The Relationship between Earnings Quality, Financing, Corporate Performance and Investment Decisions in Tehran Stock Exchange (TSE)-Listed Companies

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ABSTRACT: The aim of the present study is to examine the relationship between earnings quality, financing, corporate performance and investment decisions. Earnings quality was evaluated based on the relationship between earnings, accruals and cash using the ratio of operating cash flow to operating earnings. The sample consisted of 63 Tehran Stock Exchange (TSE)-listed companies selected through systematic sampling. The firms’ data from 2002 to 2010 were examined. The dependent variable was earnings quality. The independent variables included financing, corporate performance and investment decisions. Correlation coefficients and multivariate regression models were used for data analysis and testing hypotheses. The results showed significant relationships between earnings quality and independent variables.

Key Words: Earnings Quality, Financing, Corporate Performance, Investment Decisions

INTRODUCTION

Clear, reliable and relevant information is of great importance for investors and other financial decision-makers. It requires efficient reporting systems and financial statements, because clear information is the main pillar of informed economic decisions. Efficient accounting system provides useful financial information in the form of financial statements which fairly reflect the results of entity operations. The corporate performance in the form of reported profit and loss is a criterion for judging and determining the extent of value creation, measuring profitability and predicting future activities. Hence, managers, investors, creditors and other users of financial statements have a special look at the qualitative features of earnings. So, it is expected that earnings quality would have a significant role in crediting and economic investment.

First, theoretical principles on earnings quality, financing, firm performance and investment decisions are provided. Then, backgrounds, hypotheses and methodology will be discussed. Since the main objective of the present study is to examine the relationship between earnings quality, financing, corporate performance and investment decisions, each of these factors will be explained separately. The earnings quality is defined based on the relationship between earnings, accruals and cash flows. It will be measured using the ratio of operating cash flow to operating earnings (Cash Flow Operating). After hypothesis testing and analysis, the results, recommendations and some proposals for future research will be provided.

Theoretical Backgrounds

Earnings Concept and Viewpoints: Earning as the end result of a long process of accounting is receiving much attention by the users of financial information [1]. Hicks believes that the purpose of calculating earnings in reality is to establish guidelines for determining the amount can be consumed without getting poor [2]. According to Alexander, earnings can be used for: a) determination of tax, b) measuring the success of a corporate operation, c) determining the ability to divide earnings, d) examining the reasonability and fairness of earnings by those who approve the legal rate, e) a guide for the Board of Trustees through income distribution during the lease period, in the case where the capital is maintained, f) a guideline for the management of a company in order to conduct training. Bedford outlines three conceptual basis for earnings including psychological earnings (satisfaction of human desires), real earnings (increase in economic value) and monetary earnings (increase in monetary value) [2].

Of the other views is the concept of earnings at syntactical level (rules and definitions) [3], semantical level (meaning approach) [4] and pragmatic level. At syntactical level, earning is calculated based on a set of principles such as realization, matching, accrual method and cost allocation. Some experts believe that earnings calculated...
based on this view can be effective in decision-making model of creditors and investors. However, the reliability of these assumptions cannot be interpreted using this approach.

At semantical level, two following concepts are emphasized in definition of earnings: 1-change in welfare (wealth), 2-maximizing profits under certain conditions (performance). In this view, current and potential shareholders use the effectiveness of corporate operations as a criterion for decision-making. It is clear that performance as one of economic concepts has an interpretation in the real world. At pragmatic level, earnings refer to concepts such as investors and creditors’ decision-making process, the reaction of stock prices in the capital market to reported earnings, management decisions about capital expenditures and reactions of management and accountants to earnings [4].

Comparison of Economic View and Accounting Earnings: Accounting earning is located at syntactical level. The difference between realized incomes from period transactions and expenses incurred to earn the income makes sense to accounting earnings at this level. Accordingly, accounting earnings is based on matching, revenue-recognition, financial period assumption, cost principles and genuine transactions done by the company [3,4]. According to Hicks, Lindale and Fisher, economic earning is the personal earnings consuming maximum amount within a week and expecting same levels of well-being and happiness at the beginning of the week. Economic earning is a future earning based on expected future cash flows. Accounting earning is periodic or past earnings based on historical values. According to Solomo, the difference between these two aspects is as follows:

Accounting earnings:
+ Unrealized change in tangible assets
+ Changes that occurred in previous periods and realized tangible assets
+ Change in value of intangible assets

Economic earnings

Here, an intangible asset do not mean conventional intangible assets written in the balance sheet, but is subjective goodwill arises through the use of a criterion in calculating the economic earnings [4].

