Investigating The Impact Of The Criteria Determining The Duration Of Executive Directors' Bonuses On The Debt Maturity Structure Of Companies

Fereshteh Nouri[1*]

[1*] Master's degree, Department of Accounting, Faculty of Management, Central Tehran Branch, Islamic Azad University, Tehran, Iran

RTICLE INFO	ABSTRACT
	Increasing the transparency of information is often possible through the voluntary disclosure of information, and providing solutions to increase the amount of voluntary disclosure is of interest to the researcher. Some of these managers They believe that as much as the amount of profit divided between shareholders increases, in the same proportion, the fluctuations of executive directors' compensation will move towards the positive side in the short and long term. In some cases, the comparability of information has a significant effect on increasing or decreasing the maturity structure of companies' debt. The more the comparability of information increases, the more positive the views of shareholders and investors will be in relation to investing in the shares of the above companies, and finally the price fluctuations will move in a positive direction. Forecasting stock yield fluctuations is considered as one of the main patterns related to investors' decision making. In general, it can be stated that the more the short-term and long-term debt maturity structure of the companies increases according to the predefined patterns, the more the prediction of the volatility of the companies' stock returns will move to the negative side. will do Increasing the transparency of information related to the duration of bonuses paid to company managers is one of the most serious priorities and part of the reform programs in corporate governance. The purpose of this research is to investigate the impact of the criteria that determine the duration of executive directors' bonuses on the debt maturity structure of companies. This research is a library and analytical-causal study and is based on panel data analysis. In this research, the financial information of 105 companies admitted to the Tehran Stock Exchange during the period of 2016 to 2021 has been examined. The results of the research in connection with the confirmation of the first hypothesis of the research showed that information asymmetry as one of the criteria for determining the duration of executive directors' bonuses has a negative and inverse effect on the debt maturity structure of companies. Also, according to the analyzes carried out in connection with the confirmation of the second hypothesis of the research, we came to the conclusion that the fluctuations of the current ratio, as one of the criteria that determine the duration of the payment of executive directors' bonuses, have a positive and direct effect on the debt maturity structure of companies. In the continuation of the research results in connection with the confirmation of the third hypothesis of the research, it was indicated that the growth rate of stock issuance as one of the criteria that determines the duration of executive directors' bonuses has a positive and direct effect on the debt maturity structure of companies. Finally, according to the analyzes carried out in connection with the confirmation of the fourth hypothesis of the research, we came to the conclusion that the fluctuations of current costs as one of the criteria for determining the duration of executive directors' bonuses have a negative and inverse effect on the maturity structure of companies' debt.

Keywords: *the duration of executive directors' remuneration; Debt Maturity Structure and Panel Data.* |

1. Introduction

Hilary, Hsu, and Segal (2013) show that CEOs become more optimistic after a series of past successes and that more optimistic CEOs appear to exert greater effort. Campbell, Gallmeyer, Johnson, Rutherford, and Stanley (2011) provide evidence regarding the influence on CEO turnover, and Hackbarth (2008, 2009) examines the implications for capital structure decisions. Keiber (2005) considers a setting in which both the principal and the agent are overconfident, and Gervais and Goldstein (2007) show how agents who over-estimate the marginal productivity of their effort can amelio- rate free-rider and effort coordination problems. Moreover, CEO compensation is an important organizational aspect found to play a role in affecting managerial decisions toward social goals (Malmendier & Tate, 2015). Accordingly, this paper investigates the relationship between CSR and CEO compensation in order to answer an important question regarding what is the real motivation of CEO to engage in CSR activities. Moreover, this relationship is tested in different governance setting i.e. testing the moderating effect of corporate governance on this relationship. More importantly, it was found that such executive behavior was followed by an increase in CEO compensation (Masulis & Reza, 2015). Supportive empirical evidence was provided by Milbourn (2003) using data related to five top executives from US firms over the period 1993– 1998. Finance literature has traditionally offered two primary models of static trade-off and pecking order as explanations for debt-equity financing decisions. However, these models are viewed by Kisgen (2006) as inadequate because they do not account for how management views capital structure changes as a tool to obtain favorable rating changes that lower the overall cost of financing. Using annual measures of capital structure adjustments following identification of corporate credit ratings, Kisgen shows empirically that firms near broad rating changes are associated with greater net debt declines than firms not near broad rating changes. He concludes from this that it is the intense focus by management on exploiting beneficial moves in discrete costs associated with changes in ratings levels that strongly motivate capital structure decisions. A large number of studies find that firms with higher information asymmetry choose shorter debt maturity structure (e.g., Stohs, Mauer, 1996; Berger et al., 2005).

The independent directors of a company's board of directors have an important role in monitoring the performance of managers and play a fundamental role in preventing the expropriation of property and the wealth of their shareholders. Examining the ways of paying managers' bonuses is an important part of this monitoring process. Previous studies show that managers with their personal connections influence independent board members with higher compensation packages that are less sensitive to company performance and are related to their agents. Also, these results suggest that a board member may enjoy this friendly relationship and establish a "friendly relationship" with the company's management. Also, board members may adequately monitor the performance of managers. However, the relationship between the board of directors and the company's management in a loving and kind way may improve the communication between the board of directors and the management and increase the optimal performance of the company and help in consulting the managers for key decisions. In other words, we simply don't know whether a friendly relationship between management and independent board members is always harmful to a firm, or may even be beneficial. In addition, several studies have shown that information transparency resulting from the disclosure of information on bonuses paid to managers is a key corporate governance mechanism that can enhance corporate governance through accountability to public opinion. The literature on executive compensation has focused more on CEO long-term compensation plans, called CEO inside debt. Firms pay CEOs not only in the form of inside equity with stocks and stock options or short-term incentives such as cash and bonuses but also with inside debt in the form of deferred compensation and pensions. Wei and Yermack (2011) analyze how the market reacts to inside debt. They find that after the Securities and Exchange Commission (SEC)mandated pension reporting in 2006, firm risk decreases, and firm value decreases as inside debt increases. Cassell, Huang, Sanchez, and Stuart (2012) demonstrate how CEO inside debt affects CEO investment projects.

A small but growing number of studies have examined how credit supply shocks affect corporate debt maturity. For example, Custodio, Ferreira, and Laureano (2013) demonstrate that demand-side factors at the firm level do not fully explain debt maturity adjustments for U.S. firms and that supply-side factors related to public debt markets have remarkable impacts. In contrast to previous research on the importance of financial market development, we introduce a new dimension from the perspective of credit supply shocks: the critical role of human capital in the financial sector in shaping corporate debt maturity choices. nancial intermediaries have some advantages in monitoring firms, explaining the stylized fact that financial intermediaries usually hold short-term debt. Hence, if human capital in the financial sector helps mitigate information asymmetry, the decreasing monitoring cost of short-term debt would reinforce the preference of financial intermediaries for short-term debt, suggesting that corporate debt maturity would decrease. There fore the best of our knowledge, it is the first to explore the effect of the financial sector's human capital on corporate debt maturity. Most previous works investigate the determinants of the corporate debt maturity from the perspectives of firm characteristics (e.g., Brockman et al., 2010; Custodio et al., 2013; Guedes &

Opler, 1996; Stohs & Maurer, 1996), industry environments (e.g., Boubaker, Saffar, & Sassi, 2018; Parise, 2018), and institutional differences (e.g., Fan et al., 2012; Zheng, Ghoul, Guedhami, & Kwok, 2012). In particular, studies on the importance of financial development use market size indicators as their measurement items (Fan et al., 2012).

