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# Effect of Financial Flexibility on Financial Policies of Companies Listed in Qom Province Stock Exchange

**Mahsa Zolfigol[*], Mahdi Zolfigol**

[2]*Senior Manager of Financial Management, Islamic Azad University of Malard, Karaj, Iran*

[*]Corresponding Author Email: ma.zolfi@yahoo.com

**Abstract:** One of the current issues attracting the attention of researchers and financial managers is the issue of financial flexibility and corporate financial decisions. The cash earned through business operations is one of the most influential factors playing a crucial role in making financial decisions. Accordingly, a great pile of studies in this domain have examined corporate incentives for cash holding and optimal decisions of financial managers. The proposed recommendations and the importance of this issue in the Iran Stock Exchange market led us to investigate the role of financial flexibility extent as a determining factor in financial decisions of companies, and then, to specify the type of the relationship between the above variables. The research includes a 6-year period from 2013 to 2017. A systematic exclusion method is used in this research to determine the statistical sample. Excel and Eviews8 are used to perform calculations and prepare the data required for the research and their analysis. The results of analyzing company data, using a multivariate regression at 95% confidence level show that the degree of financial flexibility significantly affects the amount of dividends, financial leverage, and the level of cash holdings.

**Keywords**: Financial Leverages, Financial Flexibility, Financial Policies, Stock Exchanges.

## Introduction

Financial flexibility is defined as the extent to which a company can equip its financial resources to perform reactive activity to maximize its value (Byoun, 2007). Denis (2011) describes a company's financial flexibility as its ability to take remedial and corrective action to eliminate the cash payment surplus for expected cash receipts with minimum effect on current and future income or company stock value. Meier et al (2013) accepts Denis's view regarding the definition of financial flexibility and states that financial flexibility is the ability to take actions that eliminate the surplus of demand and cash payments on expected resources. The theoretical concepts of Iran's accounting standards define financial flexibility as the ability of the business entity to take effective actions to change the amount and timing of its future cash flows so that the business entity can react to unexpected events and opportunities. Financial flexibility enables the business entity to use unexpected investment opportunities and survive during the period when cash flows from operations are low and possibly negative, for example, due to an unexpected reduction in the demand for the products of the business entity (Denis, 2011). Today, the financial management issues have earned a special place in improving the efficiency of organizations (Marchica & Mura, 2010). Therefore, making financial and investment decisions, as two main tasks of financial managers, play a special role in improvement of the efficiency of organization. Chan et al (2010) stated that the main objective of the

accounting actions of the managers in most companies is to control critical sectors and performance of the company, hoping to make an improvement in the performance of the company. Meier et al (2013) believes one of the main sectors that should be properly controlled and managed is the current assets and liabilities (Moqaddam et al., 2011). The financial statements are a major component of the financial reporting process. The purpose of financial statements is to provide summarized and classified information regarding the financial status, financial performance and financial flexibility of the business entity that is used by a wide range of users of financial statements to make economic decisions. Smith (2014) asserted that the objectives of financial reporting and accounting principles require that information provided by financial reporting to have certain characteristics. In theoretical concepts of Iran's financial reporting, these characteristics are referred to as qualitative attributes (Arab, 2011). Considering the above mentioned issued, effective and efficient investment is one of the factors affecting sustainable economic growth and development. Hence, an economic entity should take into account the limit or amount of investment it is going to make in different projects, with regard to its resource constraints. Financial decisions of a company are an example of the complex issues that are being made to obtain the best possible conditions and returns. In this regard, financial managers attempt to achieve factors affecting investment efficiency. One of such factors is financial flexibility. Managers argue that financial flexibility plays an important role in empowering them to invest in the future. Any financial decision to improve efficiency affects the company's performance and value; optimization of financial activities requires having full information about the investment, including the effect of financial flexibility on investment efficiency. Joo Ste et al (2013) argued that a majority of company managers around the world consider financial flexibility as an important issue in making investment decisions. Academic studies confirm that the incentive to achieve financial flexibility is related to future ability and need of companies to increase external investment and low-cost re-financing. Companies with greater financial flexibility also have easy access to foreign capital markets; in addition, they can obtain required resources to gain unexpected profit and seize new growth opportunities. Given the importance of financial flexibility in financial decisions and policies of companies, and considering that no study has been carried out on Qom Stock Exchange so far, it seems necessary to investigate the effect of the extent of financial flexibility on the financial policies of companies.

