Investigating Effect of Governmental Ownership on the Investment Decisions of Managers

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Abstract
The establishment of appropriate corporate governance mechanisms is a basic measure for the efficient use of resources, improvement of accountability, transparency, observance of fairness and the rights of all stakeholders of the company. Each of the intra and inter organizational mechanisms monitor the processes and activities of the company and improve the accountability to achieve the other strategic objectives of the company. One of these mechanisms is the institutional investors and state ownership. The purpose of this study was to evaluate the effect of governmental ownership on the investment decisions of managers in companies listed in Tehran Stock Exchange. In this study, three aspects of managers’ investment decisions including investment policy, dividend policy and financing policy are used. This study in terms of purpose is applied and in terms of methodology is causal and correlational and finally in terms of tense is ex post facto. Target population of the study includes companies listed in Tehran Stock Exchange. By using systematic elimination sampling, 102 companies during 7 years, i.e. 714 firm-years, are included in the statistical population of the study. The study period is from 2008 to 2014. To test the hypotheses, the linear regression model and ordinary least squares method were used. The results show that state ownership has a significant effect on the investment decisions of managers in all dimensions except investment policy so that it has a significant negative impact on managers’ financing policy and in contrast the state ownership has a significant positive impact on dividend policy. Other findings showed that the company’s size has a significant positive impact on managers’ decision about dividend policy and financing. Return on assets has a significant positive impact on dividend policy and in contrast the rate of return on assets has a significant positive impact on financing policy. However, no significant impact was observed in the control variables of company’s size and return on assets on the investment decisions of managers. The operating cash flow has a significant positive impact on the investment decisions of managers and has also a significant positive impact on managers’ financing policy but no significant effect was observed on managers’ financing policy.

Key words
Managerial ownership; Investment decisions of managers; Institutional investors

DOI: 10.6007/IJARAFMS/v5-3/1737
URL: http://dx.doi.org/10.6007/IJARAFMS/v5-i3/1737

1. Introduction
In recent years, much progress has been made on the issue of corporate governance in the world and the leading countries in this field still continue to strengthen the corporate governance. In this regard, the participants in corporate governance and the issues such as shareholders and their relationships, responsibility, the improvement of the performance of the board of directors, board committees, auditors and accounting systems and internal controls are paid much attention. On the other hand, accountants and auditors, minor investors, other actors in the field of money and capitals are aware of the existential philosophy and the need for continuous improvement of corporate governance. Corporate governance system which involves a set of relationships between the company’s management, the board of directors, shareholders and other stakeholder groups can be one of the main factors which improve the efficiency of the economic system. Corporate governance provides a structure through which the company’s objectives are set and the means of achieving objectives and monitoring performance are determined. This system creates the required incentive for achieving the company’s goals in management and provides the effective monitoring, so that the companies use the resources with more efficiency (Hasas Yeganeh and Baghumian, 2007).
Appropriate corporate strategies make companies profitability, which in turn increases the stock prices and dividends paid to shareholders. They showed that companies with good governance compared to other companies have higher value added. Therefore, they concluded that application of mechanisms of governance system such as ownership and board structures could make economic decisions of managers with high profitability and optimal performance (Brown and Caylor, 2005).

It should be noted that ownership structure of different company differ. Part of the ownership of companies is in the hands of minority shareholders and the other part is in the hands of the major professional investors, i.e. institutional investors. Depending on the type of ownership, monitoring of management performance in the mentioned companies could also be different. So that in the first type companies, outside shareholders to monitor the performance of managers and to evaluate the company’s business prospects are mainly rely on overall publicly available information such as financial statements. However, in the second type, confidential information such as the ownership of company’s stock and valuable information on the company’s future business prospects of business strategies through a direct relationship become accessible to the owners of the shares by managers.

Managers do two types of tasks: (1) the decision management tasks, including development of long-term strategies and adopting investment and financing decisions, and (2) decision control tasks, including the recruitment of high-level executives, determining ways for compensating their activities, punishing them if necessary, and monitoring capital allocation decisions (Fama and Jensen, 1983). Specifically, monitoring the quality of financial reporting information, which will be released to the public, is among the decision control tasks of managers (Beasley, 1996). Fama and Jensen examined the importance of non-duty (outside) members of the board in carrying out task of controlling the board’s decisions. If the non-duty managers are independent of the management, it seems that in terms of protecting the interests of shareholders compared to local managers have better position to prevent managerial opportunism (Fama and Jensen, 1983).

2. Theoretical basics of the research

In the following, to improve our understanding of the ownership structure and features of the board and our understanding of this concept and investment decisions, managers attempt to examine both the dependent and independent variables of the study in detail. In addition, by exploring the background of each of them, the present study extends the previous researches and reviews the literature on this subject.

2.1. Corporate Governance

The corporate governance means the rules, regulations, structures, processes, cultures and systems that facilitates achieves to the goals of accountability, transparency, justice and observing the rights of beneficiaries. This word is derived from the Greek word “kyberman”, which means guiding or governing. This word from the intended Greek word transferred into the Latin word of “Gubernare” with the meaning of guiding and in the old France changed to “Governer” with the meaning of governing. In general, we can say that corporate governance addresses the way to control and manage companies, especially the role of the board in this regard, and defined the framework for an effective accountability system.

Abdelsalam et al. (2008) defines the corporate governance as one of the most important business topics at the beginning of 21st century. In fact, the term corporate governance received considerable attention only in the past three decades.

In Cadbury (1992), the presence of institutional investors and the establishment of the internal control system as well as internal auditing are greatly emphasized. The report in 1995 by Barry Green committee reexamined and in 1998 by the Committee of Hampl was finalized. Most countries of the world, including the UK, China, Korea, Canada and Australia have such a developed strategic system. In USA, after disclosure of Watergate election as well as the fraud in capital market of USA in 2001, the Sarbanes–Oxley Act or the same corporate governance law was enacted (Najjar and Taylor, 2008).

Corporate governance is multidisciplinary issue, which include various areas of sciences such as law, economics, management and political sciences. This subject and its extensive scope is one reason for the presence of many varied definitions, which is proposed by different individuals, financial and international institutions, experts and practitioners from different fields. Each of these definitions includes
environmental and structural features as well as existing interests in society, while some definitions proposed for them, so that in some texts the writer has focused on some specific parts of the broad topic while neglecting the other aspects (Organization for Economic Cooperation and Development, 2004).

Below some of the existing definitions for corporate governance system are presented.

