
Samaneh Bari*, Meisam Karamlou**

* M.A. Student of Accounting, Allame Tabatabaee University, Tehran, Iran.
** M.A. of Auditing, Allame Tabatabaee University, Tehran, Iran.

Abstract
The main purpose of this study is investigating the relationship between capital structure and investment efficiency. The sample of this study, includes 87 companies listed in the Tehran Stock Exchange during the period 2009 to 2013 and for processing and testing hypothesis, Estimated Generalized Least Squares (EGLS) method is used. Study results show that capital structure (leverage) has a negative and significant impact on the investment efficiency.

Keywords: Capital Structure, Leverage, Overinvestment, Underinvestment, Investment Efficiency.

Introduction
Financing and investment are two major decision areas in a firm. In the financing decision the manager is concerned with determining the best financing mix or capital structure for his firm. Capital structure decision is the mix of debt and equity that a company uses to finance its business (Damodaran, 2001).

The main purpose of this study is investigating the effect of capital structure on the investment efficiency in the companies listed in the Tehran Stock Exchange. Tehran Stock Exchange is considered both as an emerging stock exchange in the Middle East and as a less developed financial market in the world. Iranian capital market for using of highest investors’ potential is needed the complete and better understanding from the existent condition, attention to the effects of laws, policies and new financial mechanisms (Ghadiri et. al., 2013).

1. The Theories of Capital Structure Value Creating
The theory of capital structure and its relationship with a firm’s performance has been an issue of great concern in corporate finance and accounting literature since the seminal work of Modigliani & Miller (1958). They argue that under very restrictive assumptions of perfect capital market, such as there are no bankruptcy, taxes and transaction costs; perfect information is
available to all investors; value maximization is a common purpose among managers; investors can lend and borrow at the same interest rate and they have homogeneous expectations about firm’s profits, capital structure is irrelevant in determining firm value. Their subsequent preference of purely debt financing due to tax shield in 1963 was a contradiction to traditional approaches which suggests an optimal capital structure (Modigliani & Miller, 1963). In reality, establishing an optimal capital structure is a difficult task (Siddiqui & Shoaib, 2011). He contends that a firm may require issuing a number of securities in a mixture of debt and equity to meet an exact combination that can maximize its value and having succeeded in doing so, the firm has achieved its optimal capital structure.

Trade off theory (Kraus & Litzenberger, 1973; Myers, 1984) claims that a firm will trade off costs and benefits of debt in order to maximize firm value. The benefit of debt primarily comes from the tax-shield by decreasing income through paying interest (Miller & Modigliani, 1963). The costs of debt mainly drive from direct and indirect bankruptcy costs by increasing the financial risk (Kraus & Litzenberger, 1973; Kim, 1978). In other words, this theory asserts that value of a firm with debt is equal to that of a firm without debt plus tax shield after deducting financial distress cost. However, Miller (1977) argues that the tax saving looks large and certain whereas the financial distress cost seems to be negligible, this implies that there is a positive link between capital structure and firm value.

The pecking order theory (Ross, 1977; Myers & Majluf, 1984) states that financing follows hierarchy: internal financing is used first, then debt is issued, and equity is issued when no more debt can be approached. The pecking order was traditionally clarified by transaction costs, issuing costs and asymmetric information. Retained earnings involve few transaction costs and issuing costs than other sources. Issuing debts acquires lower information costs than that of equity. Therefore, retained earnings are better than outside funds and debt is better than equity if firm need external funds. The most implication of this theory is that while an announcement of an equity issue results in a fall of market firm value and an announcement of a debt issue leads a positive market response to firm value (Milton & Raviv, 1991). In other words, the firm value can rise with debt level, because an increase of debt level enhances the market perception of the firm prospects (Ross, 1977).

Agency cost theory developed by Jensen & Meckling (1976), Jensen (1986), and Hart & Moore (1994) contents that there are conflicts of target among managers, shareholders and debt holders. Consequently, an optimal capital structure to maximize firm value is one helping minimize total agency costs. The conflict between managers and shareholders implies that managers try to achieve their personal aims instead of maximizing firm value and shareholder’s returns. Especially, with an excess free cash flow, managers have opportunities to invest in non-profitable projects for personal goals. Therefore, with high debt, managers are under pressure of investing in profitable projects to create cash flow to pay interest. So, through reducing agency cost relating to manager and shareholders, debt can have a positive effect on firm value. Whereas
debt is an efficient means to reduce shareholders-managers conflict, it increases shareholders-debt holders conflict (Myers, 1977). Myers states that when debt is high, debt holders will require higher interest rate to compensate for higher risk of liquidation or underinvestment. So in this term, debt does have a negative effect on firm’s value. However, agency theory generally predicts that leverage is positively related to firm value except from a high debt ratio (Le & Phung, 2013).