**Theoretical Basis and Research Background**

The results of recent research suggest that managers are extremely concerned about the financial flexibility of their financing decisions. Gamba and Traintis (2011), defining the financial flexibility, express that financially flexible companies, when faced with financial crisis, can prevent the destructive effects of negative shocks and invest with low costs when profitable opportunities rise. They believe that financial flexibility is provided through controlling liquidity policy, and it has a significant impact on the value of the company. The Financial Accounting Standards Board (FASB) defines financial flexibility as the ability of an entity to take effective actions to change the amount and timing of cash flows so that it can react to unexpected demands and opportunities. Most definitions of financial flexibility are more or less related to the ability of a company to meet expected future demands through cash flow, unused debt capacity or liquid assets. Tehrani and Noorbakhsh (2006) argued that financial policies are the criteria that represent the solutions a company provide in relation to its debts, equity of shareholders, maturity structure, financing methods for investment projects and decisions about covering risks with the aim of maximizing value of the company for shareholders. Denis and McKeon (2011), in their definition of financial flexibility, stated that it is a missing ring in the theory of capital structure, which results from unused debt capacity to stored cash reserves. Smith (2014) concluded that companies with higher flexibility pay lower cash revenue, prefer to repurchase shares rather than dividing the revenue, and have lower leverage ratios. Moreover, these companies tend to accumulate cash. Jooste et al (2013) analyzed the effects of financial policy shocks on the economy of South Africa. To do so, they used the Structural Vector Error Correction Model and time variation parameters. Shock responses showed that, first, the increase in government's expenditure has a positive effect which is less than usual; second, the effect of government expenditure on GDP is not significant in the long term, and third, the tax increase reduces GDP in the short term. Finally, Denis (2011) showed that the companies with debt financing, in future, will attempt to return to their previous state by limiting profit sharing (Takami, 2016).

## Materials and Methods

This research is an applied-descriptive study with emphasis on correlation relationships, because it examines the status quo on the one hand and specifies the relationship between different variables using regression analysis, on the other hand. In addition, it is a retrospective study (using past information) based on real data of the financial

statements of companies listed in Qom Stock Exchange and other real data that are generalizable to the entire statistical population by inductive method. The statistical population of the present study includes the companies listed in Qom Stock Exchange. The research covers a 6-year period from 2013 to 2017. A systematic exclusion method is used in this research to determine the statistical sample. In this regard, those companies consistent with the following conditions are selected as the statistical sample and the rest are excluded.

1. The fiscal year of the company should end on 20 March each year.
2. The company should not change its financial year during the period under study.
3. The under study company should not be an investing, holding or financial intermediary company.
4. The information and data related to the company should be available.
5. The company stock should be traded continuously on the Qom Stock Exchange and no more than a three-month interruption should take place in trading these stocks.

The data needed to calculate the research variables are extracted from Tadbir Pardaz and Rah Adard Novin databases. In the case that some data were missing in these databases, we used the archives of the library of the Stock Exchange Organization and the Internet website of the Research, Development and Islamic Studies Management of Stock Exchange Organization. Once the data were collected, the suitable tool for calculation and analysis of the data related to the variables was selected. Excel and Eviews8 are used to perform calculations and analyze the data.

**Investigating the Assumptions of Linear Regression Model**

There is a set of assumptions, i.e. classic assumptions, regarding the residual term (or model error). It is necessary to examine the assumptions of the linear regression model if the estimators of regression coefficients are to be the best linear unbiased estimators. Therefore, it is explained in the following that how to test these assumptions, and then the results of the estimates are described.

**Constancy of the Variance of the Error Term (Residuals)**

Another linear regression assumption is that all residual terms have the same variance. In practice, this assumption may not be true and we face with heterogeneity of variance due to various reasons, such as incorrect shape of the model function, the presence of outlier data, structural failure in the statistical society, and so forth. In all three models, the zero hypothesis (H0) indicating the homogeneity of variance is rejected. In other words, it can be said that in all three research models, the variance is heterogeneous. Therefore, in order to eliminate the heterogeneity of variance, we use generalized least squares (GLS) regression in all three models (Table 1).