Earnings Quality: Since various users use entities information in a variety of decisions, so there are different definitions for earnings quality. Despite the numerous definitions for earnings quality, persistent earning which is closer to cash has higher quality. As another viewpoint, earnings quality can be sought in earnings sustainability, accruals and profits reflecting economic transactions [5]. According to Bernstein [6], earnings quality is used to evaluate various entities to compare and identify differences in profits of entities. According to Hodge [36], the reported earning that is closer to real profits has higher quality. Bodie et al. [7] define earnings quality as the persistence of current level of reported earnings in future periods. According to Williams [8], earning stability and management determine earnings quality. Tits define earning quality as the ability of accounting earnings in reflecting economic events.

Earnings Management: According to Schipper [9], earnings management is a targeted intervention in financial reporting to achieve some personal interests. Management tries to manipulate price and earnings reporting given the importance of reported earnings for the users. Two main motives to manipulate earnings (earnings management) include encouraging investors to buy company's stocks and increasing the market value. On the other hand, accrual accounting provides many options for determining earnings at different periods, because accruals can be used to manipulate corporate earnings. Management practices in determining reported earnings will affect the quality of earnings and reduce earnings quality. Managers adjust reported earnings through adopting certain accounting policies and accruals management. The use of estimates in financial statements affects profits and may lead to earnings different with the actual corporate performance.

Financing Strategy: Financing is a branch of economics dealing with providing funds for individuals, governments and businesses. Financing allows above institutions to use credit for the purchase of goods, investment in projects or other economic exchanges instead of having the money. Managers of entities can provide required funds from resources inside or outside the company when needing funds for new investment or in times of crisis. Entities adopt financing policies according to a series of internal characteristics (such as asset structure, profitability, growth, firm size, desire and opinion of shareholders and business owners) and a set of characteristics outside the company (such as inflation, interest rates, economic conditions and government regulations, etc.) [10].

Internal financing methods include earnings (accumulated), depreciation, sales (loss) and assets (fixed and current). External financing methods include short term or long term debts (loans or bonds), dissemination of common and preferred stock and rentals. Common framework for the analysis of different methods of financing is usually based on flexibility, risk, benefit, schedule and other factors including collateral values, the cost of bonds dissemination and the rate of future outcomes [5]. Managers consider "financial risks" and "financing costs" in financing decisions referred as financing strategic reference points [11].

Four financing strategies are obtained through combining these two dimensions. In the case where risk-taking and cost of financing are low, accumulated earning is the most reasonable financing strategy. Financing through loans, bonds and rent is the most appropriate way for financing in the case of high risk and low financing costs. In the case of high risk-taking and low financing costs, the best financing strategy is sale of assets. When
both risk-taking and financing costs are high, the most reasonable way of financing is issue of shares [2, 3]. If companies follow matching principle in long terms, they will experience lower risk as well as lower financing cost. Matching principle is based on short-term financing through short-term resources and long-term financing through long-term resources [1]. Financial managers often do not follow matching principle, because it does not consider permanent short-term financing arising from current liabilities. With sales growth over time, current liabilities of company also increase regardless of decisions taken by financial manager [6].

**Corporate Performance:** The aim of corporate performance evaluation is overall assessment of financial situation, firm value and results of operations to take rational decisions. Financial success of a company is affected by performance of company relative to its competitors. The relative performance of a company to its competitors is important for two reasons. First, investors and creditors usually compare financial performance of competitors when making decisions on allocating their capital. Second, the relative performance of a company to its competitors may be an important factor in determining remuneration of The Board. According to Paragraph 43, Statement 1 of accounting concepts, Financial Accounting Standards Board, the first role of earnings is to evaluate periodical financial performance of an institution. According to this statement, the users of financial statements employs earnings to evaluate the performance of management, the corporate profitability in long term, forecast future earnings and evaluate the risks of investing in the company or crediting.