2. Capital Structure and Investment Efficiency

2.1. Capital Structure and Information Asymmetry
The pecking order theory, first suggested by Donaldson (1961) and then developed by Myers and Majluf (1984), predicts that informational asymmetry between firm management and outside investors affects firms' financing decisions. According to the theory, equity capital -the most information-sensitive security- has large adverse selection cost so firms prefer to raise equity as a financing means of last resort. By contrast, debt capital has much less adverse selection cost and internal funds completely avoid the problem. Consequently, outside investors would require higher adverse selection risk premium on equity than on debt (Gao et. al. 2012) and there is a negative relationship between debt ratio and information asymmetry.

2.2. Information Asymmetry and Investment Efficiency
Under neo-classical theory, firms invest until the marginal benefit equals the marginal cost of this investment in order to maximize their values (Yoshikawa, 1980; Hayashi, 1982; Abel, 1983). However, in the Keynesian framework (Gordon, 1992; Crotty, 1992), where expected investment will be determined by the preference for growth or for financial security, and in the agency framework (Myers, 1977), which considers information asymmetry problems, firms may deviate from their optimal investment levels and hence suffer from underinvestment (lower investment than expected) or overinvestment (greater investment than expected). In perfect financial markets, all positive net present value projects (NPV) should be financed and carried out. Nevertheless, there is a significant body of literature that contradicts this assumption (for example, Hubbard, 1998; Bertrand and Mullainathan, 2003). Market imperfections, as well as information asymmetries and agency costs can lead to negative NPV projects being carried out (overinvestment) and to the rejecting of positive NPV projects (underinvestment). According to agency theory, both overinvestment and underinvestment can be explained by the existence of asymmetric information among stakeholders. Jensen and Meckling (1976), Myers (1977) and Myers and Majluf (1984) develop a framework for the role of asymmetric information in investment efficiency through information problems, such as moral hazard and adverse selection. With regard to moral hazard, discrepancy of interests between shareholders and a lack of monitoring of managers may lead to management trying to maximize its personal interests by making investments that may not be suitable for shareholders (Jensen and Meckling, 1976), with the consequence of managerial empire building and overinvestment (Hope and Thomas, 2008).
Under adverse selection, better informed managers may overinvest if they sell overpriced securities and achieve excess funds. To avoid this, suppliers of capital can ration the capital or raise its cost, which will lead to the rejection of some profitable projects due to fund constraints (Stiglitz and Weiss, 1981; Lambert et al., 2007; Biddle et al., 2009) with subsequent underinvestment (Gomariz and Ballesta, 2013).

**Literature Review**

McConnell and Servaes (1995) examine a large sample of non-financial US firms for the years 1976, 1986, and 1988. For each year, they separate their sample into two groups, those with strong growth opportunities and those with weak growth opportunities. They show that corporate value is negatively correlated with leverage for firms with strong growth opportunities (indicated by high Tobin’s Q), and positively correlated with leverage for firms with weak growth opportunities (or low Tobin’s Q). Their results are consistent with the hypothesis that leverage induces underinvestment and reduces firm value, as well as the hypothesis that leverage attenuates overinvestment and increases firm value.

Lang et al. (1996) analyze a large sample of US industrial firms over the period 1970–1989 and find a strong negative relation between leverage and subsequent investment, but only for firms with weak growth opportunities (with Tobin’s Q less than one). Again, their results are consistent with the hypothesis that leverage attenuates incentives to invest in poor projects. To address the endogeneity issue mentioned earlier, that leverage might proxy for growth opportunities, Lang et al. (1996) distinguish between the impacts of leverage on growth in a firm’s core business from that in its non-core business. They argue that if leverage is a proxy for growth opportunities, its contractionary impact on investment in the core segment of the firm should be much more pronounced than in the non-core segment. However, they find that the impact of leverage on growth tends to be not significantly different across core and non-core segments, suggesting that leverage is not simply a proxy for growth opportunities.