**Table 1.** The Results of the Test of the Error Term Constancy.

| Model | F-statistic | Probability | Result |
|---|---|---|---|
| 1 | 1.7222 | 0.0320 | heterogeneity of the variance of the error term |
| 2 | 2.0013 | 0.0002 | heterogeneity of the variance of the error term |
| 3 | 6.9768 | 0.0000 | heterogeneity of the variance of the error term |

**Absence of Auto-Correlation of Error Term (Residuals)**

This assumption of the classic linear regression model holds that there is no correlation between the residual terms of the regression. The Breusch-Godfrey serial correlation test was used to examine the independence of the residuals. In this test, the H0 suggests that there is no auto-correlation, and the opposite hypothesis suggests that there is a serial auto-correlation between errors. The results of the test show that considering the fact that the probability of F-statistic at 95% confidence level in all three models is higher than 5%, then H0, can be confirmed in all three models. Therefore, there is no reason for the rejection of the lack of auto-correlation between the residual terms. In other words, the assumption of the absence of auto-correlation between the error terms is true in all three models of the research.

**Table 2.** Results of the Test for the Lack of Auto-Correlation between the Error Terms.

| Model | F-statistic | Probability | F-statistic | Result |
|---|---|---|---|---|
| 1 | 1.2221 | 0.2677 | 1.2221 | No Auto-Correlation between the Error Terms |
| 2 | 1.133 | 0.3332 | 1.133 | No Auto-Correlation between the Error Terms |
| 3 | 1.0717 | 0.3457 | 1.0717 | No Auto-Correlation between the Error Terms |

**The Lack of Collinearity between Explanatory Terms**

Collinearity indicates a strong relationship between the independent and control variables in the model. In the case of collinearity, the estimation coefficients of the model will have a high standard error and, consequently, this will result in the reduction of the number of significant variables of the equation. In this equation, the variance inflation factor (VIF) criterion is used to examine the absence of collinearity. When the variance inflation index is less than 10, it indicates that there is no collinearity. According to the (Table 2) and (Table 3), the results of this test suggest that the variance inflation rates of the independent and control variables of the research are within the acceptable limits in all three models, and therefore there is no problem in this regard.

**Table 3.** The Results of the Test for the Lack of Collinearity between the Explanatory Terms of the First Model of Research.

| **Variable** | **Variance Coefficient** | **Variance Inflation Factor** |
|---|---|---|
| VOFF | 0.001811 | 1.558001 |
| PROFIT | 0.001621 | 1.345221 |
| SIZE | 0.000908 | 1.011212 |
| COLL | 0.000497 | 1.210411 |
| NEQ_EQ | 0.000793 | 1.213451 |
| BETA | 0.000621 | 1.020111 |

**Table 4.** The Results of the Test for the Lack of Collinearity between the Explanatory Terms of the Second Model of Research.

| **Variable** | **Variance Coefficient** | **Variance Inflation Factor** |
|---|---|---|
| VOFF | 0.03786 | 1.558843 |
| PROFIT | 0.003230 | 1.599332 |
| SIZE | 0.000181 | 1.011840 |
| COLL | 0.001050 | 1.045345 |
| NEQ_EQ | 0.001638 | 1.039945 |
| BETA | 0.000110 | 1.018406 |

**Table 5.** The Results of the Test for the Lack of Collinearity between the Explanatory Terms of the Third Model of Research.

| **Variable** | **Variance Coefficient** | **Variance Inflation Factor** |
|---|---|---|
| VOFF | 0.000251 | 1.537111 |
| PROFIT | 0.000234 | 1.577543 |
| SIZE | 0.000123 | 1.011840 |
| COLL | 0.000713 | 1.045345 |
| NEQ_EQ | 0.000111 | 1.039945 |
| BETA | 0.000745 | 1.018406 |

**Normality of Error Terms**

One of the crucial assumptions regarding the residual terms is that the distribution of its terms is normal. The Jarque-Bera test is used to examine the normality of the error terms. According to the results, the probability of the Jarque-Bera test statistic in all three research models is less than 5%. Hence, the H0 denoting the normality of the error terms is rejected in all three models. When the sample size is large enough, the deviation from the assumption of the normality of error terms is usually insignificant and its consequences are negligible. Under these conditions, according to the central limit theorem (CLT), it can be concluded that, even in the case where the residuals are not normal, the test statistic asymptotically follows normal distribution and it is unbiased and efficient. Therefore, on the basis of these terms, the assumption of normality of the error terms can be ignored in (Figures 1-3).