Some writers have looked at corporate governance from a financial point of view and have defined it as promoting the efficiency of the allocation of savings of people to high-yielding investments. Governance rules need two main reasons: (1) resolving problems in batch and releasing the results for shareholders, and (2) protecting the interests of all voters. According to this view, corporate governance is defined as follows. Corporate governance include procedures that aligns the interests of investors and ensures that companies are guided such that to benefit all shareholders (Mayer, 1997).

Others group has emphasized the greater level of accountability relative to other stakeholders and has considered other beneficiaries. According to this view, Abor and Adjasi (2007) defined corporate governance as a process and structure that is used to guide and manage the business activities of company towards improving value and increasing accountability so that maximizing the value for shareholders in long term while considering the interests of other stakeholders too.

The importance of corporate governance in the world is to the extent that Standard & Poor’s Ratings Agency has introduced the following four criteria to measure the status of corporate governance:

1. Ownership structure;
2. Financial stakeholder relations;
3. The structure and activity of the board and CEO;
4. Accountability (transparency and information disclosure).

2.1.1. The importance of corporate governance

There is no doubt about the importance of corporate governance for the success of companies and social welfare. This is even more important given the recent events. The collapse of large companies such as Enron, World Com, Cisco, Lucent Technologies, Xerox, Global Crossing, Waste Management, Sun Beam, Adephi, Qwest, Tyco, Parmalat, Vivendi and etc. (which caused a huge loss for many investors and stakeholders and was due to the poor corporate governance) caused more emphasis on the need to improve and reform corporate governance at the international level. In America, as a rapid response to these collapses, the Sarbanes-Oxley Act was adopted in July 2002 (which has been irrevocable since 2004) and in January 2003, the reports by Hicks and Smith were published in Great Britain in response to the failures of corporate governance.

The reasons for the importance of creation of corporate governance can be summarized as follows:

- First, it can be said that the privatization process and market-based investment is one of the most important economic issues of the day. Privatization has increased the amount of corporate governance in sectors that were previously owned by the state and companies are forced for financing to rely on market and thus to try for being listed on exchange.
- Second, because of technological advances, the liberalization of financial markets, liberalization of trades and other structural reforms especially in the area of deregulation of pricing and the removal of restrictions on ownership, the way national and international companies allocate capital has complicated.
- Third, the movement of investment from private property to corporate ownership has increased and the importance of the role of financial intermediaries is increased. In other words, the role of institutional investors in many countries is enhanced.
- Fourth, reform programs in the field of finance have caused reformation of this sector of the domestic and foreign economy of the country. Although the current rules of corporate governance are replaced by former rules, but it lacks the necessary mechanisms and has created conflicts.
- Fifth, increased financial integrity at the international level and the flow of investments and transactions have caused problems at the international level.

Based on these cases, the routes through which corporate governance can affect the economic growth and development include (Molla husseini and Qurban nejad, 2009).

1. Corporate governance reduces capital expenditures and thus increases the value of company. This leads to absorbing investment and causes more employment.
2. Corporate governance improves the company's operating performance and in addition to managing, causes the efficient allocation of resources as well, which ultimately leads to an increase in shareholder’s wealth.

3. Corporate governance reduces the risk associated with the financial crisis. This issue becomes important when that such a risk leads to high costs.

4. Desirable corporate governance means better communication with stakeholders in business and social relations of firm.

2.2. Classification of Corporate governance

Attempts to classify corporate governance systems have always been faced with difficulties. However, one of the best efforts with more acceptability among the experts is the well-known classification of “inside and outside organizational systems”. Short et al. (1999) discussed this type of classification. The terms inside and outside are attempts to describe two types of corporate governance. In fact, most of corporate governance systems place between the two groups and have some common features. This duality in corporate governance is due to the differences existing between cultures and legal systems.

2.2.1. Inside governance systems

Inside governance system is a system in which a small number of shareholders own or control a country's listed companies. The owners may be family members of the founder or a small group of shareholders like the creditor banks, other companies or government. Inside systems because of having close relationships between companies and their major shareholders are also called relational systems (Hasas Yeganeh et al., 2006).

Although in the model of inside corporate governance because of the close relationship between owners and managers the agency problems are lower, but other serious problems do occur. Due to the minimal separation of ownership and management in many countries, for example, because of the ownership of the founding families, the power would be abused. Minority shareholders cannot be aware of the company's operations, there is little transparency and the occurrence of abuse seems likely. Financial transactions are vague and non-transparent and an increase in the misuse of funds is an example of negative flows in these systems.

2.2.2. Outside governance systems

The term outside refers to financing systems and corporate governance. In these systems, large companies are managed by managers and are owned by outside shareholders or private shareholders. The situation causes separation of ownership from management, first, introduced by Berlin and Means (1932). As mentioned in the agency theory of Jensen and Mac Ling (1976), the agency problem is associated with heavy costs, which shareholder and director must incur. Although in outside systems, managers handle companies directly, but indirectly outside members control companies. These members include financial institutions and private shareholders.

2.3. Dimensions of Corporate Governance

Theoretical foundations of corporate governance include six different aspects to control agency costs (Kumar, 2003).

1. Ownership Structure;
2. Capital Structure;
3. Board Structure;
4. Managerial Remuneration;
5. Product Market Competition;

In this study, with respect to various aspects of corporate governance, we have studied some aspects of the ownership structure in companies listed on Tehran Stock Exchange.
2.3.1. Ownership structure theory

The effect of ownership structure on performance and return of company is a complex and multi-dimensional issue. For this reason, many conflicts between interests of individuals and groups can be expected, including conflict of interest between owners and managers, shareholders and creditors, legal and natural stakeholders, inside and outside stakeholders etc. However, one of the most important aspects of agency theory is about the lack of convergence of interests between managers and shareholders, which is the main subject of most of researches in this area. According to experts, shareholders should have always effective and careful monitoring of management and should always strive to prevent conflicts in objectives and diversion in management efforts. However, shareholders by electing directors and delegating the power of decision-making to them might in some circumstances to be placed in a passive position and their weakness largely depends on the level of performance, accuracy and exactness of decisions of other shareholders (Pushner, 1993).

2.3.1.1. Ownership structure

Several definitions with various terms are presented for ownership structure and different words such as shareholding and ownership structure are used for this concept. Ownership structure or shareholding means the distribution of stock and the ownership rights based on the voting rights and capital as well as the nature and existence of the stockowners (Jafari seresht, 2011).

The most basic pillar of corporate governance is ensuring the correct application of the governance of shareholders on the company's handling. However, certain obstacles cause that the application of this governance especially for small shareholders to face obstacles. Hence, one of the most important issues in corporate governance is awareness of ownership structure and its grading in a standard scale so that by which we can develop strategies needed for the establishment of corporate governance. Accordingly, the status of shareholder’s ownership can be divided into 3 main categories (Saghir, 1993).