Aivazian et al. (2005) examine the impact of financial leverage on the firms’ investment decisions using information on Canadian publicly traded companies. They show that leverage is negatively related to investment and that this negative effect is significantly stronger for firms with low growth opportunities than those with high growth opportunities. The paper tests the robustness of these results using alternative empirical models and, in addition, uses the instrumental variable approach to deal with the endogeneity problem inherent in the relationship between leverage and investment. The results provide support to agency theories of corporate leverage, and especially the theory that leverage has a disciplining role for firms with low growth opportunities.

Joshua (2007) using panel regression model with a sample of small and medium-sized enterprises in Ghana and South Africa shows that long term and total debt level is negatively
associated with firm performance measured by Tobin’s Q. This result advocates that to reduce conflicts of interests between managers and shareholders, firms may actually use a higher debt ratio than an appropriate level, thus a high debt ratio produces a low performance.

Arabiyan & Safari (2009) investigate the effects of capital structure on profitability using 100 Iranian listed firms from 2001 to 2007. They found short-term and total debts are positive related to profitability (ROE) while indicate a negative relation between long-term debts and return on equity.

Ebaid (2009) investigates the impact of capital structure choice on performance of 64 firms from 1997 to 2005 in the Egyptian capital market. He employs three accounting–based measures; including return on assets, return on equity and gross profit margin, and concludes capital structure choices, generally, has a weak impact on firm performance.

Gill et. al. (2011) using correlations and regression analyses to investigate the linkage between capital structure and profitability of 272 American firms listed on new York stock exchange for a period of 3 years from 2005-2007 demonstrate that a significant positive association exists between capital structure (measured by short term debt to total assets, long term debt to total assets and total debt to total assets) and firm value (measured by return on equity).

Franklin and Muthusamy (2011) investigate the impact of leverage on firm’s investment decision of Indian pharmaceutical companies during the period from 1998 to 2009. To measure the impact of leverage on firm’s investment decision, pooling regression, random and fixed effect models are used by taking, leverage, sales, cash flow, Return on Asset, Tobin’s Q, liquidity and retained earnings as independent variable and investment as dependent variable. In addition, they demarcate between three types of firms (i) Small firms, (ii) Medium firms and (iii) Large firms. The results reveal that a significant and positive relationship between leverage and investment, while they found a negative relationship between leverage investment for medium firms and positive relationship between leverage and investment in large firms. Their econometric results reveal an insignificant relationship between the two variables for medium and large firms.

Kajananthan & Nimalhasan (2013) examine the relationship between capital structure and firm performance. The annual data over the period 2008-2012 is collected from Colombo stock exchange. Based on selected sample and using financial performance measures (return on equity, return on assets, gross profit margin and net profit margin). Descriptive statistic, correlation analysis and regression analysis are used to estimate the results. The results show that gross profit, net profit, return on equity, and return on assets, are not significantly correlated with debt equity ratio, and gross profit margin and return on equity are significantly correlated with debt assets ratio as the measures of capital structure, and capital structure has significant impact on gross profit and return on equity.
Ogebe et.al. (2013) investigate the impact of capital structure on firm performance in Nigeria from 2000 to 2010. They considered the impact of some key macroeconomic variables (gross domestic product and inflation) on firm performance. The results provide strong evidence in support of the traditional theory of capital structure which asserts that leverage is a significant determinant of firms’ performance. Ogebe et. al. show that there is a significant and negative relationship between leverage and performance.

Fosu (2013) investigates the relationship between capital structure and firm performance, paying particular attention to the degree of industry competition. The paper applies a novel measure of competition, the Boone indicator, to the leverage-performance relationship. Using panel data consisting of 257 South African firms over the period 1998–2009, this paper examines the effect of capital structure on firm performance and investigates the extent to which the relationship depends on the level of product market competition. The results suggest that financial leverage has a positive and significant effect on firm performance. It is also found that product market competition enhances the performance effect of leverage. The results are robust to alternative measures of competition and leverage.

Rahimian et.al. (2014) examine the potential curvilinear relationship between capital structure, performance and firm value of companies listed in Tehran Stock Exchange. The sample of this study, includes 102 companies listed in the Tehran Stock Exchange during the period 2007-2011 and for processing and testing hypotheses, regression method is used. Study findings support the U-shaped relationship between capital structure with performance and firm value of companies listed in Tehran Stock Exchange.