As a result, firms with long-vesting CEO incentives that are designed to induce long-term investments might borrow short-term debt as a signal to debtholders and equity holders in order to alleviate information asymmetry. Pay duration is calculated as the weighted average of the vesting periods of different components of executive pay, and debt maturity is measured as the weighted average number of years to maturity of the debts. We find that longer CEO pay duration is associated with shorter corporate debt maturity. The result also holds in the sample of new debt issues where we consider new issues of debt only. These baseline findings are consistent with the prediction from the information asymmetry hypothesis that CEOs with long-vesting incentives choose more short-term debt to mitigate information asymmetry. Following Barclay, Max, and Smith (2003), Johnson (2003), and Datta et al. (2005), we also conduct a two-stage simultaneous equations analysis to account for the simultaneity of leverage and debt maturity choices, and our results continue to hold. Further, we investigate firms' debt versus equity choices and the cost of new debt. We find that longer CEO pay duration is significantly associated with more issuance of new debt and less issuance of new equity. It suggests that firms with long-term CEO incentives prioritize the use of debt financing over equity financing, which is consistent with that these firms face high levels of information asymmetry, and therefore prefer financing through debt over equities to avoid the higher information costs associated with equity issuance as predicted by the pecking order theory in capital structure (Myers and Majluf, 1984). Prior literature has documented that firms that use managerial incentive schemes with long vesting periods innovate more, engage in less stock repurchases, and spend more in research and development and capital expenditures (Baranchuk et al., 2014; Edmans et al., 2017; Edmans et al., 2018). The intrinsic differences between short- and long-term debt, as well as the inconsistent empirical evidence on the link between leverage and earnings management, point to necessity to conduct research that specializes in the effect of short-term debt. Several studies document a positive relationship between unsigned discretionary accruals, as a measure of earnings management, and debt supporting financial distress theory. However, argue that debt's monitoring role has largely been ignored, and this desirable role is more likely to be credited to short-term debt rather than long-term counterpart. Consistently, Goodwin (2013) contend that shortterm debt helps alleviate agency costs, reducing earnings management (or increasing earnings quality) for firms with higher creditworthiness. haviors and operating performance (Fu & Tian, 2016; Wang, Chiu, & King, 2020). The increasing availability of micro-level data and rapid developments in quantitative methods have allowed economists to infer the determinants of corporate debt maturity from the credit demand side, highlighting the characteristics of firms and institutional environments. The theoretical framework helps to clarify the mechanisms underlying the effects of the financial sector's human capital on a firm's leverage and the mixture of short- and long-term debt. The study was presented in the first part of an introduction on the topic, followed by a second section, findings and in the third part, the importance and necessity of research and in the fourth, and theoretical studies continued in the fifth, hypothesis and in the sixth, models and analyzes of descriptive statistics and correlations between variables stated in part VII outlines the results of hypothesis testing and the results will be expressed in the eighth.

2. Statement of Problem

Aivazian et al. (2005) claim that the link between leverage and investment is negative and that the effect is significantly stronger for low-growth firms than for high-growth firms. Research by Jiming et al. The copious literature on the choice between debt and equity dwarf studies on the structure of debt maturity. Early works, for instance Merton (1974), assuming perfect capital markets, show the irrelevance of debt maturity structure in affecting firm value. Why firms use both short and long-term debts seem to be only partially understood under the existence of market imperfections. The choice of debt maturity structure is important to firms since a badly chosen mix may cause an inefficient liquidation of a positive-NPV project. It can also be used by firms as a signalling device in an imperfect market to provide information about their quality, credibility and future prospects. According to signalling models, under-(over-) value firms issue short-(long-)term debt to signal their under-(over-)valuation. Indeed, Fama (1990) suggests that maturity structure of corporate debt reflects the incentive to provide information, monitoring and bonding relevant for contracts. Recent empirical studies find evidence supporting the notion that long-vesting compensation encourages managers to pursue investment strategies over the long-term whereas CEO's short-term incentives have negative impacts on real investment decisions (e.g. Marinovic and Varas, 2019; Ladika and Sautner, 2020; Aktas et al., 2021). our study explains why firms use more short-term debt than long-term debt. Using data on U.S. industrial firms, Custodio et al. (2013) find a remarkable decrease in short-term corporate debt over 1976–2008, especially for firms with relatively severe information asymmetry and new firms issuing public equity. However, demand-side determinants are insufficient to account for the trend, making it crucial to examine supply-side factors. Considering that the share of high-skilled workers in the financial sector is rising across economies (Philippon & Reshef, 2013), we argue that increasing human capital in the financial sector—a supply-side determinant—contributes to the decline in corporate debt maturity. More importantly,

consistent with Custodio et al. (2013), our results confirm that the debt maturity theory focusing on information asymmetry, rather than agency costs, better explains increasing short-term debt. In corporate finance, the question about investment and financing decisions has long been a concern (Hackbarth et al. (2007), Hackbarth and Mauer (2012), Lyandres and Zhdanov (2014), and Luo et al. (2020), among others). However, much of literature focuses on the interaction between public (market) debt financing and investment. The public debt can be difficult (or even impossible) to renegotiate, and it leads to inefficient bankruptcy liquidation. Whereas private debt is easy to renegotiate when firms are in financial distress. According to the long-term policies, company managers seek to reduce the ratio of debt maturity structure. As much as the debt maturity structure of the companies decreases according to the pre-determined patterns, the productivity and efficiency of the companies will increase in the same proportion in the long term. The more the investors have a positive prediction regarding the returns of the companies' shares, according to the existing fluctuations, the more they will find the desire to invest in the shares of the above companies. Aivazian et al. (2005) that because the market is not really perfect, the conflict of interest between shareholders, creditors and managers of the enterprise related to the level of debt and debt maturity structure can lead to overinvestment and underinvestment. A good example is that in low- growth firms with large free cash flows, leverage can be used as a discipline device because it discourages managers from investing excessively in risky projects. Crouzet (2016) also demonstrates that firms' investment policies are strongly influenced by their ability to continuously adjust debt maturity structure. The available evidence on the link between debt maturity structure and corporate investment is mainly generated in developed markets such as the United States. Studies to examine debt maturity structure using evidence from developing markets are limited (Khaw and Lee, 2016). Scherr and Hulburt (2001) suggest that if a debt has a maturity of one year, it is considered long-term. Some researchers like Barclay and Smith (1995) consider long- term debt to be debt with a maturity of 3 years or 5 years as Schiantarelli and Sembenelli (1997). Research results show that debt maturity structure has an impact on investment decisions of enterprises. According to Rashedi and Zadeh (2015), debt maturity structure has a positive influence on investment decisions. Specifically, an increase in long-term debt will increase the investment rate. However, according to Barclay and Smith (1995). Saquido (2003) concludes that liquidity and firm size are not significantly related to investment; however, there is still an important relationship between investment and revenue growth and fixed capital ratio. In general, it can be stated that the more the short-term and long-term debt maturity structure of the companies increases according to the predefined patterns, the more the prediction of the volatility of the companies' stock returns will move to the negative side. will do Increasing the transparency of information related to the duration of bonuses paid to company managers is one of the most serious priorities and part of the reform programs in corporate governance. according to the stated content, the main problem of this research is to investigate the impact of the criteria that determine the duration of executive directors' bonuses on the debt maturity structure of companies.

