using the methods of panel data and fixed effects. The estimated models using the software Eviews 7 will be as follows:

$$PP_{i,t} = 7.6784 - 2.1042iOC_{i,t} + 3.3801SIZE - 0.7383ACC_{i,t} + \varepsilon_{i,t}$$

**The first research hypothesis**

The purpose of the research's first hypothesis testing is to study this subject that whether conservatism in financial reporting leads to a stronger impact on the accuracy of profit forecast? And the statistical hypothesis can be expressed as follows:

$H_0$  = Conservatism in financial reporting does not result in the stronger impact of managerial overconfidence on the accuracy of profit forecast.

$H_1$  = Conservatism in financial reporting results in the stronger impact of managerial overconfidence on the accuracy of profit forecast.

$$2)PP_{i,t} = 4.1204 - 3.5482OC_{i,t} - 0.3468_{i,t}CONS + 3.0286SIZE_{i,t} - 1.9217ACC_{i,t} + \varepsilon_{i,t}$$

In investigating the meaningfulness of coefficients according to the results presented, since the probability of t-statistic for the coefficient of managerial overconfidence variables and conservatism is smaller than 0.05, as a result, the impact of managerial overconfidence variables and conservatism on the accuracy of profit forecast is confirmed at the level of 95% confidence level.

The negative coefficients of these variables (-0.3468 and -3.5482) reflects the reverse impact of managerial overconfidence and conservatism on the accuracy of banks' profit forecast, so that by 1 unit increase in managerial overconfidence and conservatism the accuracy of profit forecast will also decrease to a low of (- 0.3468 and -3.5482) units.

According to the comparison of the coefficient of managerial overconfidence variable, since the coefficient of managerial overconfidence (-3.5482) is higher than the coefficient of managerial overconfidence (- 2.1042); the first hypothesis can be confirmed and concluded that conservatism in financial reporting results in the stronger reverse impact of managerial overconfidence on the accuracy of profit forecast.

In examining the significance of the entire model, according to the fact that the probability of F-statistic is smaller than 0.05 (0.0000), the total significance of the model is confirmed with the confidence level of 95%. The model's determining coefficient shows that 42.97% of the volatility of the banks forecast accuracy is explained by the variables in the model.

Figure 6 test results of the first research hypothesis using fixed effects

Variable	Coefficient	t-statistic	P-Value	Type of relation
Fixed component	4.1204	2.5936	0.0001	-
Managerial Overconfidence	-3.5482	-3.0021	0.0376	Reverse
Conservatism	-0.3468	-2.8936	0.0000	Reverse
The size of the bank	3.0286	3.2964	0.0010	Direct
Financial Leverage	0.7383	0.2973	0.6855	No relation
The ratio of accrual	-1.9285	-2.2449	0.0003	Reverse
The ratio of operating cash flow	1.9285	0.1856	0.3281	No relation
The model Determining coefficient				0.4297

F-statistic	0.3658
<i>P – Value</i>	0.0000

### The second research hypothesis

Figure 7 test results of the first research hypothesis using fixed effects

Variable	Coefficient	t-statistic	P-Value	Type of relation
Fixed component	7.6784	2.6090	0.0093	-
Managerial Overconfidence	-2.1042	-2.2199	0.0260	Reverse
The size of the bank	3.3801	1.3084	0.0000	Direct
Financial Leverage	-3.0286	-0.6084	0.4373	No relation
The ratio of accrual	-0.7383	-2.8381	0.0000	Reverse
The ratio of operating cash flow	-1.9285	-0.3276	0.559	No relation
The model Determining coefficient				0.3924
F-statistic				0.1933
<i>P – Value</i>				0.0098

The aim of the second research hypothesis is to test whether the managerial overconfidence has a significant effect on the accuracy of bank's profit forecast or not? And the statistical hypothesis is expressed as follows:

$H_0$  = Managerial overconfidence has no significant impact on the accuracy of bank's profit forecast

$H_1$  = Managerial overconfidence has a significant impact on the accuracy of bank's profit forecast

This hypothesis was estimated using a model on panel data in examining the significance of coefficients, since the probability of t-statistic for the coefficient of managerial overconfidence is smaller than 0.05 (0.0260), As a result, the impact of managerial overconfidence on the accuracy of bank's profit forecast is confirmed in 95% confidence level. Therefore, the second research hypothesis is accepted and with 95% confidence it can be said that managerial overconfidence has a significant impact on the accuracy of bank's profit forecast.

The negative coefficient for this variable (-2.1042), indicates the reverse impact of managerial overconfidence on the accuracy of bank's profit forecast; Thus, according to the analysis made in connection with the second hypothesis, it can be said that managerial overconfidence has a significant and reverse impact on the accuracy of bank's profit forecast.

### Conclusion

Based on the results of the first research hypothesis, conservatism in financial reporting results in the stronger impact of managerial overconfidence on the accuracy of profits forecast in banks listed on the Tehran Stock Exchange during 2010 to 2014 and this outcome refers to this fact that as the value of conservatism raise in the financial statements, the reverse impact of managerial overconfidence on the accuracy of profit forecast will be stronger. Conservatism in the financial statements means further reaction to bad news than good news and in other words, the profit reported is less than its actual amount. Conservatism will arise when asymmetry of information between managers and shareholders is high. Since the main basis of profits forecast by managers is the financial statement items; thus, conservatism can have the opposite effect on the accuracy of profit forecast and consequently, increase the reverse impact of managerial overconfidence on the accuracy of profits forecast. According to the second research hypothesis, managerial overconfidence has a reverse and significant impact on the accuracy of profit

forecast in banks listed on the Tehran Stock Exchange over the years 2010 to 2014. This matter indicates that as the managerial overconfidence raise, the accuracy of profit forecast will be decreased.

Managers' Overconfidence causes them to have much hope towards the future of the bank and neglect the effects of some factors such as inflation, exchange rates, sanctions and other types of risks that affect the performance of the bank. These factors are related to the lot of confidence and arrogance of managers. Due to ignoring some unforeseen factors there will be a reduction in the accuracy of profit forecast.

The results of the control variables showed that:

The size of the bank has a direct and significant effect on the accuracy of profit forecast and this result refers to this matter that banks that are bigger in size or in other words, have large assets, by having enough assets, can employ professional and more experienced managers in the department of banking, these managers make right financial decisions and have higher accuracy of profit forecast than small banks. The ratio of bank accruals has a reverse and significant impact on the accuracy of profit forecast and this result refers to this matter that banks that have higher accruals ratio, are more likely to manage and manipulate the banks interest, because managers can make changes in the banks profit report by manipulating the financial statements. The Bank's profit forecast is formed by managers on the basis of financial statement items that this matter can lead to a reduction in the accuracy of profit forecast.

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