**Table 6.** The Test Results of the Normality of Error Terms.

| Model | Jarque-Bera statistic | Probability | Results |
|---|---|---|---|
| 1 | 18.184 | 0.0000 | Non-normality of error terms |
| 2 | 16.6643 | 0.0002 | Non-normality of error terms |
| 3 | 39.6419 | 0.0000 | Non-normality of error terms |

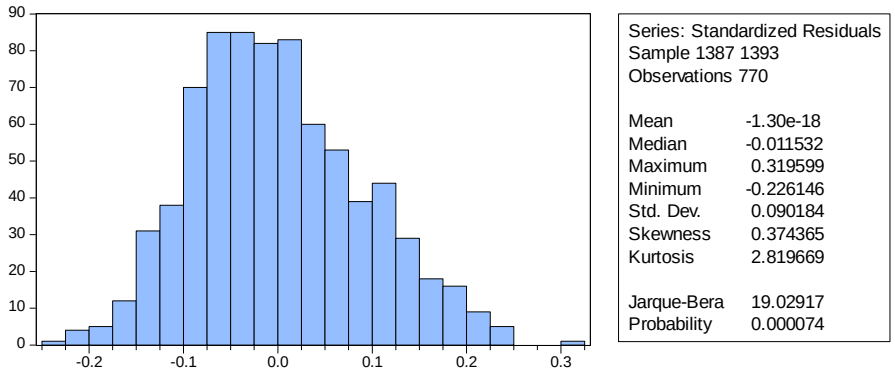


**Figure 1.** The Histogram of the Normality of the Error Terms Associated with the First Model of Research.

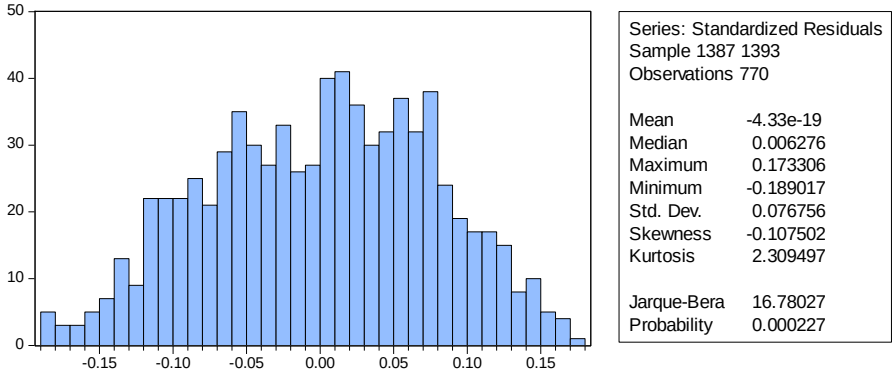


**Figure 2.** The Histogram of the Normality of the Error Terms Associated with the Second Model of Research.

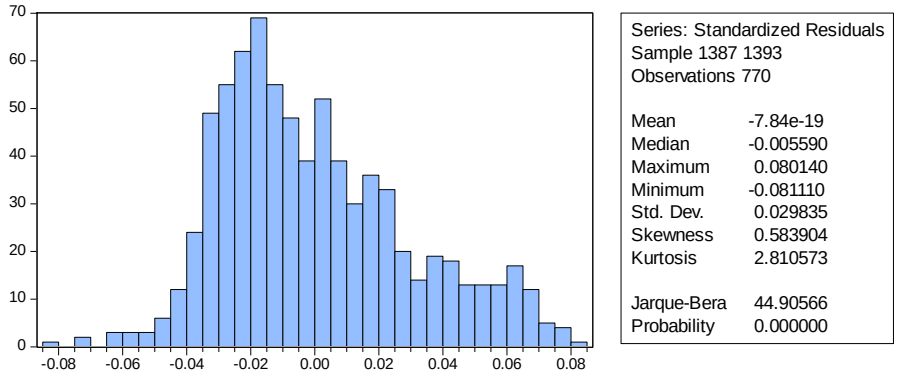


**Figure 3.** The Histogram of the Normality of the Error Terms Associated with the Third Model of Research.

**Results of the Research Hypothesis Test**

**Hypothesis 1**: The extent of financial flexibility has a significant effect on the amount of profit sharing.

**Table 7.** The Results of the Estimation of the First Model of the Research.

$$DIV_{it} = \beta_0 + \beta_1 VOFF_{it} + \beta_2 PROFIT_{it} + \beta_3 SIZE_{it} + \beta_4 COLL_{it} + \beta_5 NEG\_EQ_{it} + \beta_6 BETA_{it} + \varepsilon_{it}$$

| Probability | t-statistic | SD | Estimated Coeff. | Symbol | Variable |
|---|---|---|---|---|---|
| 0.0000 | 6.567147 | 0.110030 | 0.722580 | C | Constant (y-intercept) |
| 0.0057 | 2.775314 | 0.016540 | 0.045904 | VOFF | Financial flexibility |
| 0.0059 | 2.760705 | 0.044580 | 0.123073 | PROFIT | Profitability |
| 0.0000 | -5.447461 | 0.008282 | -0.045118 | SIZE | Company size |
| 0.2439 | 1.166332 | 0.017647 | 0.020582 | COLL | Hypothecation capability |
| 0.0102 | -2.575639 | 0.009347 | -0.024075 | NEQ_EQ | Negative Eigen value |
| 0.0000 | 4.864873 | 0.003282 | 0.015967 | BETA | Systematic risk |
| | | 68.66% | | | Adjusted R-squared (R2) |
| | | 1.803 | | | Watson–Durbin |
| | | 12.2458 | | | F-statistic |
| | | 0.0000 | | | Probability of F-statistic |

In the test of this hypothesis, the probability (or significance level) of F is 0.0000, and since this value is less than 0.05, the zero assumption is rejected at the 95% confidence level, i.e. the model is significant. The results show that all variables of the model are significant at the 95% confidence level except the Hypothecation capability. The results of the control variables suggest that profitability and systematic risk have a positive and significant effect on the profit sharing, while the company size and the negative