3. The importance and necessity of research

Capital structure research has emphasized the importance of agency costs and information asymmetries for optimal leverage ratios and optimal debt maturity. Both market frictions can result in significant debt overhang and asset substitution problems, potentially affecting the firm's investment decisions (Myers, 1977). With risky debt outstanding, managers face an "over-hang problem" with incentives to pass-up some positive net present value projects because bondholders will gain a larger share of the project's value. Managers also face an "asset substitution problem" with incentives to accept somenegative net present value projects that have a large upside return but (a more probable) lower downside return. Debt investors recognize the potential for these expost investment distortions, and protect their positions ex ante by adjusting loan pricing, security, seniority, maturity, and other debt contract features (Daniels, Ejara, & Vijayakumar, 2010). Executive compensation in the form of inside debt was mentioned by Jensen and Meckling (1976), who modeled the firm's financing of assets debt and equity. Accordingly, the agency paradigm views increasing CSR as being accompanied by an increase in CEO power, entrenchment and compensation (Bebchuk & Fried, 2003; Vo & Canil, 2016). In this regard, previous empirical research has documented an increase in CEO compensation when a CEO exploited CSR for his/her personal interests (Barnea & Rubin, 2010; Milbourn, 2003). Barnea and Rubin (2010) asserted that investments in CSR should positively improve corporate value otherwise they were a waste of resources. The study argued that CEOs overinvest in CSR to enhance their reputation which would be reflected in career opportunities and bargaining power. Unlike most prior studies, the strength of each component of the CEO compensation structure is included in our work to provide a more in-depth analysis. The literature has provided evidence illustrating how CEO preferences may vary according to the different components of compensation structure. CEOs tend to prefer short-term low-risk compensation as in salaries and bonuses, rather than long-term compensation such as equity (Kadiyala & Rau, 2004). (1980) argue that choosing a short-term or long-term debt for investment projects, enterprises need to maintain using a reasonable debt maturity and will

minimize conflicts between shareholders and bondholders. Terra (2011) argues that small businesses often use more short-term debt for investments, so they have to bear higher agency costs due to underinvestment. The maturity structure of short-term debt is very important for managers. As much as the maturity structure of the short-term debt of the companies, according to the pre-determined patterns, increases the positive fluctuations of stock returns, in the same proportion, we can expect an increase in the productivity and efficiency of the companies. had According to the predetermined policies, some managers believe that the more the maturity structure of long-term debt of companies increases, the more the volatility of stock returns will decrease in the long-term period. The growth rate of bonuses paid to managers can have a significant impact on the growth rate of the company's stock market value. As the growth rate of the stock prices of the companies increases, in the same proportion, the growth rate of the stock market value will experience more positive fluctuations and finally, with the increase in the stock prices, we will see an increase in the capital expenditures of the companies. Fluctuations in bonuses paid to managers and predicting patterns related to these fluctuations can greatly affect the comparability of information. Thus, a breakdown of the CEO compensation structure can offer evidence of the real intention of CEOs to engage in CSR activity there are institutional impediments to timely and accurate reporting by CRAs such as their inability to access timely information, inadequate methodologies, and a preference for stable and accurate ratings (Goldstein, Kaminsky, and Reinhart (2000), Cheng and Neamtiu (2009), and Gu, Jones and Liu (2014)). Therefore, ratings levels and the occasional change in these levels are at best considered to reflect untimely stable long-term credit risk exposures that slowly and occasionally shift through time (Cantor (2001), Altman and Rijken (2004), Cantor and Mann (2007)). There are assets in an investment project; therefore, it is difficult to recover capital from liquidation. In this case, to protect the interests of creditors, they will create disadvantageous debt covenants for debtors to pay higher interest rates and limit the size of loans. Barnea et al. Increasing the transparency of information is often possible through the voluntary disclosure of information, and providing solutions to increase the amount of voluntary disclosure is of interest to the researcher. As information transparency can have ameliorating effects on board oversight efforts, information transparency can also protect shareholders' interests. In this context, it is noteworthy that the board of directors performs two broad functions: supervision and consultation according to management's opinion. In this way, the principles that consist of things that maintain friendly relations with senior managers in order to use their advice based on increasing the improvement of communication are important, but these same principles may also weaken the supervision of the board of directors on the performance of the managers. . Previous studies from the Management Association show that senior managers have a significant impact on their compensation and when company managers are weak and do not have the right motivation to perform their duties, the amount Incentive schemes increase pay and inefficiency.

Kim et al. (1995) significant positive relation between debt maturity, and leverage and firm size. Barclay and Smith (1995) find that larger firms with lower market-to-book ratio have longer debt maturity. Guedes and Opler (1996) report that larger, better and the firms with higher growth opportunities are most likely to issue shortterm debt. Stohs and Mauer (1996), however, find only mixed support for an inverse relationship between debt maturity and market-to-book ratio. Ozkan (2000) reports negative relation of debt maturity with firm size and market-to-book ratio. A large number of studies find that firms with higher information asymmetry choose shorter debt maturity structure. For example, Barclay and Smith (1995) find that firms with more information asymmetry use short-term debt. High information friction deters firms from borrowing long-term debt. As a result, short-term debt mitigates information asymmetry. Diamond (1991) argues that short-term debt creates liquidity risks leading to a borrower's loss of control rents in the event that lenders are unwilling to refinance due to the lenders can pledge on future rents. Therefore, using short-term debt exposes firms to the risk of lenders' excessive liquidation threats, which could force firms to cut back the business or forgo investment opportunities.

The importance of comparability of information is because the more comparability of information increases, the flexibility of companies will also increase, and finally, the ratio of maturity structure of companies' debt will experience a significant decrease in long-term time frames. The prediction of stock fluctuations can be greatly influenced by the growth rate of dividends and the growth rate of stock prices. In some cases, with the increase in the volatility of cash flows and the importance of capital expenditures, we can expect an increase in the amount of positive fluctuations in executive directors' rewards. Considering that managers seek to increase the profitability of companies in the long-term and short-term periods, in the same proportion, they seek to reduce the ratio of the maturity structure of short-term and long-term debt and increase of bonuses received. As much as the debt maturity structure of the companies decreases according to the pre-determined patterns, in the same proportion, the financing costs and the financial costs of the companies are also reduced and in the long-term periods of time, we see an increase in the company's profitability. In addition, He and Xiong (2012) suggest that short-term debt amplifies a firm's rollover risk leading to greater default risks. The growth rate of stock prices is a pattern that can increase or decrease cash flows of companies. The more the cash flows of the companies increase, the comparability of the financial statements and information of the companies increases, and with the increase of this comparability, the flexibility of the companies in connection with the changes in the leverage ratio. The finances of companies will also increase. The maturity structure of the debt is one of the models that is significantly affected by the liquidity ratio of the shares. As much as the maturity structure of short-term debt has a positive effect on the

prediction of fluctuations in the compensation of executive directors of companies and is affected by the liquidity ratio of stocks, it will increase the productivity and efficiency of companies in the long term. Fluctuations of bonuses paid to managers can be considered as an optimal model in relation to the increase or decrease of fluctuations in capital expenditures of companies. Some managers seek to increase the positive fluctuations of capital expenditures according to the pre-determined patterns. As long-term and short-term debt maturity structures experience a positive growth rate according to the patterns developed in connection with the fluctuations of capital expenditures, the market value of the companies' shares increases in the same proportion and ultimately increases the company's stock returns. will be Shares are a reward that is paid for the investment of shareholders and investors. The more the volatility of stock returns moves to the positive side, the bonuses paid to investors and shareholders will increase in the same proportion, and finally, with the increase of bonuses paid, the amount of new investments in these companies will increase. did Comparability of information related to the amount of bonuses paid; It can also significantly affect the credit rating of companies. The more the comparability of information, especially the information related to the debt maturity structure of the companies, increases, the more the credit rating of the companies will increase significantly in the long-term period by gaining the trust of the investors.