Net received cash is also used to evaluate performance. Cash is of vital resources of every entity which is increasingly used in new financial analysis. The ability of a company to generate cash affects the value of shares of that company. This is why The Financial Accounting Standards Board (1978) argues that the primary objective of financial reporting is providing information to help investors and creditors and other users to assess the levels and timing of future cash. According to Paragraph 44, Statement 1, audit information about corporate earnings evaluated based on accrual accounting is generally a better indication of corporate performance than information about cash receipts and payments [12].

To improve performance and compete with competitors, companies should have a competitive advantage to have superior performance and maintain in markets in complex and changing circumstances. In recent years, not only the sensitivity of competition in market has increased, but its nature has changed. Because companies mainly invest in intangible resources instead of tangible resources to gain superior performance and competitive advantage [13]. Managers may manipulating accounting earnings to hide their poor performance (intended to gain opportunities and delaying bankruptcy). It may lead to reduced earnings quality of those companies [14].

**Investment Decisions Strategy:** Investment is defined as a process converting funds to one or more types of assets which will be maintained for some time in future. Investor must examine investment process and wealth management of shareholders. Investment process in a coherent state requires analyzing nature of investment decisions. In this case, activities related to decision-making process are decomposed and important factors affecting decision-making as the funds conversion process are examined in investment environment. According to Corrado and Bradfo [15] and Chen et al. [16], the period of investment, financial resources, liquidity, investment and taxation affect investment decisions.

According to Pandi, business risk and return of investment are the strategic investment reference points. Accordingly, there are four strategies for investment decisions as most preferred investment methods including: 1) low financial risk and low return on investment to invest in functional units to reduce costs, 2) low risk and high return on investment to invest in cost units to develop the market (current product), 3) high risk and low return on investment to invest in functional units to improve quality and finally and 4) high risk and return on investment in functional units to promote the market (new products) [2, 3]. Conservatism as one of the criteria to assess the quality of potential earnings is effective in reducing representation problems relating to investment of managers [17].

Watts et al. [18] believe that conservatism provides executives and shareholders with more early signs to evaluate the net present value of the project and to engage in remedial measures and take the best decision. According to Garcia et al. [19], companies with conservative reporting deal with more efficient and profitable investments. Negative correlation between conservatism and investment of managers in companies with high return volatility and short-term responsibility of executives is more pronounced. It decreases with increasing executive ownership. As a result, managers’ ownership will reduce representation conflicts [16]. Sustainable and durable earnings are of great importance for investors. Company will have the capability to maintain more sustainable earnings, thereby earnings quality will be higher [11]. High earnings quality leads to efficient allocation of resources because financial information with real value will help decision-makers in allocation of financial and human resources for economic development. Furthermore, it reduces earning risk for shareholders and creditors. It also plays an effective role in economic sustainability, integrity and growth [16].

**Literature Review**

**Domestic Studies:** Damori [20] examined the relationship between smoothing, earnings quality and firm value. The results showed that investors consider highest and lowest values respectively for high quality earning-smoothing companies and low quality earning-smoothing companies. Safaeian [21] evaluated investment decisions and its relationship with sustainable earnings in eight industries. The results indicated a significant

positive relationship between earnings quality and earnings sustainability in five industries including chemical, machinery and equipment, basic metals, foods, rubber and plastic industries. However, no significant relationship was found between earnings quality and earnings stability in three industries including non-metallic minerals, automotive and manufacturing parts and fabrication of metal products.

Khajavi and Nazemi [5] examined the impact of accruals on earnings quality of TSE-listed companies. There was no significant difference between the average efficiency of companies, when accruals are reported at lowest and highest rates. Mokhtarian [22] examined factors influencing investor decisions. The results showed that stock price trend is more important than other factors such as efficiency and earnings per share. Moreover, financial ratios received little attention by investors in their investment decisions.

Zariffard and Nazemi [23] studied the role of accounting earnings and cash flows in assessing performance of TSE-listed companies. According to results, firm size had a significant impact on the relationship between earnings, cash flows and stock returns. However, the influence of industry type on cash and accrual variables was unknown. Haghighat and Homayun [24] examined correlation between accruals and earnings. They found that the quality of accruals is only affected by firm size, earning and sale. A significant positive relationship was found between accruals quality, sales, earnings persistence, firm size, operating cash flow and earnings. Furthermore, a significant correlation was found between quality of accruals and accruals. There was no significant correlation between operating cycle and accruals quality.