**Research Hypothesis**

Based on Mentioned literature, main testable hypothesis is formulated:

There is a positive and significant relationship between capital structure (leverage) and investment efficiency.

**Methodology of the Research**

1. **Sample**

Our sample includes the collected data from 87 nonfinancial companies listed on the Tehran Stock Exchange from 2009 to 2013. Each company had to meet specific criteria to be included in the sample:

1. They must close their fiscal year in mid-March (end of Persian calendar year).
2. They must have full financial data for the whole period of investigation.
3. They must list on the Tehran Stock Exchange before 2009.
2. Data Collection Method

The data needed for analysis are gathered from audited financial statements and reports of the board to general assembly of shareholders. This enables the main part of the data to be collected from the database that belongs to the Development Research and Islamic Studies Management Center of the Tehran Exchange Organization, and the remaining data are gathered from the second version of Tadbir Pardaz software.

3. Variables

3.1. Independent Variables: Capital Structure (CS)

It is measured as total debt divided by total assets.

3.2. Dependent Variable: Investment Efficiency (InvEff)

Following Biddle et al. (2009), to estimate the expected level of investment for firm i in year t, we specify a model that predicts the level of investment based on growth opportunities (measured by sales growth). Deviations from the model, as reflected in the error term of the investment model, represent the investment inefficiency (Gomariz and Ballesta, 2013).

\[
\text{Investment}_{i,t} = b_0 + b_1 \text{SalesGrowth}_{i,t-1} + \epsilon_{i,t}
\]

Where Investment$_{i,t}$ is the total investment of firm i in year t, defined as the capital expenditures scaled by total assets. SalesGrowth$_{i,t-1}$ is the rate of change in sales of firm i from t-2 to t-1.

We estimate the investment model for all of the data. The residuals from the regression model reflect the deviation from the expected investment level, and we use these residuals as a firm-specific proxy for investment inefficiency. A positive residual means that the firm is making investments at a higher rate than expected according to the sales growth, so it will overinvest. In contrast, a negative residual assumes that real investment is less than that expected, representing an underinvestment scenario. Our dependent variable will be the absolute value of the residuals multiplied by -1, so a higher value means higher efficiency (InvEff$_{i,t}$).

3.3. Control Variables:

3.3.1. Size. It is measured as natural logarithm of total assets (Rahimian et.al., 2013).

3.3.2. Financial Strength (AitmanZ). The original Altman’s Z-score is a calculation which uses coefficients and variables of the equation: 3.3 (EBIT/TA) + 1 (Sales/TA) + 1.4 (Retained Earnings/TA) + 1.2 (Working Capital/TA) + 0.6 (Market Value of Equity/TL), where EBIT represents a firm’s earnings before interest and taxes; TA represents total assets, and TL represents book value of total liabilities (Altman, 1968). A higher Z-score indicates that the firm is financially healthier (i.e., less distressed) than a firm with a lower Z-score. In 1990, MacKie-Mason modified the original Z-score by excluding the market value of equity scaled by book
value of total liabilities from the original equation because of the desire to explicitly examine a firm’s capital structure and to identify the debt ratio as a separate variable. The modified version is, therefore: 3.3 (EBIT/TA) + 1 (Sales/TA) + 1.4 (Retained Earnings/TA) + 1.2 (Working Capital/TA). Graham et al. (1998) later supported the use of modified Z-scores (Lee et al., 2011).

3.3.3. Growth Opportunities (Tobin’s Q). Calculation of the Tobin’s Q follows Chung and Pruitt’s (1994) suggestion:

Approximate \( q = \frac{(MVE + PS + DEBT)}{TA} \)

Where MVE is the product of a firm’s stock price and the number of common shares outstanding; PS represents the liquidating value of outstanding preferred shares (It is zero in Iran); DEBT is the value of short-term liabilities, net of short-term assets plus the book value of long-term assets, and TA represents the book value of total assets (Tavakolnia & Tirgari, 2014).