We will be Forecasting the fluctuations of executive directors' compensation can be greatly influenced by other patterns such as the ratio of stock liquidity and the growth rate of the stock market value. When the comparability of information increases and the growth rate of the stock price is in line with the increase of the liquidity ratio of the stock, the cash flow can be expected to increase to the same extent and finally, the productivity and efficiency of the companies can be expected to increase. Discussions and margins related to the amount and method of paying bonuses to the executive directors of the companies are one of the main concerns of the investors of the companies admitted to the Tehran Stock Exchange. Most of the time, investors and shareholders of companies seek to understand whether the fluctuations of remuneration paid to executives have an impact on the maturity structure of companies' debt or not. Also, most of the investors and shareholders of the companies have this issue in their mind that is it possible that the voluntary disclosure of information and increasing the transparency of information will affect the thinking of the executive managers and increase or decrease the value of the companies? According to the stated content, the main goal of this research is to investigate the impact of the criteria that determine the duration of executive directors' bonuses on the debt maturity structure of companies.

4. Theoretical study

4.1. A review of research conducted

The first prediction of our model is thus that a firm's leverage is positively related to the financial sector's human capital. Second, the financial sector allocates deposits to satisfy the equilibrium condition that the marginal revenue of debt with different maturities is equal. By mitigating the information asymmetry faced by capital suppliers that may have a comparative advantage holding short-term credit (Fan et al., 2012), human capital in the financial sector reduces monitoring costs, leading to an increase in the marginal revenue of short-term debt contracts. My paper is also related to the literature exploring the interactions of investment and capital structure, such as Tan and Yang (2017) and Luo et al. (2020), among others. However, these studies mainly focus on the interaction between investment and public (non-renegotiable) debt financing, but few investigate how ex ante private (renegotiable) debt financing affects both investment and financing decisions. The analysis in our paper complements and extends these studies by focusing on examining the relation among optimal capital structure, expansion investment and debt restructuring with a credible threat in a unified dynamic model. The contributions most closely related to our paper are et al. (2020). The former two papers consider strategic debt restructuring with a credible threat and financing policies for restructuring funds Kisgen's (2006) results are consistent with the findings of Graham and Harvey (2001), who note that financing flexibility and credit quality are extremely important to management and rank as the two most important concerns in capital structure decisions. Kisgen provides greater detail on how credit rating concerns are related to capital structure decisions by showing that notch rated firms issue relatively less debt than non-notch rated firms. Kisgen concludes that these results reflect management's belief that relatively less debt will help the firm to benefit through either increasing the probability of lower costs associated with an upgrade or decreasing the probability of higher costs associated with a downgrade. Accordingly, ratings levels and changes in these levels will be of critical focus to management, particularly when factors such as mandatory investment limitations/requirements, access to capital markets, capital requirements, credit quality signals, bond coupon rates, contract acceptance/denial, and bond repurchasing decisions are considered relevant.

In general, corporate governance in Jordan is, unlike developed countries, characterized by a weak institutional framework, high ownership concentration that results in internally oriented firms. It is well documented that CEOs gain power and higher compensation when corporate governance practices are weak. Core et al. (1999) in this regard argued that CEO power increased when the board of directors became less

effective, had a lower ratio of independent directors and fewer institutional shareholders while concentrated shareholder ownership was found to have a negative effect on CEO compensation (Benz et al. (2001), Cyert et al. (2002)). Because debt and equity investors have asymmetric payoff functions, they have different preferences for the risk of firm activities. Debt investors use several contracting features to moderate the firm's ability and incentives to pursue excessive risk after using debt in the firm's capital structure. While loan pricing, collateral requirements, and loan security are debt contract features the lender can use to moderate the firm's ability and incentive to pursue aggressive tax planning (Hasan et al., 2014), funding the firm's assets with short-term debt exposes the firm to "rollover risk." Rollover risk is the potential that lenders will not renew debt financing on previous terms (or at all), and this threat can control potential conflicts of interest between equity and debt investors (Smith & Warner, 1979). Frequent renegotiation/re-pricing of debt – due to having shorter rather than longer-maturity debt – limits the shareholders' or managers' incentives to pursue policies that do not maximize firm value at the expense of debt investors (Childs, Mauer, & Ott, 2005). We expect that debt investors will require more frequent debt renegotiation via shorter maturity of loans to tax aggressive firms. Previous studies have documented that managerial stock ownership and compensation delta and vega have significant impacts on debt maturity structure due to asset substitution risk (Brockman et al., 2010). Our paper links duration of executive compensation, a novel dimension of managerial incentives, to debt maturity in mitigating information asymmetry. Therefore, by examining the effect of CEO pay duration on corporate debt maturity choice, we provide evidence on an important yet unaddressed issue that is at the confluence of debt maturity and managerial incentive literature.

Edmans and Liu (2011) theorize a compensation scheme that includes both equity and debt. They conclude that as a manager's personal leverage, defined as debt over equity, decreases, firm risk increases. The CEO can increase stock value by taking on higher risk in order to reap higher returns. Introducing more inside debt has the opposite effect. He will take on less risk and make the firm equity value less volatile. Evidence shows that CEOs, especially those over the age of 60, tend to become more risk averse and hedge more (Belkhir & Boubaker, 2013). The latter three papers consider the interaction of debt renegotiation, investment and financing. The key difference between our paper and Pawlina (2010) is that we consider a new debt renegotiation pattern in which creditors only accept debt restructuring offers when a credible threat is posed by shareholders. In general, when firms are in distress, shareholders can threaten lenders and force concessions from them with the possible liquidation of the firm. With respect to Pawlina (2010), owing to debt restructuring occurring prior to default, the shareholders' liquidation threat may become non-credible since it would be better for them to keep servicing the existing. In contrast to Pawlina (2010), our model ensures that the value received by creditors in renegotiation will be at least as large as that under formal bankruptcy. This design can make debt restructuring occur at the bankruptcy threshold such that the liquidation threat offered by shareholders is credible. Thus, renegotiation would benefit both the creditors and shareholders and thus reach a Pareto improvement for the two negotiating parties. In contrast to exacerbating the underinvestment problem, as in Pawlina (2010), the possibility of credible debt renegotiation in our paper mitigates underinvestment and risk-shifting incentives. Furthermore, our paper examines a partial permanent debt reduction, but Pawlina (2010) a full temporary debt reduction. If the principal optimally adjusts the agent's pay to this bias, mildly overconfident agents are compensated with less convex contracts than their peers, whereas extremely overconfi- dent agents are compensated with more convex contracts. This paper differs in that I focus on managerial optimism rather than overconfidence. That is, I consider an agent who believes that his projects are intrinsically better than they really are rather than an agent who overestimates the precision of some signal regarding the project's quality. In the empirical literature, Graham, Harvey, and Puri (2013) is the most closely related work. Using data obtained from psychometric tests, the authors show, among other findings, that CEOs with a higher risk-aversion are less likely to be compensated with performance-based pay, and that CEOs with a higher rate of time preference are more likely to be paid in salary. The literature indicates that family owned-firms might overpay their CEOs to earn their loyalty and motivate them to increase family wealth (Croci et al., 2012).