Ghosh and Moon [25] examined the relationship between financing through debt and earnings quality. They found a significant positive relationship between debt and earnings quality for most debt levels (almost 80% of sample). Although creditors have effective oversight of the accounting report, it does not work in the case of high debt levels. This declined influence can be attributed to the concerns of managers from avoiding the cost of debt contracts instead of high quality earnings reporting. Kevin and Vicky [26] examined the relationship between earnings quality and capital assets investment during 1988-2005. Their results showed that companies with lower earnings quality have lower return of assets and allocate fewer resources to capital assets.

Barker and Imam [27] examined understand and acceptance of earnings quality concept by capital analysts. Their results showed that analysts consider earnings quality as a multidimensional issue. According to capital analysts, earnings quality as an influential factor is composed of accounting and non-accounting aspects. Accounting aspect of earning quality includes cash and accrual of profits and accounting procedures, while non-accounting aspect includes information found outside the financial statements. Analysts make use of accounting information to some extent to judge the good or bad quality of earnings; however, the use of non-accounting information is most prevalent in practice.

Tian [28] evaluated the impact of earnings management on earning relevance in company valuation. The results indicated that earnings management affects company valuation, because it reduces the information content of earnings. Chan et al. [29] indicated that investors pay great attention to the level of earnings reported in profit and loss statement. On the other hand, since managers’ rewards are calculated based on earnings, managers will find motivation to consciously manipulate earnings figures. Decho and Dicho [30] examined the role of accruals in better measurement of companies’ performance within a time series. They concluded that features of each company such as absolute amount of accruals, operating cycle, standard deviation of sales, accrual cash flows and earnings and firm size can be used as tools to assess the quality of earnings.

Francis et al. [31] examined the relationship between earnings quality (eight indicators of earnings quality), specific cost of debt and specific cost of equity. The results indicated that companies with poor earnings quality have higher cost of debt and cost of common stocks compared with companies with high earnings quality. Biddle, Chen et al. [16] believes that current earning has an informing role in future profitability of capital projects. In fact, current earnings will determine future investments. In other words, future investments (as measured by the increase in operating assets) are related to current earnings.

Hypothesis:
The research hypotheses are formulated as follows:

First hypothesis: there is a significant relationship between earnings quality and financing in TSE-listed companies.

Second hypothesis: there is a significant relationship between earnings quality and firm performance in TSE-listed companies.

Third hypothesis: there is a significant relationship between earnings quality and investment decisions in TSE-listed companies.

MATERIALS AND METHODS

This is a descriptive-multivariate correlational study (non-experimental). It examines the relationship between variables based on the research objective. The objective of the present study is to examine relationship between each two variables. For this purpose, correlation test and multivariate regression models are used. Registered five-tuple test, t and f tests and statistical analysis are used.
A) **Dependent Variable:** The dependent variable is earnings quality of firms calculated based on the ratio of cash flow operating (CFO) to operating earnings (OE) (EQ=CFO/OE). CFO and OE are obtained from cash flow statement and profit and loss statement as part of financial reports.

B) **Independent Variables:** Independent variables include financing, corporate performance and investment decisions. The effect of independent variables on dependent variable (earning quality) is evaluated. Financing is defined as total debts divided by debts plus equity extracted from the balance sheet. Return on assets (ROA) is company’s profit before tax divided by total assets. According to literature, ROA is of best indicators for assessing companies and their profitability. Investment decisions is defined as the ratio of total investments to fixed assets extracted from the balance sheets of companies.

C) **Control Variables**

In addition to the independent variables affecting the quality of earnings as the dependent variable, there are also many other factors, ignoring them could lead to wrong conclusion. Control variables used in this study include: firm size, cash holdings, debt ratio and the ratio of short-term debt to net worth, the ratio of long-term debt to net worth, current ratio and inflation rate. The logarithm of book value of assets was used to calculate the firm size. For this purpose, the logarithm of total assets stated in the balance sheet of each company during 2002-2010 was used. Cash holding is the ratio of current assets to total assets. Other indicators have been calculated using financial ratios.