3.3.4. PPE. It is the ratio of property, plant, and equipment to total assets (Rahimian et al., 2013).

4. Model

\[
InvEff_{it} = \alpha + \beta_1 CS_{it} + \beta_2 Size_{it} + \beta_3 AltmanZ_{it} + \beta_4 Tobin\text{’}s\ Q_{it} + \beta_5 PPE_{it} + \varepsilon_{it} \quad (1)
\]

Data Analysis Method

We use panel data method to estimate the parameters of study. The panel data approach has several advantages compared to the cross-sectional approach often used in financial research.

1. Due to an increase in the number of data points, degrees of freedom are increased and multicollinearity problem is reduced thus the efficiency of econometric estimates is improved.

2. Panel data can control for individual heterogeneity due to hidden factors, which, if neglected in time-series or cross-section estimations lead to biased results. Heterogeneity is captured by firm specific fixed effects or random effects components based on the characteristics of the data set.

Panel data follows a given sample of individuals over time, and thus provides multiple observations on each individual in the sample. Panel data combines the features of time series and cross-section. Panel data usually provides the researcher a large number of data points, increasing the degrees of freedom and reducing the collinearity among explanatory variables; hence improving the efficiency of econometric estimates (Ghadiri et al. 2013). Before estimating the model, we should test stationary of variables by using Im, Pesaran, Shin test. But according to the number of years studied in this research is limited, There is no need to study the research variables stationary. Also, static panel data with fixed effect and Estimated Generalized Least
Squares (EGLS) methods are used. To ensure robustness of the models, we calculated the variance inflation factor (VIF) for each independent variable in our models. The largest VIF value is 1.612, which confirms that there is no multicollinearity problem in our sample, because it is far from 5 (Studenmund, 1997).

**Results**

Tables 1, 2 and 3 present the unconditional correlation coefficients between variables. Table 1 presents the Pearson’s correlation between variables.

**Table1. Pearson’s Correlation**

<table>
<thead>
<tr>
<th>Variables</th>
<th>InEff</th>
<th>CS</th>
<th>Size</th>
<th>AltmanZ</th>
<th>Tobin’s Q</th>
<th>PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>InEff</td>
<td>1</td>
<td>0.015</td>
<td>0.007</td>
<td>-0.043</td>
<td>0.018</td>
<td>0.028</td>
</tr>
<tr>
<td>CS</td>
<td></td>
<td>1</td>
<td>0.035</td>
<td>-0.757**</td>
<td>0.124**</td>
<td>-0.114**</td>
</tr>
<tr>
<td>Size</td>
<td></td>
<td></td>
<td>1</td>
<td>-0.019</td>
<td>-0.17</td>
<td>0.019</td>
</tr>
<tr>
<td>AltmanZ</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>-0.051</td>
<td>-0.117**</td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.086*</td>
</tr>
<tr>
<td>PPE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

* = Correlation is significant at the 0.05 level (2-tailed)
** = Correlation is significant at the 0.01 level (2-tailed)

According to the results in Table 1, under Pearson’s correlation test, there is not significant relationship between capital structure and investment efficiency. Table 2 presents the Spearman’s correlation between variables.

**Table2. Spearman’s Correlation**

<table>
<thead>
<tr>
<th>Variables</th>
<th>InEff</th>
<th>CS</th>
<th>Size</th>
<th>AltmanZ</th>
<th>Tobin’s Q</th>
<th>PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>InEff</td>
<td>1</td>
<td>-0.062</td>
<td>-0.003</td>
<td>0.054</td>
<td>-0.097*</td>
<td>-0.174**</td>
</tr>
<tr>
<td>CS</td>
<td></td>
<td>1</td>
<td>0.139**</td>
<td>-0.643**</td>
<td>-0.108*</td>
<td>-0.203**</td>
</tr>
<tr>
<td>Size</td>
<td></td>
<td></td>
<td>1</td>
<td>-0.106*</td>
<td>-0.088*</td>
<td>-0.002</td>
</tr>
<tr>
<td>AltmanZ</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.195**</td>
<td>-0.036</td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.127**</td>
</tr>
<tr>
<td>PPE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

* = Correlation is significant at the 0.05 level (2-tailed)
** = Correlation is significant at the 0.01 level (2-tailed)
According to the results in Table 2, under Spearman’s correlation test, there is not significant relationship between capital structure and investment efficiency. Table 3 presents the Kendall’s tau_b’s correlation between variables. According to the results in Table 3, under Kendall’s tau_b’s correlation test, there is not significant relationship between capital structure and investment efficiency.