Le et al. (2017) research and examine the impact of debt maturity structure on investment decisions of enterprises. To be specific, the research sampled 155 manufacturing and processing enterprises listed on the stock market. During the period from 2010 to 2016, the research results show that the debt maturity structure has a positive effect on investment decisions for all firms in the sample and firms with low growth opportunities. In Vietnam, research on the influence of debt maturity structure on corporate investment is still limited in number. This is a potential research gap to assess the impact of debt maturity structure on investment decisions of listed companies in the context of Vietnam's economy. Weinberg (1994) suggests two explanations for the effects of cash flow and investment. First, when cash flows suddenly increase, financial constraints arising from asymmetric information are loosened and it is possible that the investment demand of small and growing businesses also increases. Second, young companies are often engaged in the learning process and with a large internal financial potential will increase investment. In addition, the empirical analysis results of Gala and Julio (2016) provide evidence that small firms invest significantly more than large firms or firm size has a negative impact on investment decisions of investors. In particular, small firms have significantly higher investment rates than large firms, even after controlling for standard

experience proxies for the firm's actual investment opportunities and financial position, including Tobin's Q and cash flow.

Myers (1977) emphasizes that debt maturity can be one important solution to the agency costs of debt that result from the overhang and asset substitution problems. Essentially, the manager's incentives to depart from firm value-maximizing policies are decreased when they soon have to renegotiate existing debt. Childs et al. (2005) study the interaction of investment and financing policies in a model including agency costs of debt resulting from shareholder-bondholder conflicts over investment policy. They emphasize that frequent renegotiation/re-pricing of debt (e.g., due to shorter maturity) makes the value of the debt less sensitive to changes in firm value. Therefore, lenders have an effective tool in debt maturity to protect their investment. This interpretation of

debt maturity is also modeled in Flannery (1986), Diamond (1991), Flannery (1986) predicts that highquality firms prefer short-term debt to signal their type. Stohs and Mauer (1996) provide empirical support to this. Diamond (1991) shows that even low-quality firms would prefer short-term debt due to liquidity risk; only medium-rated firms issue long-term debt. These arguments are empirically supported, among others, by Barclay and Smith (1995). The third strand deals with *contracting costs* arguments. Myers (1977) argues that short-term debt mitigates underinvestment problem if it matures before growth options are exercised, as there remains an opportunity for lenders and firms to re-contract.

Given that human capital in the financial sector strengthens the quality of financial services, two competing theoretical views contribute to its effects on corporate debt maturity. First, according to the theory of debt maturity focusing on the role of agency costs, short-term debt (i.e., debt of less than one year) is more efficient in reducing agency costs than long-term debt (i.e., debt of more than one year) (e.g., Brockman, Martin, & Unlu, 2010; Datta, Iskandar-Datta, & Raman, 2005;), suggesting a positive relationship between the financial sector's human capital and corporate debt maturity. For instance, Myers (1977) illustrates that underinvestment behavior caused by the conflict of managers and shareholders can be controlled by issuing short-term debt that matures before growth options are exercised, while Brockman et al. (2010) and Datta et al. (2005) find a significantly negative impact of managerial ownership on corporate debt maturity. Our research is related to a strand of the literature that uses structural models to examine debt renegotiation between shareholders and creditors. These works address issues ranging from debt renegotiation for temporary debt reduction (Sundaresan and Wang, 2007) to permanent debt reduction for debt-to-equity swaps (Fan and Sundaresan, 2000). Similarly, Barnea et al. (1980) argue that short-term debt may mitigate asset substitution problem since the value of short-term debt is less sensitive to changes in firms' asset value. In particular, Aboody and Lev (2000) argue that investments in R&D contribute to information asymmetry in three ways. First, R&D projects are often unique to the developing firm and thus difficult for outside investors to derive information about their values by observing the R&D performance of other companies. Second, there are no organized markets for R&D and therefore no prices from these markets to convey information about the productivity of a firm's R&D. Third, R&D is instantly expensed in financial statements, which provides investors no information on its value changes. For example, Gopalan et al. (2014) use pay duration and find that firms that provide longer pay duration to their CEOs have lower earnings-increasing accruals. Baranchuk et al. (2014) empirically show that CEOs who are given incentive compensation with longer vesting periods adopt more innovative strategies, which supports the theoretical prediction on the association of longer managerial incentive schemes and innovation by Manso (2011). In addition to innovation, which is a form of corporate long-run investment (Lerner et al., 2011), recent studies have also examined the links between short-termism in managerial incentives and other firm investments. For example, Cadman and Sunder (2014) document that in the initial public offering setting short-horizon investors such as venture capitalists provide managers with short-term incentives to maximize current stock price and find a positive relation between CEO incentive horizons and long-run abnormal stock performance. Chang et al. (2021) document that an exogenous removal of short-sale constraints deters short-term incentives and leads to longer CEO compensation duration.

They consider the investigation of how debt renegotiation depicted by a Nash bargaining game affects the capital structure and business behavior of firms. However, the above literature does not address the possibility of debt renegotiation, i.e., creditors may reject it ex post in the absence of a credible threat, and discuss the financing means available to obtain restructuring funds at renegotiation, i.e., whether to take on new debt or equity or a combination of both. Nishihara and Shibata (2016) and Silaghi (2018) consider this problem and analyze the use of equity financing, debt financing and asset sales in renegotiation. Both works consider debt restructuring with a credible threat developed through an exogenously given debt repayment premium. In addition, incorporating renegotiation frictions, debt renegotiation may fail with a certain probability and lead to early default, as discussed by Antill and Grenadie (2019). Last, the empirical literature also explores the impact of debt restructuring on firms' investment decision. Such as Jiang et al. (2019) use the panel data of listed companies in China from 2005 to 2016, and then find the debt restructuring has a significant effect on investment efficiency. The empirical findings is line with the theoretical results in our model, which implies that we provide an potential economical explanation for the empirical findings.

5. Assumptions

Based on the theoretical and research conducted assumptions research provided below:
H1: Information asymmetry, as one of the criteria for determining the duration of executive directors' bonuses, has an effect on the debt maturity structure of companies.
H2: Fluctuations in the current ratio as one of the criteria for determining the duration of executive directors' bonuses have an impact on the debt maturity structure of companies.
H3: The growth rate of share issuance, as one of the criteria that determines the duration of executive directors' bonuses, has an effect on the debt maturity structure of companies.
H4: Fluctuations in current costs as one of the criteria for determining the duration of executive directors' bonuses have an impact on the debt maturity structure of companies

6. Methods

This survey and the purpose the research correlational. the quasi-experimental research design, because of the historical data used. the population of this study, all of the companies listed in Tehran Stock Exchange during the period from 2016 to 2021 and sample includes companies that by the end of 2016 are listed in Tehran Stock Exchange, financial period to the end of March, the research during the financial year have not changed and data required for this study is available. Restrictions on the intended number 105 corporations (all years) was selected as the ultimate example. Information and data necessary to carry out research through official websites Tehran Stock Exchange including site development Research and Islamic Studies (Rdis), company Information Exchange, new Software outcomes collection and preliminary analysis was required in an Excel spreadsheet. The final analysis using the software Eviews and was Spss and Minitab. To test the hypothesized model for panel data regression and statistical methods used.
Research models derived from research studies Fu eta al (2022) estimated as follows:

$Debt\ Maturity\ Measure_{i,t}$
$$= \alpha_0 + \beta_1 \text{Pay Duration}i - \text{Delta}_{i,t} + \beta_2 \text{Pay Duration}i - \text{Vega}_{i,t}$$
$$+ \beta_3 \text{Pay Duration}i - \text{New Issues}_{i,t} + \beta_4 \text{Pay Duration}i - \text{Term}_{i,t} + \beta_5 \text{Firm Size}_{i,t}$$
$$+ \beta_6 \text{Leverage}_{i,t} + \beta_7 \text{Asset Maturity}_{i,t} + \beta_8 \text{B/M}_{i,t} + \varepsilon_{i,t}$$

In the above example:

$\varepsilon_{i,t}$ = Random error of firm i in year t.