- Partial: ownership rate of 5% to 20% of company’s stocks;
- Effective: ownership rate of 20% to 50% of company’s stocks;
- Controller: ownership rate of above 50% of company’s stocks.

In this study, from different ownership structures, institutional ownership, state ownership, the ownership of free float shares and ownership concentration, because the regulatory and controlling roles of this group of shareholders in corporate governance and their relationship with the capital structure of listed companies in Tehran Stock Exchange are taken into consideration. Further investigation on these structures leads to the recognition or at least closeness to an optimal structure.

2.3.1.2. Institutional ownership

Regarding that institutional investors play important role in corporate governance mechanisms, their combination in companies can have different effects on the performance of companies and the way companies’ information are reflected in the market. Institutional shareholders look at corporate governance completely different from the real shareholders. Because companies have valuable criteria than natural shareholders and have needed incentives for development, control and monitoring on investors from a specialized perspective, therefore, they should have a more active role in corporate governance than partial shareholders. Greater access of them to company’s information and the power of their participation in sensitive decision-making of company enables them more actively monitor the company's performance and when they feel the company's performance is on the wane, they can make changes in the board. In practice, in the early 1990s, institutional investors increasingly dominated markets in USA and took a more active role in corporate governance than before (Bainbridge, 2000).

Demsets (1983) says if management acts contrary to the interests of shareholders, they can by their right of voting to change the composition of the Board as well as institutional investors would have the motivation and strength for aligning the interests of management and shareholders. That is why institutional investors play a major role in monitoring the company. Investors with blocked shares might monitor the managers. They control managers through their role as a member of the board (if applicable) and by selling their shares, which reduces the stock price and exposes company to the ownership by others.
2.3.1.3 Effective control theory

According to this theory, institutional investors due to their inherent characteristics compared to small shareholders have a certain influence by which they can monitor and align the management performance towards the interests of shareholders. The group of shareholders because of having high facilities, expertise and expertise with a low cost can monitor the performance of managers (Azibi et al., 2010).

2.3.1.4 Strategic alignment theory

According to this theory, it is possible that sometimes expectations of institutional investors conflicts with the interests of managers and I line with the interests of these two groups, the interests of small shareholders might be ignored. In the event of such a situation, the expected beneficial effects of effective supervision of the main shareholders on managers reduce and in this case, in fact, a conflict of interest between major shareholders and other owners can be observed, which due to the influence of major shareholders would ultimately led to the detriment of other shareholders (Jafari Seresht, 2011).

2.3.2 Board ownership

According to Kaplan (1990) investors, including managers, compared to other shareholders have purchased the shares on average 40% more than the market value of the shares. However, the reason for sharp increase in share prices of these companies was announced to be the acquisition, therefore, the general belief is that increase in the percentage of managerial ownership through reducing the information asymmetry reduces the conflict of interest between managers and shareholders. The ownership of managers leads to greater alignment of interests of managers and shareholders and increase problems relating to agency between both parties (Jensen et al., 1976). When the percentage of managers’ ownership is high, overstating the current earnings lead to further reward by management. However, due to the reversal of this overstatement, firm value (the wealth of management as shareholder) will reduce in the future. The basis of this argument is the expectation that managers with high percent of ownership stay for a longer term in the company. As a result, with increasing managerial ownership, their motives and interests become aligned with that of other shareholders and agency problems will decrease (La Fond et al., 2008).

Anlin Chen et al. (2005) in his research on the management structure found that the presence of managers and directors of the board in ownership has a lowering effect on the performance of the return on equity (E/P), which is inconsistent with the theory of agency. McConnell et al. (1990) found that with increasing the percentage stock ownership by board members, the control moves from foreign shareholders (free float) to managers and managerial owners of the stock and the company’s performance weakens, which is due to the rise in cost of agency management. However, Jensen (1993) stated increase in the percentage of managerial ownership helps the alignment of interests of managers and shareholders so that when the percentage of ownership of board members increases, the company’s performance through reducing the agency cost increases.

2.4 The combination of ownership and free float shares

Free float is a percentage of the total capital of the company, which is available for trading on the stock market. In other words, it is part of company’s stocks, which is tradable without any limitation and it is a number equal to ratio of non-tradable shares on the total shares. Free float is the amount of share that we expect in the near future become tradable, i.e. if a suitable price is proposed, the owner will sell it. To calculate the free float, the combination of shareholders must be reviewed and strategic shareholders must be identified. Strategic shareholders are those shareholders that in the short term are not going to sell their shares and usually want for applying their management to maintain the stocks. In calculating the free float, the number of shares owned by strategic stakeholders subtracts from the total number of shares.

Morgan Stanley Foundation defines the free float as the proportion of a company’s stocks that is tradable on the market and is not held by strategic shareholders for managerial intentions. Strategic investors are shareholders that usually invest with managerial and long-term goals in the stock of companies and their shares are not considered as free float. Typically, these stakeholders include
government, government-related companies, public investment funds, managers and members of board of companies and their relatives, company’s founders, company’s employees (to which non-tradable shares are given) and subsidiary companies (if they have purchased the shares of the original company).

Non-strategic shareholders are shareholders that the main purpose of them from buying and selling of shares is obtaining profit and they have no managerial objective of buying shares of a company. Usually, this type of shareholders include natural persons, investment funds, joint venture funds, the pension funds, insurance companies, social security funds etc.

The aim of observing the minimum free float is contributing to efficiency of market functionalities. In fact, the exchange in countries with less free float has less depth and is very fragile. To development the market, we should avoid of focusing on a certain company or industry and achievement to the market depth realizes when the supply and dealing of a large stock do not change the balance of market price. Among the reasons for low depth of markets are its small size, low number of actors and the low free float.

2.5. Funding policy (financial leverage)

Financial leverage is creates to provide optimal financing for the company and if the company is unable to offset these costs will face with a risk that is called the risk of bankruptcy.

Since the cost of financing subtracts from the profit before subtracting the interest and taxes, thus, the degree of financial leverage examines the relationship between earnings before deduction of interest and tax with earnings per share. In other words, the degree of financial leverage shows that with one percent change in EBIT how much the percentage of EPS per share will change.

Whatever the financing of the company through debt and preferred stock increases, the fixed costs of funding increases and the company will face greater financial risk, and as a result, the company would expect higher dividend (Rahnamay Roodposhti, 2008).