**Models:** There is a model for each hypothesis as follows:

\[ y = \alpha + a_1 x_1 + a_2 x_2 + a_3 x_3 + a_4 x_4 + a_5 x_5 + a_6 x_6 + a_7 x_7 + a_8 x_8 + \varepsilon \]

\[ y = \alpha + a'_1 x'_1 + a'_2 x'_2 + a'_3 x'_3 + a'_4 x'_4 + a'_5 x'_5 + a'_6 x'_6 + a'_7 x'_7 + a'_8 x'_8 + \varepsilon \]

\[ y = \alpha + a''_1 x''_1 + a''_2 x''_2 + a''_3 x''_3 + a''_4 x''_4 + a''_5 x''_5 + a''_6 x''_6 + a''_7 x''_7 + a''_8 x''_8 + \varepsilon \]

Where \( \alpha \) is intercept and \( a_1, a_2, a_3, a_4, a_5, a_6, a_7, a_8 \) and \( a_1', a_2', a_3', a_4', a_5', a_6', a_7', a_8' \) are coefficients of control variables in the regression models determined by statistical software.

\( x_1 \): financing, \( x_1' \): firm performance, \( x_1'' \): investment decisions.

\( x_2, x_2', x_2'' \): debt ratio.

\( x_3, x_3', x_3'' \): cash holdings.

\( x_4, x_4', x_4'' \): current debt to net worth.

\( x_5, x_5', x_5'' \): long-term debt to net worth.

\( x_6, x_6', x_6'' \): inflation rate.

\( x_7, x_7', x_7'' \): firm size.

\( x_8, x_8', x_8'' \): current ratio.

\( \varepsilon \): perturbation factor.

**Population and Sample:** The population consisted of TSE-listed companies during 2002-2010. The sample (63 firms) was selected from the population. The inclusion criteria are as follows:

- Fiscal year should end at March.
- Fiscal year may not be changed during the study period.
- They should not be among investment firms and banks.
- Their information should be available during the study period.
- They should be profitable during study period.

**Hypotheses Testing:** Before testing hypotheses, necessary tests were performed to ensure establishing some basic assumptions including normality, autocorrelation and Collinearity between independent variables for regression estimates. Then, the hypotheses were tested [18]. In all models, H0 states that there is not a significant relationship between earnings quality and independent variable while H1 supposes that there is a significant relationship between earnings quality and independent variable.

**Limer F Test:** In this study, data from 63 companies were examined during 2002-2010 to determine the factors affecting earnings quality. Thus, Limer F test was used to ensure the validity of models. The results show that model statistic is less the value listed in table at confidence level of 95%. Therefore, the data can be integrated to analyze hypotheses ensuring that the model is appropriate for all levels and periods.

<table>
<thead>
<tr>
<th>Model</th>
<th>Model statistic</th>
<th>Table statistic at error rate of 5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.495367</td>
<td>1.43</td>
</tr>
<tr>
<td>2</td>
<td>0.348947</td>
<td>1.43</td>
</tr>
<tr>
<td>3</td>
<td>0.465873</td>
<td>1.43</td>
</tr>
</tbody>
</table>

**Correlation Test:** One of the assumptions used in regression is independence of model errors. The Durbin-Watson statistic of hypotheses ranges from 1.5 to 2.5. As a result, there is no correlation between model errors. Thus, regression can be used.
Collinearity Test: Tolerance and variance inflation test was used to evaluate the degree of Collinearity between the independent variables. In this test, status indices greater than 15 indicate probable Collinearity between independent variables. Indices greater than 30 indicate a serious problem in using regression in status quo. The results show a poor possibility of Collinearity between the independent variables.

Normality of Errors: Another assumption used in regression is normality of model errors. According to the results of all three models, average errors are close to zero and the standard deviation is constant and close to one. Therefore, model errors are normal and regression can be used.

The Significance of Regression: This test was used to ensure the significant relationship between independent and dependent variables in multivariate regression equation. In the case where there is no relationship between the dependent variable and independent variables, all independent coefficients in the equation are equal to zero. Since the F statistic is smaller than the error rate of 5%, there are significant correlations between earnings quality, financing, firm performance and investment decisions.