6.1. Descriptive statistics for variables

In descriptive statistics, data analysis using index of dispersion parameters such as mean and median, and standard deviation, skewness and elongation done. The relationship between the mean, median, and the main central index data show, so that if the data on a regular basis row axis, the mean value is exactly the balance point or center of distribution. Standard deviation of the distribution parameters and the distribution the data show. Skewnes of the parameters determining the deviation from symmetry and asymmetry index databases. If the community has a symmetric distribution, the skewness coefficient is equal to zero, if the skew to the left, the skewness coefficient is negative and if you have a skew to the right, the coefficient of skewness is positive. Stretching towards the normal distribution is the distribution of the index. Summary descriptive statistics of the variables after the screening model and outlier removal software 20 Spss is presented in Table 1-1.

Statistics										
		DEBT MATURITY MEASUREi,t	Pay Durationi-Deltai,t	PAY DURATIONI-VEGAi,t	PAY DURATIONI-NEW ISSUES i,t	PAY DURATIONI-TERMi,t	Firm Sizei,t	Leveragei,t	Asset Maturityi,t	B/Mi,t
N	Valid	630	630	630	630	630	630	630	630	630
	Missing	0	0	0	0	0	0	0	0	0
Mean		.553131	.685081	.674106	.628630	.240699	.227976	.134591	.143809	.732743
Std. Deviation		.0926767	.0717739	.2320693	.2336187	.2242059	.1768388	.1554703	.1376511	.0549145
Skewness		-.059	-.486	-.950	2.010	1.667	1.737	7.556	1.715	-3.530
Std. Error of Skewness		.097	.097	.097	.097	.097	.097	.097	.097	.097

Kurtosis	1.814	.817	.834	14.744	3.915	3.434	109.964	4.843	49.567
Std. Error of Kurtosis	.194	.194	.194	.194	.194	.194	.194	.194	.194
Minimum	.1553	.4374	.0058	.0964	.0058	.0001	.0000	-.3028	.0000
Maximum	.8510	.8646	1.2313	2.7553	1.0159	1.0145	2.6498	.9462	.8647

7. The results of hypothesis testing

7.1. The main first hypothesis of the research results

The purpose of testing the first hypothesis of the research is to investigate the impact of information asymmetry as one of the criteria that determines the duration of executive directors' bonuses on the debt maturity structure of companies, and its statistical hypothesis is defined as follows:

H_0 :Information asymmetry, as one of the criteria for determining the duration of executive directors' bonuses, does not affect the debt maturity structure of companies.

H_1 : Information asymmetry, as one of the criteria for determining the duration of executive directors' bonuses, has an impact on the debt maturity structure of companies.

This hypothesis using converters (1) for panel data estimation and if the coefficient is statistically significant at the 95% confidence level will be verified.

$$Debt\ Maturity\ Measure_{i,t} = \alpha_0 + \beta_1 Pay\ Duration_i - Delta_{i,t} + \beta_5 Firm\ Size_{i,t}$$
$$+ \beta_6 Leverage_{i,t} + \beta_7 Asset\ Maturity_{i,t} + \beta_8 B/M_{i,t} + \varepsilon_{i,t}$$

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

To be certain whether the use of panel data in estimating the model will be efficient or not, the Chow test in order to determine which method of tying or F (fixed effects or random effects) is more appropriate to estimate (recognition of the differences between fixed or random cross-sectional units) used the Hausman test. The results of these tests are presented in Table 1-3.

Table 1-3 Chow and Hausman test results for the model

Test	Count	Count	P-Value	Degrees of freedom	Statistics	Count
Chow	F	630	0000/0	)104/516(	1/9805	F
Hausman	χ^2	630	0040/0	8	8/6352	χ^2

According to the results of the Chow test and P-Value (0/0000), test the hypothesis was rejected at 95%, indicating that the method may be used panel data. also according to the results of the Hausman test and P-Value (0/0040), which is less than 0/05, hypothesis testing and hypothesis rejected at 95% will be accepted. The model is estimated using fixed effects.

To check the validity of the model and the assumptions of the classical regression is necessary to assess the absence of multicollinearity between the independent variables in the model, tests remained normal with the consistency variance lack of independence remnant and the stipulates error (linearity model) is also recommended. To test the normality of error terms can be used for various tests. One of these tests is to test Jarkyv- of these tests have been used in this study. Jarkyv- test results indicate that the residues of the estimation model for investigation in 95% of the normal distribution, so that the probability of the test (0/3952) is larger than 0/05. One of the assumptions of the classical regression residual variance is consistency. If the variances are estimated non linear unbiased minimum variance will not. In this study we test for homogeneity of variance was used to cut Pagan. Due to the importance of this test, which is smaller than 0/05 (0/0149), the null hypothesis is rejected and we can say that there is consistency variance variance anisotropy model is problematic. In this study, to address the problem of estimating the generalized least squares estimation method (GLS) is used. According to the preliminary results of the model estimation Watson statistic is equal to 2/16 camera, and since that is between 1.5 and 2.5 can be concluded that the residuals are independent of each other. In addition, to test whether the model has a linear relationship with the desired model study of the relationship between linear and non-linear explanation is correct or not coded test is applied. Due to the level of the encoded test (0/4125) is larger than 0/05, so the null hypothesis of this test is to verify that the linear model and the model error is not specified. Table 1-4 summarizes the results of these tests are presented.

Table 1-4 Test results of the statistical assumptions of the model

Ramsey		Durbin-Watson	Breusch-Pagan		Jarque-Bera	
$P-Value$	F	D	$P-Value$	F	$P-Value$	χ^2
0/4125	16/7689	2/16	0/0149	2/3995	0/3952	1/4589

According to the results of Chow and Hausman tests and test results of the statistical assumptions of the classical regression model (1.1) and applied research using panel data fixed effects are estimated. The results are presented in Table 1-5. Shdh estimate the model using Eviews 7 software.