2.6. Investment policy

Investment efficiency depends on all commitments and tasks of companies represents only by positive net present value. There can be at least two determinant factors for the efficiency of investment. First, company to finance its investment opportunities needs increase in capital, which in this case in an efficient market, all projects with positive net present value should be funded. In other words, if managers have opportunities for investment in projects with positive net present value should be able to finance it. Second, even if the company has decided to increase the capital, there is no guarantee that investments will be done correctly. For example, managers can by choosing inappropriate projects to have an inefficient investment.

Companies that face financing constraints may because of the high cost of financing to reject projects with positive net present value, which leads to less investment (Verdi, 2006).

In addition, in examining the relationship between firm value and investment in testing investment hypotheses more or less found that there is an optimal level of investment. Companies that invest less than this optimal level from the problem of low investment and companies that invest more than this optimal level from the problem of over-investments will harm. Companies having more investment opportunities maintain their level of investment close to the optimum level.

2.7. Dividend policy

Cash dividend and stock cash return because of being objective and concrete have special place for some of beneficiaries. In fact, actual and potential users of financial information are eager to know the power of creating liquidity and distributing it among the shareholders, because this information not only provide a clear picture of the situation of the company, but also makes possible the estimation and evaluation of the future situation and undoubtedly they are important in the decision-making process.

The importance of this issue from the viewpoint of firm’s manager is serious both in terms of using data obtained from the process of firm’s administration and in terms of the evaluation of market their performance. Therefore, part of the attention and power of firm’s managers is focused on the issue called “dividend policy”.
As the cash flow within the company for the assessment of the status of its power and cash state is of utmost importance, naturally, cash dividends per share as one of the sources creating liquidity for people is of great importance. On the other hand, cash dividends per share somehow contain its special message to the market. This phenomenon in the finance literature is known as “messaging effect” or sometimes “information content effect”. According to this concept, companies increase their cash dividend only when they expect increase in future profits, otherwise the increased cash dividend should be reduced to its original level. Therefore, increasing cash dividends contains a message for the market that it is expected that the company’s performance will improve (Jahankhani and Qorbani, 2007).

2.7.1. Determinants of dividend policy

Two basic researches have examined determinant factors of dividend policy. The first study is by Rozeff (1992) about the way companies determine their ratios of cash dividends and the second study is by Barclay et al. (1995) about determinants factors of financial leverage and dividend policies of companies.

According to Rozeff, determinants factors of company’s dividend policy can be categorized as follows:

- The transactions cost of financing from capital market;
- Financing restrictions due to the increase in financial and operating leverage;
- Agency costs represent of outside ownership (minority shareholders).

These cases suggest that company to minimize its total trading costs, which are due to capital market financing, restrictions on financing from the capital market, financing constraints, and agency costs.

In another study, Barclay et al. (1995) discussed three factors as potential determinants factors in the company's dividend policy: (1) the rate of investment opportunities, (2) the messaging effects of changes, and (3) firm size. In their model, return on cash dividend is considered as the alternative variable for policy of dividing earnings.

2.7.2. Common dividend policy

Public corporations must choose certain policies in relation to dividend. Some dividend policies are as follows:

2.7.2.1. Regular dividend policy

According to Brealey and Myers (2003), it is the common policy that companies usually pay the dividend in cash four times a year. However, sometimes some companies might pay an additional cash dividend per year.

2.7.2.2. Residual Dividend Approach

According to Mason and Lee (2006), Residual Dividend Approach is an attitude in which it suggests that company can pay the cash dividends when it has no suitable investment opportunity. The purpose of the company of Residual Dividend Approach is that before payout to meet its capital needs and simultaneously to maintain a favorable ratio of debt on equity.

To implement Residual Dividend Approach, we should determine the cash we can’t provide without selling new shares. If the needed amount is more than the available amount, no money will be distributed as cash dividend. However, if the required fund is less than the available amount, part of earning that is not needed to finance the project will be paid as the cash dividend (Ross et al., 2009).

2.8. Theoretical relationships of managers’ investment decisions and ownership structure

Corporate governance is a series of inside and outside control mechanisms, which makes an appropriate balance between equity on one hand and the needs and powers of the board on the other hand. Finally, these mechanisms make provide a reasonable guarantee for shareholders, suppliers of funds and other beneficiary groups that their investments would return with a reasonable profit and value creation mechanisms will be taken into account. Gompers et al. (2003), Brown and Caylor (2005), Black et al. (2006), Durnev and Kim (2005) and Vienna Drobetz (2004) consistently found that appropriate strategy
and governance of the company make the company more profitable, which leads to increased stock prices and dividends paid to shareholders. They showed that companies with good governance than other companies have higher value. Therefore, they concluded that the use of corporate governance mechanisms such as ownership and board structures could result the economic decisions of managers to high profitability and favorable performance.

The ownership structure in different companies differs. Part of ownership of companies is in the hands of minority and natural shareholders and the other part is in the hands of the major professional shareholders or institutional investors. Bushee (1998) defines institutional investors as major investors such as banks, insurance companies, investment companies and the pension institutions. It is generally thought that the presence of institutional investors might lead to changes in the behavior of companies. This stems from the monitoring activities that these investors do perform.

The results of all the economic activities of the company are not reflected in current earnings, but the benefits resulting from some activities such as long-term sales contracts and investment as well as research and development activities will be realized in the following years. Since this information is available to the professional (institutional) investors, mentioned shareholders analyze the stock values information that is not reflected in earnings and they consider them in pricing the stock (Bushman and Smith, 2001).

This information often is transmitted through channels such as common members of the Board will be given to shareholder’s corporate network and through which most of the investment companies access to the information. Prevalence of ownership of a company by other companies can play major role in reducing information asymmetry between managers and outside investors in the capital market (Ibrahim, Kordlar, 2008).

In particular, monitoring the quality of financial reporting information, which released to the public, is among the controlling tasks of managers (Beasley, 1996). Fama and Jensen (1983) examined the importance of non-duty (outside) members of the board in the task of controlling decisions made by the board. If non-duty managers are independent of the manager, its position in terms of protecting the interests of shareholders against managerial opportunism seems to be better than that of inside managers.

In contrast, some studies on the structure of the board have reached the conclusion that higher ratio of non-duty members of the board does not necessarily lead to better performance. Hermalin and Weisbach (1998) found no statistical correlation between the composition of the board’s members and the value of company.

Klein (1998) evaluated the fact that members of the board conduct both tasks of decision management and decision control. His main insight was that responsible (inside) managers because of their unique experience and knowledge about the company are very valuable in determining long-term strategies. He also found little evidence on the value of non-duty managers.