### Table 2. Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>Multiple correlation coefficient</th>
<th>Durbin-Watson</th>
<th>Coefficient of determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.081</td>
<td>1.988</td>
<td>0.007</td>
</tr>
<tr>
<td>2</td>
<td>0.814</td>
<td>2.106</td>
<td>0.633</td>
</tr>
<tr>
<td>3</td>
<td>0.082</td>
<td>1.988</td>
<td>0.007</td>
</tr>
</tbody>
</table>

### Table 3. Variables in the model

<table>
<thead>
<tr>
<th>Variables</th>
<th>Status Index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>Financing</td>
<td>1.882</td>
</tr>
<tr>
<td>Investment decisions</td>
<td>1.826</td>
</tr>
<tr>
<td>Debt ratio</td>
<td>3.383</td>
</tr>
<tr>
<td>Cash holding</td>
<td>7.894</td>
</tr>
<tr>
<td>Current debt to net worth</td>
<td>9.323</td>
</tr>
<tr>
<td>Long term debt to net worth</td>
<td>11.128</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>11.673</td>
</tr>
<tr>
<td>Current ratio</td>
<td>21.132</td>
</tr>
</tbody>
</table>

### Table 4. Mean and Standard Deviation of the model

<table>
<thead>
<tr>
<th>Model</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.0</td>
<td>0.993</td>
</tr>
<tr>
<td>2</td>
<td>0.0</td>
<td>0.993</td>
</tr>
<tr>
<td>3</td>
<td>0.0</td>
<td>0.993</td>
</tr>
</tbody>
</table>

### Table 5. F statistic of the model

<table>
<thead>
<tr>
<th>Model</th>
<th>Significance level</th>
<th>F Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.0</td>
<td>57.640</td>
</tr>
<tr>
<td>2</td>
<td>0.0</td>
<td>15.457</td>
</tr>
<tr>
<td>3</td>
<td>0.0</td>
<td>0.477</td>
</tr>
</tbody>
</table>

### Table 6. Research models properties

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sig. T value</td>
<td>B</td>
<td>Sig. T value</td>
</tr>
<tr>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.006</td>
<td>-1.917</td>
<td>0.604</td>
</tr>
<tr>
<td>Financing</td>
<td>0.009</td>
<td>-0.132</td>
<td>0.316</td>
</tr>
<tr>
<td>Firm performance</td>
<td>......</td>
<td>......</td>
<td>......</td>
</tr>
<tr>
<td>Investment decisions</td>
<td>......</td>
<td>......</td>
<td>......</td>
</tr>
<tr>
<td>Debt ratio</td>
<td>0.048</td>
<td>0.497</td>
<td>0.309</td>
</tr>
<tr>
<td>Cash holding</td>
<td>0.83</td>
<td>-0.20</td>
<td>-0.73</td>
</tr>
<tr>
<td>Current debt to net worth</td>
<td>0.0</td>
<td>8.698</td>
<td>0.33</td>
</tr>
<tr>
<td>Long term debt to net worth</td>
<td>0.0</td>
<td>-8.000</td>
<td>-0.17</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>0.13</td>
<td>1.510</td>
<td>0.479</td>
</tr>
<tr>
<td>Firm size</td>
<td>0.174</td>
<td>1.128</td>
<td>0.60</td>
</tr>
<tr>
<td>Current ratio</td>
<td>0.25</td>
<td>1.377</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Significance of coefficients: This test was used to ensure the significance level of coefficients. It
determines whether the calculated ratio is equal to zero or not at desired confidence level (95%). As shown
in Table 6, the probabilities corresponding to financing, firm performance and investment decisions are smaller than
the acceptable significance level of 5%. Thus, there is a significant positive relationship between earnings quality
and financing, firm performance and investment decisions at confidence level of 95%. Creditors evaluate
corporate earnings to ensure the ability of firms in debt principal and interest repayment to pay credits. Future
earnings forecast are of qualitative feature of earnings. Through this, creditors ensure that the company is able to
repay in the future. On the other hand, financial managers involve in financing activities given the level and
quality of corporate earnings. In the case where earning is closer to cash, corporate will ask more liquidity from
creditors.