Table 1-5 subhypotheses research results using fixed effects

Dependent variable: Debt maturity structure Views: 630 years - the company				
Relation	P-Value	Statistics t	Factor	**Variable**
Positive	0/0109	2/5562	0/1817	**C**
Negative	0/0000	5/5532	-0/4677	**Information asymmetry as one of the criteria for determining the duration of executive directors' bonuses**
Positive	0/0071	3/3759	0/0049	**size of the company**
Positive	0/0488	2/7414	0/0128	**Financial leverage ratio**
Positive	0/0032	3/6323	0/0311	**Asset ratio**
Positive	0/0382	2/6159	0/0537	**Growth opportunities**
0/5100	**Determining factor model**			
4/7953)0000/0(	**Statistics** F $_($$P-Value$$_)$			

In examining the significance of the whole model, considering that the probability value of the F statistic is less than 0.05 (0.0000), the significance of the whole model is confirmed with 95% certainty. The coefficient of determination of the model also shows that 51.00% of the debt maturity structure of the companies is explained by the variables entered in the model. In examining the significance of the coefficients according to the results presented in Figure 7-4, from there the probability of the t statistic for the variable coefficient of information asymmetry as one of the criteria for determining the duration of executive directors' bonuses is less than 0.05 (0.0000). As a result, the existence of a significant relationship between information asymmetry as one of the criteria for determining the duration of executive managers' bonuses and debt maturity structure is confirmed at the 95% confidence level. Therefore, the first hypothesis of the research is accepted and with 95% certainty, it can be said that there is a significant relationship between information asymmetry as one of the criteria that determines the duration of executive directors' bonuses and the maturity structure of companies' debt. The negativity of the coefficient of this variable (-0.4677) indicates the existence of an inverse relationship between information asymmetry as one of the criteria for determining the duration of executive managers' bonuses and the maturity structure of companies' debt, so that with an increase of 1 unit of information asymmetry as one of the criteria for determining the duration of executive directors' bonuses; The maturity structure of companies' debt also decreases by 0.4677 units. Therefore, according to the analyzes carried out in connection with the confirmation of the first hypothesis of the research, it can be concluded that information asymmetry as one of the criteria for determining the duration of executive directors' bonuses has a negative and inverse effect on the debt maturity structure of companies.

7.2. The main second hypothesis of the research results

The purpose of testing the second hypothesis of the research is to investigate whether the fluctuations of the current ratio as one of the criteria for determining the duration of executive directors' bonuses have an effect on the debt maturity structure of companies or not. And its statistical hypothesis can be expressed as follows:

H_0 :Fluctuations in the current ratio, as one of the criteria for determining the duration of executive directors' bonuses, do not affect the debt maturity structure of companies.

H_1: Fluctuations in the current ratio as one of the criteria for determining the duration of executive directors' bonuses have an impact on the debt maturity structure of companies.

This hypothesis is estimated using model (1) as panel data and will be confirmed if the coefficient is significant at the 95% confidence level.

$$Debt\ Maturity\ Measurei_{i,t} = \alpha_0 + \beta_2 Pay\ Durationi - Vega_{i,t} + \beta_5 Firm\ Size_{i,t}$$
$$+\beta_6 Leverage_{i,t} + \beta_7 Asset\ Maturity_{i,t} + \beta_8 B/M_{i,t} + \varepsilon_{i,t}$$

(1)

$$\begin{cases} H_0 : \beta_2 = 0 \\ H_1 : \beta_2 \neq 0 \end{cases}$$

Figure 8-4. The results of the second research hypothesis test using the fixed effects method

Dependent variable: Debt maturity structure Views: 630 years - the company				
Relation	P-Value	Statistics t	Factor	**Variable**
Positive	0/0109	2/5562	0/1817	**C**
Positive	0/0023	3/0653	0/0283	**Fluctuations in the current ratio as one of the criteria for determining the duration of executive directors' bonuses**
Positive	0/0071	3/3759	0/0049	**size of the company**
Positive	0/0488	2/7414	0/0128	**Financial leverage ratio**
Positive	0/0032	3/6323	0/0311	**Asset ratio**
Positive	0/0382	2/6159	0/0537	**Growth opportunities**
0/5100	**Determining factor model**			
4/7953)0000/0(	**Statistics** F $_{(}P-Value_{)}$			

In examining the significance of the coefficients according to the results presented in Figure 7-4, from there the probability of the t statistic for the variable coefficient of current ratio fluctuations as one of the criteria for determining the duration of executive directors' bonuses is less than 0.05 (0.0023). As a result, the existence of a significant relationship between the fluctuations of the current ratio as one of the criteria for determining the duration of executive directors' bonuses and the debt maturity structure is confirmed at the 95% confidence level. Therefore, the second hypothesis of the research has been accepted and with 95% certainty, we can say that there is a significant relationship between the fluctuations of the current ratio as one of the criteria that determine the duration of executive directors' bonuses and the debt maturity structure. The positivity of the coefficient of this variable (0.0283) indicates the existence of a direct relationship between the fluctuations of the current ratio as one of the criteria that determine the duration of executive managers' bonuses and the debt maturity structure, so that with an increase of 1 unit of the fluctuations of the current ratio as One of the criteria for determining the duration of executive directors' bonuses; The debt maturity structure also increases by 0.0283 units. Therefore, according to the analyzes carried out in connection with the confirmation of the second hypothesis of the research, it can be concluded that the fluctuations of the current ratio as one of the criteria for determining the duration of executive directors' bonuses have a positive and direct effect on the debt maturity structure of companies.

7.3. The main third hypothesis of the research results

In the third hypothesis of the research, the impact of the growth rate of stock issuance as one of the criteria that determines the duration of executive directors' bonuses on the debt maturity structure of companies is investigated, and its statistical hypothesis can be expressed as follows:

H_0 :The growth rate of share issuance, as one of the criteria for determining the duration of executive directors' bonuses, does not affect the debt maturity structure of companies.

H_1 : The growth rate of share issuance, as one of the criteria that determines the duration of executive directors' bonuses, has an impact on the debt maturity structure of companies.

This hypothesis is estimated using model (1) as panel data and if the coefficient is significant at the 95% confidence level, it will be confirmed.

$$Debt\ Maturity\ Measure_{i,t} = \alpha_0 + \beta_3 Pay\ Duration_{i} - New\ Issues_{i,t} + \beta_5 Firm\ Size_{i,t}$$
$$+\beta_6 Leverage_{i,t} + \beta_7 Asset\ Maturity_{i,t} + \beta_8 B/M_{i,t} + \varepsilon_{i,t}$$

(1)

$$\begin{cases} H_0 : \beta_3 = 0 \\ H_1 : \beta_3 \neq 0 \end{cases}$$

Figure 9-4. The results of the third research hypothesis test using the fixed effects method

Relation	P-Value	Statistics t	Factor	Variable
**Dependent variable: Debt maturity structure  ** **Views: 630 years - the company**
Positive	0/0109	2/5562	0/1817	**C**
Positive	0/0492	2/7573	0/0125	**The growth rate of stock issuance as one of the criteria for determining the duration of executive directors' bonuses**
Positive	0/0071	3/3759	0/0049	**size of the company**
Positive	0/0488	2/7414	0/0128	**Financial leverage ratio**
Positive	0/0032	3/6323	0/0311	**Asset ratio**
Positive	0/0382	2/6159	0/0537	**Growth opportunities**
0/5100		**Determining factor model**
4/7953 **)0000/0(**		**Statistics** F $_(P-Value_)$

In examining the significance of the coefficients according to the results presented in Figure 7-4, from there, the probability of the t statistic for the variable coefficient of the growth rate of stock issuance as one of the criteria for determining the duration of executive directors' bonuses is less than 0.05 (0.0492).), as a result of the existence of a significant relationship between the growth rate of stock issuance as one of the criteria for determining the duration of executive directors' bonuses and the debt maturity structure is confirmed at the 95% confidence level. Therefore, the third hypothesis of the research has been accepted and with 95% certainty, it can be said that there is a significant relationship between the growth rate of stock issuance as one of the criteria that determines the duration of executive directors' bonus payments and the debt maturity structure. The positive coefficient of this variable (0.0125) indicates the existence of a direct relationship between the growth rate of stock issuance as one of the criteria that determines the duration of executive managers' bonus payment and the debt maturity structure, so that with an increase of 1 unit the growth rate of stock issuance as one of the criteria for determining the duration of executive managers' bonus payment and debt maturity structure, it will increase by 0.0125 units. Therefore, according to the analyzes carried out in connection with the confirmation of the third hypothesis of the research, it can be concluded that the growth rate of stock issuance, as one of the criteria that determines the duration of executive directors' bonuses, has a positive and direct effect on the debt maturity structure of companies.