The size of the board is the other relevant aspect of the operation of the board. In particular, with growth in the size of the board, the damages increase, because a larger board prevents the free and effective exchange of ideas between managers (Jensen, 1993). In addition, it is possible that the alliance costs between members of the board would increase with the size growth, which makes it easy for the senior executive to monitor other members of the board (Eisenberg et al., 1998). When the board size increases, losses of the process and costs of alliance exceeds the benefits from entrance many managers (Yermack, 1996).

3. Literature review

Gompers et al. (2003) conducted a study to examine the relationship between corporate governance and long-term return on equity and the company value and accounting performance evaluation criteria. They concluded that the companies with good governance based on the governance principles have higher value than the other companies and their financial statements show the higher standards and indicators of accounting (such as the rate of return on equity). Brown and Caylor (2005) found that the company’s good governance makes more profitability and this issue increases the share price and dividends paid to shareholders. In the studies conducted by Black and colleagues (2006), Durnev and Kim (2005) and Vienna
Drabtz (2004), the similar results were obtained which showed the positive relationship between corporate governance mechanisms and the value created for shareholders and value creation.

Bi et al. (2004) investigated the relationship between corporate governance and market value in China’s stock market. Their findings suggest that state ownership has a significant negative relationship with the market value of companies.

Schmid and Zimmermann (2005) investigated the relationship between the ownership percentage of managers and that of administrators of company’s value. The study was performed on a sample including 145 Swiss companies using a system of simultaneous equations and reached the conclusion that the ownership percentages of managers and administrators have positive effect on the value of the company. They also found that outside Block ownership statistically has no significant effect on the firm’s evaluation. It is interesting that even benner et al. (2004) for a sample of Swiss companies found a significant negative correlation between the block shareholders and the company’s performance.

Krivogorsky (2006) examined the effect of board composition and ownership structure on company’s performance in the European countries. In this study, to measure performance, ratios ROA, ROE, market-to-book value (MTB) are used. The study population included 87 companies from nine countries of the European Union that during the years 2000 and 2001 were active in NYSE. The final sample consisted of 81 companies. The results include a strong positive relationship between relational ownership and profitability ratios, and between the proportion of independent (non-duty) directors of the board and profitability ratios. In addition, in this study no strong relationship between the ratio of inside members of the board or managerial ownership and profitability in studied companies. Among other results of the study was that the concentration of power (the lack of separation of duties of CEO and director of the board) in a company has negative correlation with company’s profitability.

Tasia and Gu (2007) examined the relationship between institutional ownership and company performance for the years 1999 to 2003. Institutional ownership is equal to the shares held by state-owned enterprises of the total capital stock and these companies include insurance companies, financial institutions, banks and state-owned corporations. They showed that the institutional investors may help the investors to reduce the agency problems resulting from the separation of management and ownership.

Moradi (2008) studied the relationship between institutional investors and the quality of earnings in Iran during the years 1998 to 2005. The results suggest a positive relationship between institutional investors and the quality of earnings, while these results indicate that the focus of institutional investors does not play a role in improving the quality of earnings but also causes a decline in the quality of earnings based on some models. Sulong and Mat nor (2010), in a study evaluated the effects of corporate governance mechanisms (type of ownership structure and board of directors) and dividend policy on company value. The results showed a positive relationship between concentrated ownership, state ownership and the number of board members and the company value.

Khodadadi and Taker (2012) in a part of their study entitled as “the effect of corporate governance on financial performance and value of companies listed in the Tehran Stock Exchange” examined the effect of government ownership on the financial performance and value of stock companies. The results showed that the concentration of state ownership has significant positive relationship with the performance and value of companies. Taghavi and colleagues (2013) in a study entitled as “The analysis of corporate effect on the stability of the banking system in developing countries (with an emphasis on the ownership index of banks) examined the effect of banks’ ownership structure as a measure of corporate governance on the bank stability indicators of some developing countries. The results show that state ownership has a greater effect on increasing the overdue claims than private and foreign ownership. However, the foreign ownership acts better than the other banks in terms of profitability.

Lim et al. (2014) in a research on corporate ownership investigated corporate governance reforming and timeliness of earnings during the period 1996 to 2009 by using panel data of 1276 companies in Malaysia. The results showed a non-linear relationship between the ownership concentration and delay in reporting, but no relationship was found for timeliness. Family and foreign companies as the largest shareholder of price discovery are less on time. Although delay in reporting in the period after the merge of corporate governance law in Malaysia is shorter in exchange regulations, its effect on the timeliness of price discovery is mainly trivial.
4. The hypothesis of the study

Regarding the background of foreign and domestic researches, the question addressed in this study is that, is governmental ownership effective on investment decisions of managers? Therefore, considering the above question, the following hypotheses are presented.

The main hypothesis: Governmental ownership is effective on investment decisions of managers.

Sub-hypotheses derived from the main hypothesis are as follows:

1. Governmental ownership is effective on manager’s decisions about investment policy.
2. Governmental ownership is effective on manager’s decisions about dividend policy.
3. Governmental ownership is effective on manager’s decisions about financing policy.

5. Research variables and the way to measure them

In this study, one independent variable, one dependent variable and three control variables are used, each of them are discussed in the following.

5.1. Independent variables

The independent variable in this study is governmental ownership, which calculates as follows. Governmental ownership is the total share of the state and quasi-state organizations and agencies.

5.2. Dependent variable

Given that in this study, we have examined the governmental ownership effect on investment decisions of managers, investment decision of managers is considered as the dependent variable.

Investment decisions of managers are any decision about the use of the company’s cash resources to increase shareholder’s wealth (Jahankhani, 1995), which in this study to calculate it, three indicators of investment policy, dividend policy and financing policy are used.

5.2.1. Index of investment policy

It is equal to the ration of investment funds of the company divided by its total assets:

\[ \text{LNV} = \left( \frac{\text{AMN}_t - \text{AMN}_{t-1} - \text{DM}_t}{\text{Total Assets}} \right) \]  \hspace{1cm} (1)

Where:
- \( \text{AMN}_t \): Net fixed assets of current year;
- \( \text{AMN}_{t-1} \): Net fixed assets of last year;
- \( \text{DM}_t \): Depreciation cost of current year.