eigenvalue have a negative and significant effect on the profit sharing. In general, considering the above mentioned items, the first hypothesis of the research can be assumed as confirmed at 95% confidence level. This indicates that the extent of financial flexibility has a positive and significant effect on profit sharing; in other words, when the financial flexibility is increased, the profit sharing of the company will also be increased.

**Hypothesis 2**: the Extent of financial flexibility has a significant effect on financial leverage.

**Table 8.** The Results of the Estimation of the Second Model of the Research.

| $LEV_{it} = \beta_0 + \beta_1 VOFF_{it} + \beta_2 PROFIT_{it} + \beta_3 SIZE_{it} + \beta_4 COLL_{it} + \beta_5 NEG\_EQ_{it} + \beta_6 BETA_{it} + \varepsilon_{it}$ | | | | | |
|---|---|---|---|---|---|
| **Probability** | **t-statistic** | **SD** | **Estimated Coeff.** | **Symbol** | **Variable** |
| 0.0000 | 7.046175 | 0.066202 | 0.466468 | C | Constant (y-intercept) |
| 0.1710 | -1.370557 | 0.019684 | -0.026978 | VOFF | Financial flexibility |
| 0.0000 | -2.044061 | 0.027616 | -0.564493 | PROFIT | Profitability |
| 0.0001 | 3.828955 | 0.004798 | 0.018370 | SIZE | Company size |
| 0.0000 | -4.391328 | 0.018015 | -0.079108 | COLL | Hypothecation capability |
| 0.0001 | 4.022351 | 0.035323 | 0.142082 | NEQ_EQ | Negative Eigen value |
| 0.1196 | 1.558285 | 0.000920 | 0.001434 | BETA | Systematic risk |
| | | 87.84% | | | Adjusted R-squared (R2) |
| | | 1.631 | | | Watson–Durbin |
| | | 89.5232 | | | F-statistic |
| | | 0.0000 | | | Probability of F-statistic |

In this hypothesis test, the probability (or significance level) of F-statistic is 0.0000, and since this value is less than 0.05, the zero assumption is rejected at the 95% confidence level, i.e. the model is significant. The results show that all variables of the model are significant at the 95% confidence level except for the financial flexibility and systematic risk. The results of the control variables suggest that the company size and the negative eigenvalue have a positive and significant effect on the financial leverage, while profitability and hypothecation capability have a negative and significant effect on the financial leverage. Given the above items, the second hypothesis of the research cannot be confirmed at 95% confidence level. This means that the extent of financial flexibility does not have a significant effect on financial leverage.