Furthermore, a significant relationship was found between earnings quality and firm performance. Given
that earnings is one of the criteria for evaluating firm performance, managers, economists, investors, creditors
and analysts give more value to those companies with higher earnings quality. There was also a correlation
between the earnings quality and investment decisions. Higher earnings quality results in higher investment. In
other words, companies with higher earnings quality will involve in more investment activities. In addition to
earnings and its quality, managers also pay attention to earnings sustainability in their investment decisions.
More real earning information, higher ability of corporate to maintain current earnings. Thus, the manager will
invest in projects with greater confidence. According to the results, the regression models of hypotheses are
defined as follows:

\[
y = -0.604 + 0.316 x_1 + 0.309 x_2 + 0.033 x_4 - 0.712 x_5 + \varepsilon \quad \text{Model 1}
\]
\[
y = 0.003 x_1 + 0.530 x_2 + 0.033 x_4 - 0.172 x_5 + 0.085 x_6 + \varepsilon \quad \text{Model 2}
\]
\[
y = -0.061 x_1 + 0.579 x_2 + 0.033 x_4 - 0.174 x_5 + \varepsilon \quad \text{Model 3}
\]

DISCUSSION

This is a descriptive – correlational study. The effects of financing, firm performance and investment
decisions on earnings quality of TSE-listed companies were examined. The earnings quality was defined based on
the relationship between profits, accruals and cash flows. It was measured using the ratio of cash flows from
operating activities to operating profits. After determining population and statistical sample and ensuring the
establishment of basic assumptions of regression test, the research hypotheses were tested at confidence level of
95%. Hypotheses testing showed significant positive correlations between financing, corporate performance and
investment decisions and earnings quality. The results are summarized in the following table.

Table 7. Results of hypotheses testing

<table>
<thead>
<tr>
<th>Model</th>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Result</th>
<th>Control variable</th>
<th>Control variable</th>
<th>Control variable</th>
<th>Control variable</th>
<th>Control variable</th>
<th>Control variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Earnings quality</td>
<td>Financing</td>
<td>Confirmed</td>
<td>H1</td>
<td>Current ratio</td>
<td>Inflation rate</td>
<td>Long term debts to net worth</td>
<td>Current debts to net worth</td>
<td>Cash holding</td>
</tr>
<tr>
<td>2</td>
<td>Earnings quality</td>
<td>Corporate performance</td>
<td>Confirmed</td>
<td>H1</td>
<td>Current ratio</td>
<td>Inflation rate</td>
<td>Long term debts to net worth</td>
<td>Current debts to net worth</td>
<td>Cash holding</td>
</tr>
<tr>
<td>3</td>
<td>Earnings quality</td>
<td>Investment decisions</td>
<td>Confirmed</td>
<td>H1</td>
<td>Current ratio</td>
<td>Inflation rate</td>
<td>Long term debts to net worth</td>
<td>Current debts to net worth</td>
<td>Cash holding</td>
</tr>
</tbody>
</table>

Recommendations: To finance resources, it is suggested that managers first identify appropriate
investment opportunities to maximize firm value and ability to repay loans and financial costs and then choose
the best option. In the case where cash is needed for various purposes, it is recommended that different methods
of financing should be examined to choose appropriate method of financing or a combination of best methods
according to type of need (short or long term). Given the higher importance of earnings than cash flows in
predicting corporate performance, managers, investors and other users of financial statements should be more
careful about earnings so that companies report their true earnings and do not show their performance better
than actual performance through unrealistic earnings. Given the results of the present study, potential and active
investors, creditors, senior managers and other users of financial statements are recommended to pay special
attention to quality of accruals to decide on the level and type of investment and financing method ultimately
leading to maximized wealth as a top target.

Suggestions for future studies:

Given the importance of quality of accounting information, especially accounting earnings in decisions of
managers and other users of financial statements, it seems that further studies are required in this area using
other indicators. Further research leads to more accurate understanding of this topic based on various conditions.
Therefore, it is suggested that following areas are also studied:
1. The relationship between earnings quality and financing (internal and external) and performance of all types of companies (privately held and public joint companies).
2. The effect of internal financing rate (external) on earnings quality of corporates.
3. The effect of earnings quality on debt policies and performance of developed and developing companies.

REFERENCES