5.2.2. Dividend policy index

This index calculates based on the following formula:

\[ \text{DIV} = \left( \frac{\text{Dividends}}{\text{EPS}} \right) \]  \hspace{1cm} (2)

(Rostami and Pakdel, 2014)

5.2.3. Financing policy index

To calculate this variable, the company’s financial leverage is used:

\[ \text{LEV} = \left( \frac{\text{TotalDebit}}{\text{Total Assets}} \right) \]  \hspace{1cm} (3)

(Dadashi et al., 2015)
5.3. Control variables

Also in this research, some special features of the company such as company size, return on assets and operating cash flow are considered as control variables, which are explained as follows:

1. Firm size: is equal to the natural logarithm of total assets of firm;
2. Return on assets: is equal to net earnings divided by firm’s assets at the end of period;
3. Operating cash flow: is equal to operating cash flow divided by assets of the end of period.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governmental ownership</td>
<td>GOWN</td>
</tr>
<tr>
<td>Investment policy</td>
<td>INV</td>
</tr>
<tr>
<td>Dividend policy</td>
<td>DIV</td>
</tr>
<tr>
<td>Financing policy</td>
<td>LEV</td>
</tr>
<tr>
<td>Firm size</td>
<td>SIZE</td>
</tr>
<tr>
<td>Return on assets</td>
<td>ROA</td>
</tr>
<tr>
<td>Operating cash flow</td>
<td>OCF</td>
</tr>
</tbody>
</table>

6. Research methodology

The present study aims to investigate the role of governmental ownership on investment decisions made by managers. Therefore, the study in terms of purpose is applied and in terms of the strategy of implementation is descriptive, and in terms of examining the relationships between variables is correlation and causal. In addition, since in this study, the past data is used in the analysis of hypotheses, the study in terms of nature is ex post facto. In addition, since the historical data are used in testing the hypotheses, the research is classified as quasi-experimental.

6.1. The population

The population of the study includes those listed companies in Tehran Stock Exchange that were active between 2008 and 2014. Using systematic elimination sampling, 102 companies were placed in the sample. In other words, those companies of the population that had the following conditions were selected and the rest were eliminated:

1. To make comparability possible, the end of financial year should adapt on the end of calendar year.
2. During the period of the study, the company should have none stopping activity should not have changed its accounting period.
3. All the required information from companies should be available for research.
4. The company should not be among banks and financial institutions (investment companies, Brokers, financial holding companies and leasing).

6.2. Data collection and analysis methods

This study is based on library method. Information about the literature, theoretical basics and previous studies on the subject of study is collected through library resources and through studying books and periodicals, articles and foreign and domestic dissertations. Information and data needed to evaluate and test research hypotheses was extracted from the financial statements and reports submitted by companies to the stock exchange as well as Tadbir Pardaz software and CDs including the financial information of companies.

6.3. Test models with respect to test hypotheses of three models

According to the test’s hypotheses, the models of the effect of state ownership on the investment decisions of managers consist of 3 models as follows:
Model 1: Models of testing the effect of governmental ownership on investment decisions policy

\[ INV_{ij} = \alpha + \beta_1(GOWN_{ij}) + \beta_2(SIZE_{ij}) + \beta_3(ROA_{ij}) + \beta_4(OCF_{ij}) + \epsilon_{ij} \]  

(4)

Model 2: Models of testing the effect of governmental ownership on investment dividend policy:

\[ DIV_{ij} = \alpha + \beta_1(GOWN_{ij}) + \beta_2(SIZE_{ij}) + \beta_3(ROA_{ij}) + \beta_4(OCF_{ij}) + \epsilon_{ij} \]  

(5)

Model 3: Models of testing the effect of governmental ownership on investment financing policy:

\[ LEV_{ij} = \alpha + \beta_1(GOWN_{ij}) + \beta_2(SIZE_{ij}) + \beta_3(ROA_{ij}) + \beta_4(OCF_{ij}) + \epsilon_{ij} \]  

(6)

7. Findings

This hypothesis is discussed about the effect of state ownership on the investment decisions of managers and is tested using the Pearson test and finally the conclusions are reached using the results of the main hypothesis.

First, the descriptive statistics of the interested variables and then the test hypotheses of the research are presented.

7.1. Descriptive statistics

In the descriptive analysis, researcher using descriptive statistics tables and indexes such as central and dispersion parameters describes the collected data. The results of the descriptive analysis of the data are shown in Table 2.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Symbol</th>
<th>NUMBER</th>
<th>AVERAGE</th>
<th>DIVISION</th>
<th>MINIMOM</th>
<th>MAXIMOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governmental own</td>
<td>GOWN</td>
<td>714</td>
<td>0.297</td>
<td>0.236</td>
<td>0.000</td>
<td>0.837</td>
</tr>
<tr>
<td>Investment policy</td>
<td>INV</td>
<td>714</td>
<td>0.078</td>
<td>0.132</td>
<td>-0.685</td>
<td>0.878</td>
</tr>
<tr>
<td>Financing policy</td>
<td>LEV</td>
<td>714</td>
<td>0.616</td>
<td>0.217</td>
<td>0.080</td>
<td>0.985</td>
</tr>
<tr>
<td>Dividend policy</td>
<td>DIV</td>
<td>714</td>
<td>0.841</td>
<td>0.908</td>
<td>0.000</td>
<td>2.514</td>
</tr>
<tr>
<td>Firm size</td>
<td>SIZE</td>
<td>714</td>
<td>13.661</td>
<td>1.400</td>
<td>10.031</td>
<td>18.437</td>
</tr>
<tr>
<td>Return on assets</td>
<td>ROA</td>
<td>714</td>
<td>0.139</td>
<td>0.141</td>
<td>-0.320</td>
<td>0.656</td>
</tr>
<tr>
<td>Operating cash flow</td>
<td>OCF</td>
<td>714</td>
<td>0.286</td>
<td>0.719</td>
<td>-1.864</td>
<td>3.106</td>
</tr>
</tbody>
</table>

The results of the descriptive analysis of the study data show that the average state ownership for the sample companies is equal to 29.7 of the total observations. The highest and lowest amounts of state ownership for the sample companies equal to zero and 83.7%. The average investment policy of managers is positive and is equal to 0.078. Average of financing policy for companies of sample is 61.6% and shows that corporate executives often tend to use debt financing. The average of dividend policy of administrators is 0.841, which shows that the companies in the sample on average distribute 84.1% of earnings per share in the form of cash dividends among shareholders. The maximum value for this variable is equal to 2.514. The average of return on assets for companies of the sample is equal to 0.139 and average ratio of operating cash flow to assets is equal to 0.286.

7.2. Examining data distribution

The first step to start the process of testing hypotheses is checking for normality of data. To check data normality, some hypotheses were formulated as follows:

H₀: Distribution of data is normal.
H₁: Distribution of data is not normal.