**Hypothesis 3**: The extent of financial flexibility has a significant effect on the rate of cash holdings.

**Table 9.** The Results of the Estimation of the Third Model of the Research.

| $CASH_{it} = \beta_0 + \beta_1 VOFF_{it} + \beta_2 PROFIT_{it} + \beta_3 SIZE_{it} + \beta_4 COLL_{it} + \beta_5 NEG\_EQ_{it} + \beta_6 BETA_{it} + \varepsilon_{it}$ | | | | | |
|---|---|---|---|---|---|
| **Probability** | **t-statistic** | **SD** | **Estimated Coeff.** | **Symbol** | **Variable** |
| 0.6595 | -0.441243 | 0.020349 | -0.009121 | C | Constant (y-intercept) |
| 0.0000 | -8.661600 | 0.007601 | -0.065838 | VOFF | Financial flexibility |
| 0.0129 | 2.493138 | 0.008288 | 0.020663 | PROFIT | Profitability |
| 0.0237 | 2.267347 | 0.001484 | 0.003364 | SIZE | Company size |
| 0.0000 | -6.381007 | 0.005495 | -0.035061 | COLL | Hypothecation capability |
| 0.0234 | 2.272531 | 0.002315 | 0.005261 | NEQ_EQ | Negative Eigen value |
| 0.5003 | 0.674456 | 0.000447 | 0.000301 | BETA | Systematic risk |
| | | 59.61% | | | Adjusted R-squared (R2) |
| | | 1.714 | | | Watson–Durbin |
| | | 18.8544 | | | F-statistic |
| | | 0.0000 | | | Probability of F-statistic |

The results of the model estimation presented in (Tables 4-13) are used to test this hypothesis. The probability (or significance level) of F-statistic is 0.0000 and since this value is less than 0.05, the zero assumption is rejected at the 95% confidence level, i.e. the model is significant.

## Discussion and Conclusion

Today, the financial management has earned a special place in improving the efficiency of organizations. Therefore, making financial and investment decisions, as two main tasks of financial managers, play a special role in improvement of the efficiency of organization. The main objective of the accounting actions of the managers in

most companies is to control critical sectors and performance of the company, hoping to make an improvement in the performance of the company. One of the main sectors that should be properly controlled and managed is the current assets and liabilities (Moqaddam et al., 2011). The financial statements are a major component of the financial reporting process. The purpose of financial statements is to provide summarized and classified information regarding the financial status, financial performance and financial flexibility of the business entity that is used by a wide range of users of financial statements to make economic decisions. The objectives of financial reporting and accounting principles require the information provided by financial reporting to have certain characteristics. In theoretical concepts of Iran's financial reporting, these characteristics are referred to as qualitative attributes. According to the results of the Adjusted R-squared (R2), approximately 59.61% of the variations of the dependent variables are explained by the independent and control variables of the model. The results show that all variables of the model are significant at the 95% confidence level except the systematic risk. The results of the control variables suggest that profitability, company size and negative eigenvalue have a positive and significant effect on the rate of cash holdings, while hypothecation capability has a negative and significant effect on the rate of cash holdings. On the basis of the above mentioned items, the research hypothesis can be confirmed at 95% confidence level, which denotes that the extent of financial flexibility has a negative and significant effect on the rate of cash holdings. In other words, it can be said that with increasing financial flexibility, the rate of cash holdings will decrease, and with decreasing financial flexibility, the rate of cash holdings will increase. Finally, it is worth noting that the limitation of this study is as follows: the companies that are active in Qom Stock Exchange has a limited history and most of them have entered the stock market in recent years, so the statistical population of the research was limited to those companies for which the statistical data was available for the considered period.

**Conflict of Interest**

The authors declare no conflict of interest.

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