Table 3. Kendall’s Tau_B’s Correlation

<table>
<thead>
<tr>
<th>Variables</th>
<th>InEff</th>
<th>CS</th>
<th>Size</th>
<th>AltmanZ</th>
<th>Tobin’s Q</th>
<th>PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>InEff</td>
<td>1</td>
<td>-0.039</td>
<td>-0.002</td>
<td>0.037</td>
<td>-0.066*</td>
<td>-0.113*</td>
</tr>
<tr>
<td>CS</td>
<td>1</td>
<td>0.097**</td>
<td>-0.47**</td>
<td>-0.6*</td>
<td>-0.135**</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td></td>
<td>1</td>
<td>-0.071*</td>
<td>-0.06*</td>
<td>-0.006</td>
<td></td>
</tr>
<tr>
<td>AltmanZ</td>
<td></td>
<td></td>
<td>1</td>
<td>0.136**</td>
<td>-0.025</td>
<td></td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.084**</td>
<td></td>
</tr>
<tr>
<td>PPE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

* = Correlation is significant at the 0.05 level (2-tailed)
** = Correlation is significant at the 0.01 level (2-tailed)

Table 4 presents the estimation results of Model (1). According to the results in Table 4, coefficient for the capital structure is -0.043068, indicating that capital structure has a negative effect on investment efficiency. The calculated value of t statistic for the coefficient of capital structure is greater than critical value of t statistics in error 0.05 and likelihood for it is 0.000 that represents a significant coefficient obtained for capital structure. Therefore hypothesis of study will be rejected.

Table 4. Analysis The Hypothesis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS</td>
<td>-0.043068</td>
<td>0.007536</td>
<td>-5.715219</td>
<td>0.0000</td>
</tr>
<tr>
<td>Size</td>
<td>0.007330</td>
<td>0.001774</td>
<td>4.132466</td>
<td>0.0001</td>
</tr>
<tr>
<td>AltmanZ</td>
<td>-0.013804</td>
<td>0.002610</td>
<td>-5.289486</td>
<td>0.0000</td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>0.000395</td>
<td>0.001263</td>
<td>0.312933</td>
<td>0.7546</td>
</tr>
<tr>
<td>PPE</td>
<td>0.012744</td>
<td>0.009204</td>
<td>1.384590</td>
<td>0.1677</td>
</tr>
<tr>
<td>C</td>
<td>-0.032265</td>
<td>0.012210</td>
<td>-2.642532</td>
<td>0.0089</td>
</tr>
<tr>
<td>AR(1)</td>
<td>0.044720</td>
<td>0.044667</td>
<td>1.001187</td>
<td>0.3179</td>
</tr>
</tbody>
</table>

Weighted Statistics

<table>
<thead>
<tr>
<th>R-squared</th>
<th>Mean dependent var.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.186776</td>
<td>-0.454820</td>
</tr>
</tbody>
</table>
### Conclusion

A lot of prior studies suggest that higher quality financial reporting can enhance investment efficiency by mitigating information asymmetries that cause economic frictions such as moral hazard and adverse selection (e.g., Leuz and Verrecchia, 2000; Bushman and Smith, 2001; Verrecchia, 2001). Consistent with this argument, Biddle and Hilary (2006) find that firms with higher quality financial reporting exhibit higher investment efficiency paradoxed by lower investment-cash flow sensitivity. However, investment-cash flow sensitivity can reflect either financing constraints or an excess of cash (e.g., Kaplan and Zingales, 1997, 2000; Fazzari et. al., 2000). Gomariz and Ballesta (2013) conclude that Market imperfections, as well as information asymmetries and agency costs can lead to negative NPV projects being carried out (overinvestment) and to the rejecting of positive NPV projects (underinvestment). In addition, according to the pecking order theory, equity capital –the most information-sensitive security– has large adverse selection cost so firms prefer to raise equity as a financing means of last resort. By contrast, debt capital has much less adverse selection cost and internal funds completely avoid the problem. So in this study, we investigate the impact of capital structure on the investment efficiency in the companies listed in the Tehran Stock Exchange. Study results show that there is a negative relationship between capital structure (leverage) and investment efficiency in the companies listed in Tehran stock exchange.

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### References