To test these hypotheses, Kolmogorov-Smirnov test is used and results are presented in Table 3.
Table 3. Results of Kolmogorov-Smirnov test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Symbol</th>
<th>z statistic</th>
<th>Significance level of z statistic (P-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management own</td>
<td>GOWN</td>
<td>2.153</td>
<td>0.000</td>
</tr>
<tr>
<td>Investment policy</td>
<td>INV</td>
<td>1.101</td>
<td>0.125</td>
</tr>
<tr>
<td>Financing policy</td>
<td>LEV</td>
<td>1.304</td>
<td>0.067</td>
</tr>
<tr>
<td>Dividend policy</td>
<td>DIV</td>
<td>1.135</td>
<td>0.101</td>
</tr>
<tr>
<td>Firm size</td>
<td>SIZE</td>
<td>1.021</td>
<td>0.162</td>
</tr>
<tr>
<td>Return on assets</td>
<td>ROA</td>
<td>1.240</td>
<td>0.092</td>
</tr>
<tr>
<td>Operating cash flow</td>
<td>OCF</td>
<td>1.334</td>
<td>0.075</td>
</tr>
</tbody>
</table>

Results of (K-S) test shows distribution of the dependent variables of research (including investment policy of managers, financing policy of managers and dividend policy) follow a normal distribution. The results also show that the distribution of variables managerial ownership, firm size, rate of return on assets and operating cash flow follow a normal distribution.

7.3. Correlations test between variables

In this study, to determine the correlation between quantitative variables the Pearson correlation is used and the matrix of correlation between variables is presented in Table 4.

The results show that there is a significant positive correlation between the state ownership and the variables of investment policy, managers’ dividend policy, company’s operating cash flow and the size of the company. There is also a significant negative correlation between the state ownership and managers’ financing policy. There is a significant positive correlation between the manager’s investment policy and the variables of return on assets and operating cash flow. There is a significant negative correlation between the managers’ financing policy and the variables of managers’ dividend policy, the return on assets and operating cash flow of the company. In contrast, there is a significant positive correlation between managers’ financing policy and the size of the company.

Among other results of matrix, we can refer to the significant negative correlation between company size and operating cash flow as well as a significant positive correlation between the company’s rate of return on assets and operating cash flow of companies. Other results are presented in the correlation matrix.

Table 4. Pearson’s correlation matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>Symbol</th>
<th>GOWN</th>
<th>INV</th>
<th>LEV</th>
<th>DIV</th>
<th>SIZE</th>
<th>ROA</th>
<th>OCF</th>
</tr>
</thead>
<tbody>
<tr>
<td>governmental ownership</td>
<td>GOWN</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment policy</td>
<td>INV</td>
<td>-0.003</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financing policy</td>
<td>LEV</td>
<td>**-0.212</td>
<td>-0.041</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend policy</td>
<td>DIV</td>
<td>**0.165</td>
<td>-0.016</td>
<td>*-0.110</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>SIZE</td>
<td>**0.139</td>
<td>0.039</td>
<td>**0.186</td>
<td>**0.241</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on assets</td>
<td>ROA</td>
<td>0.005</td>
<td>**0.156</td>
<td>**-0.381</td>
<td>*0.109</td>
<td>0.022</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Operating cash flow</td>
<td>OCF</td>
<td>**0.161</td>
<td>*0.101</td>
<td>*.0122</td>
<td>0.083</td>
<td>**-0.244</td>
<td>**0.164</td>
<td>1</td>
</tr>
</tbody>
</table>

* And ** show significance at 95% and 99%, respectively

7.4. Results of testing hypotheses

In this study the main hypothesis is examined and tested in the form of three sub-hypotheses. The main hypothesis: governmental ownership is effective on investment decisions of managers.

7.4.1. Results of first sub-hypothesis testing

The first sub-hypothesis suggests:

Governmental ownership is effective on manager’s decisions on investment policy.
According to the results of the first sub-hypothesis that are provided in table 5, the significance level of F statistic (0.000) is less than the accepted level of error (5%) and the total regression model is significant. Durbin-Watson statistic (2.058) is between 1.5 and 2.5, thus there is no correlation between the components of the model error. The study of the correlation between the independent variables indicates that the specific value of the index is less than 15. If the status indicator is less and the specific value is more and near to one, the regression will be more appropriate for the prediction. The results in the above table indicate that the status indicator and the specific value approve the use of regression. Due to the high (P-Value) of t-statistic for the acceptable error rate for $\beta_1$, the test results show that state ownership has a significant negative impact on the investment decisions of managers. Thus, the first hypothesis cannot be accepted at 95% confidence level. The results also showed that among the control variables, the rate of return on assets and operating cash flow have a significant negative impact on the investment decisions of managers. Coefficient of determination and adjusted coefficient of determination also show that the independent and control variables entered in the regression could explain 8.2% of the changes in the dependent variable.

### 7.4.2 Results of testing the second sub-hypothesis

The second sub-hypothesis suggests:
Managerial ownership is effective on manager’s decisions about dividend policy.

According to the results of the second sub-hypothesis that are provided in table 6, the significance level of F statistic (0.000) is less than the accepted level of error (5%) and the total regression model is significant. Durbin-Watson statistic (1.825) is between 1.5 and 2.5, thus there is no correlation between the components of the model error. The study of the correlation between the independent variables indicates that the specific value of the index is less than 15. If the status indicator is less and the specific value is more and near to one, the regression will be more appropriate for the prediction. The results in the above table indicate that the status indicator and the specific value approve the use of regression. Due to

### Table 5. Results of testing the first sub-hypothesis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Symbol</th>
<th>Beta</th>
<th>t statistic</th>
<th>P-Value</th>
<th>Checking for multicollinearity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Status Indicators</td>
</tr>
<tr>
<td>Fixed value</td>
<td>$\alpha$</td>
<td>-</td>
<td>-1.286</td>
<td>0.199</td>
<td>-</td>
</tr>
<tr>
<td>Governmental own</td>
<td>GOWN($\beta_1$)</td>
<td>-0.033</td>
<td>-0.667</td>
<td>0.505</td>
<td>0.955</td>
</tr>
<tr>
<td>Firm size</td>
<td>Size($\beta_2$)</td>
<td>0.079</td>
<td>1.321</td>
<td>0.321</td>
<td>0.891</td>
</tr>
<tr>
<td>Return on assets</td>
<td>ROA($\beta_3$)</td>
<td>0.196</td>
<td>2.321</td>
<td>0.000</td>
<td>0.960</td>
</tr>
<tr>
<td>Operating cash flow</td>
<td>OCF($\beta_4$)</td>
<td>0.140</td>
<td>2.781</td>
<td>0.006</td>
<td>0.894</td>
</tr>
<tr>
<td>Total</td>
<td>F statistic</td>
<td>7.069</td>
<td>2.058</td>
<td>0.000</td>
<td>0.667</td>
</tr>
</tbody>
</table>

### Table 6. Results of testing the second sub-hypothesis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Symbol</th>
<th>Beta</th>
<th>t statistic</th>
<th>P-Value</th>
<th>Checking for multicollinearity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Status Indicators</td>
</tr>
<tr>
<td>Fixed value</td>
<td>$\alpha$</td>
<td></td>
<td>-3.398</td>
<td>0.000</td>
<td>-</td>
</tr>
<tr>
<td>Governmental own</td>
<td>GOWN($\beta_1$)</td>
<td>0.189</td>
<td>2.505</td>
<td>0.000</td>
<td>0.948</td>
</tr>
<tr>
<td>Firm size</td>
<td>Size($\beta_2$)</td>
<td>0.281</td>
<td>5.746</td>
<td>0.000</td>
<td>0.925</td>
</tr>
<tr>
<td>Return on assets</td>
<td>ROA($\beta_3$)</td>
<td>0.102</td>
<td>2.478</td>
<td>0.000</td>
<td>0.954</td>
</tr>
<tr>
<td>Operating cash flow</td>
<td>OCF($\beta_4$)</td>
<td>0.098</td>
<td>1.589</td>
<td>0.089</td>
<td>0.901</td>
</tr>
<tr>
<td>Total</td>
<td>F statistic</td>
<td>10.269</td>
<td>1.825</td>
<td>0.000</td>
<td>0.091</td>
</tr>
</tbody>
</table>
the high (P-Value) of t-statistic for the acceptable error rate for β1, the test results show that state ownership has a significant negative impact on the manager’s dividend policy. Thus, the second hypothesis cannot be rejected at 95% confidence level. The results also showed that among the control variables, the size of the company and the returns on assets have a significant negative impact on the manager’s dividend policy. Coefficient of determination and adjusted coefficient of determination also show that the independent and control variables entered in the regression could explain 9/1% of the changes in the dependent variable.

7.4.3. Results of testing the third sub-hypothesis

The third sub-hypothesis suggests:
Governmental ownership is effective on manager’s decisions about financing policy.

Table 7. Results of testing the third sub-hypothesis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Symbol</th>
<th>Beta</th>
<th>t statistic</th>
<th>P-Value</th>
<th>Checking for multicollinearity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed value</td>
<td>α</td>
<td>-</td>
<td>-3.309</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Governmental own</td>
<td>MOWN(β1)</td>
<td>-0.145</td>
<td>-3.309</td>
<td>0.001</td>
<td>0.957</td>
</tr>
<tr>
<td>Firm size</td>
<td>Size(β2)</td>
<td>0.137</td>
<td>3.034</td>
<td>0.003</td>
<td>0.903</td>
</tr>
<tr>
<td>Return on assets</td>
<td>ROA(β3)</td>
<td>-0.404</td>
<td>-9.244</td>
<td>0.000</td>
<td>0.960</td>
</tr>
<tr>
<td>Operating cash flow</td>
<td>OCF(β4)</td>
<td>-0.079</td>
<td>-1.760</td>
<td>0.079</td>
<td>0.905</td>
</tr>
<tr>
<td>Total</td>
<td>F statistic</td>
<td>34.034</td>
<td>1.989</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P-Value</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the results of the third sub-hypothesis that are provided in table 7, the significance level of F statistic (0/000) is less than the accepted level of error (5%) and the total regression model is significant. Durbin-Watson statistic (1/989) is between 1/5 and 2/5, thus there is no correlation between the components of the model error. The study of the correlation between the independent variables indicates that the specific value of the index is less than 15. If the status indicator is less and the specific value is more and near to one, the regression will be more appropriate for the prediction. The results in the above table indicate that the status indicator and the specific value approve the use of regression. Due to the high (P-Value) of t-statistic for the acceptable error rate for β1, the test results show that state ownership has a significant negative impact on the manager’s financing policy. Thus, the third hypothesis cannot be rejected at 95% confidence level. The results also showed that among the control variables, the size of the company has a significant positive impact and the return on assets has a significant negative impact on the manager’s financing policy. Coefficient of determination and adjusted coefficient of determination also show that the independent and control variables entered in the regression could explain 24/9% of the changes in the dependent variable.

7.4.4. Summary of test hypotheses

Table 8. Summary results of hypothesis testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Description</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Governmental ownership is effective on manager’s decisions about investment</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>policy.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Governmental ownership is effective on manager’s decisions about dividend</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>policy.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Governmental ownership is effective on manager’s decisions about financing</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>policy.</td>
<td></td>
</tr>
</tbody>
</table>
8. Result analysis

The results of the sub-hypotheses resulting from the first hypothesis show that the state ownership had a positive impact on manager’s dividend policy and a negative impact on manager’s financing policy. This means that the presence of state ownership in the combination of company’s capital increases the distribution of dividends and the resistance to the policy of financing. This indicates that institutional investors have the power to monitor the management and to be ensured that they efficiently guide the company. They can also act mechanisms for controlling the agency costs.

8.1. Side results of the research

With respect to the side results of multivariate regression on the control variables of the research, it was concluded:

- Company size has a significant positive effect on managers’ decisions on dividend and financing policies.
- Rate of return on assets has a significant positive effect on managers’ decisions on dividend policy and in contrast, it has a significant negative effect on financing policy.
- Operating cash flow has a significant positive effect on managers’ decisions and a significant negative effect on financing policy of managers.

8.2. Conclusions

According to the analysis of the hypotheses, the general conclusion of this study is as follows:

The objective of this study is to evaluate the impact of state ownership on the investment decisions of managers of the listed companies in the Tehran Stock Exchange. The results show that state ownership has a significant effect on the investment decisions of managers in all dimensions except investment policy so that it has a significant negative impact on managers’ financing policy and in contrast the state ownership has a significant positive impact on dividend policy.

9. Research suggestions

According to the results of research, suggestions are proposed for future research as follows.

9.1. Suggestions based on the results

1. According to the results of research, the investors and creditors are suggested to pay attention to the impact of state ownership on the investment decisions of managers when analyzing the purchase of companies’ shares.
2. Also, the potential investors and creditors are suggested to pay attention to the impact of state ownership on managers’ financing policy.

References