7.4. The main fourth hypothesis of the research results

The purpose of the fourth hypothesis of the research is to investigate the impact of fluctuations in current costs as one of the criteria that determine the duration of executive directors' bonuses on the debt maturity structure of companies, and its statistical hypothesis can be expressed as follows:

H_0 :Fluctuations in current costs as one of the criteria for determining the duration of executive directors' bonuses do not affect the maturity structure of companies' debt.

H_1: Fluctuations in current costs as one of the criteria that determine the duration of executive directors' bonuses have an impact on the debt maturity structure of companies.

This hypothesis is estimated using model (1) as panel data and it will be confirmed if the coefficient is significant at the 95% confidence level.

$$Debt\ Maturity\ Measure_{i,t} = \alpha_0 + \beta_4 Pay\ Duration_{i-Term\ i,t} + \beta_5 Firm\ Size_{i,t}$$
$$+\beta_6 Leverage_{i,t} + \beta_7 Asset\ Maturity_{i,t} + \beta_8 B/M_{i,t} + \varepsilon_{i,t}$$

(1)

$$\begin{cases} H_0 : \beta_4 = 0 \\ H_1 : \beta_4 \neq 0 \end{cases}$$

Figure 10-4. The results of the fourth research hypothesis test using the fixed effects method

Relation	P-Value	Statistics t	Factor	Variable
**Dependent variable: Debt maturity structure  ** **Views: 630 years - the company**
Positive	0/0109	2/5562	0/1817	**C**
Negative	0/0006	4/0800	-0/0277	**Fluctuations in current costs as one of the criteria for determining the duration of executive directors' bonuses**
Positive	0/0071	3/3759	0/0049	**size of the company**
Positive	0/0488	2/7414	0/0128	**Financial leverage ratio**
Positive	0/0032	3/6323	0/0311	**Asset ratio**
Positive	0/0382	2/6159	0/0537	**Growth opportunities**
0/5100		**Determining factor model**
4/7953 **)0000/0(**		**Statistics** F $_(P-Value_)$

In examining the significance of the coefficients according to the results presented in Figure 7-4, from there the probability of the t-statistic for the variable coefficient of fluctuations in current costs as one of the criteria for determining the duration of executive directors' bonuses is less than 0.05 (0.0006). As a result, the existence of a significant relationship between the fluctuations of current costs as one of the criteria for determining the duration of executive directors' bonuses and the debt maturity structure is confirmed at the 95% confidence level. Therefore, the fourth hypothesis of the research has been accepted and with 95% certainty, it can be said that there is a significant relationship between the fluctuations of current costs as one of the criteria for determining the duration of executive directors' bonuses and the debt maturity structure. The negativity of the coefficient of this variable (-0.0277) indicates the existence of an inverse relationship between the fluctuations of current costs as one of the criteria that determine the duration of executive managers' bonuses and the debt maturity structure, so that with an increase of 1 unit, the fluctuations of current costs to as one of the criteria that determines the duration of executive managers' bonus payment and debt maturity structure, it is also reduced by 0.0277 units. Therefore, according to the analyzes carried out in connection with the confirmation of the fourth hypothesis of the research, it can be concluded that the fluctuations of current costs as one of the criteria for determining the duration of executive directors' bonuses have a negative and inverse effect on the debt maturity structure of companies.

8. Conclusion

Summary descriptive statistics for variables in this study, it was shown. Continue to provide inferential statistics were used and research was presented in the form of statistical models and assumptions. The chow test was used to test the models to determine whether the method should be used panel or mixed and Then Hausman test for random effects or fixed effects panel method was used. Finally fit the classical regression model assumptions and the results of the research model in developed. The results of the research in connection with the confirmation of the first hypothesis of the research showed that information asymmetry as one of the criteria that determines the duration of executive directors' bonuses has a negative and inverse effect on the debt maturity structure of companies. Also, according to the analyzes carried out in connection with the confirmation of the second hypothesis of the research, we came to the conclusion that the fluctuations of the current ratio as one of the criteria that determine the duration of executive directors' bonuses have a positive and direct effect on the debt maturity structure of companies. Further, the results of the research in connection with the confirmation of the third hypothesis of the research indicated that the growth rate of stock issuance as one of the criteria for determining the duration of executive directors' bonuses has a positive and direct effect on the debt maturity structure of companies. Finally, according to the analyzes carried out in connection with the confirmation of the fourth hypothesis of the research, we came to the conclusion that the fluctuations of current costs as one of the criteria for determining the duration of executive directors' bonuses have a negative and inverse effect on the maturity structure of companies' debt.

References

1. Custodio, C., Ferreira, M. A., & Laureano, L. (2013). Why are US firms using more short-term debt? Journal of Financial Economics, 108(1), 182–212.
2. Brockman, P., Martin, X., & Unlu, E. (2010). Executive compensation and the maturity structure of corporate debt. Journal of Finance, 65(3), 1123–1161.
3. Datta, S., Iskandar-Datta, M., & Raman, K. (2005). Managerial stock ownership and the maturity structure of corporate debt. Journal of Finance, 60(5), 2333–2350.
4. Zheng, X., Ghoul, S. E., Guedhami, O., & Kwok, C. C. Y. (2012). National culture and corporate debt maturity. Journal of Banking and Finance, 36(2), 468–488.
5. Fan, J. P. H., Titman, S., & Twite, G. (2012). An international comparison of capital structure and debt maturity choices. Journal of Financial and Quantitative Analysis, 47(1), 23–56.
6. Guedes, J., & Opler, T. (1996). The determinants of the maturity of corporate debt issues. Journal of Finance, 51(5), 1809–1833.
7. Boubaker, S., Saffar, W., & Sassi, S. (2018). Product market competition and debt choice. Journal of Corporate Finance, 49(C), 204–224.
8. Parise, G. (2018). Threat of entry and debt maturity: Evidence from airlines. Journal of Financial Economics, 127(1), 226–247.
9. Zheng, X., Ghoul, S. E., Guedhami, O., & Kwok, C. C. Y. (2012). National culture and corporate debt maturity. Journal of Banking and Finance, 36(2), 468–488.
10. Philippon, T., & Reshef, A. (2013). An international look at the growth of modern finance. Journal of Economic Perspectives, 27(2), 73–96.

11. Custodio, C., Ferreira, M. A., & Laureano, L. (2013). Why are US firms using more short-term debt? Journal of Financial Economics, 108(1), 182–212.
12. Hackbarth, D., Hennessy, C.A., Leland, H.E., 2007. Can the trade-off theory explain debt structure? Rev. Financ. Stud. 20 (5), 1389–1428.
13. Lyandres, E., Zhdanov, A., 2014. Convertible debt and investment timing. J. Corp. Finance 24, 21–37.
14. Hackbarth, D., Mauer, D.C., 2012. Optimal priority structure, capital structure, and investment. Rev. Financ. Stud. 25 (3), 747–796.
15. Luo, P., Tian, Y., Yang, Z., 2020. Real option duopolies with Quasi-hyperbolic discounting. J. Econ. Dynam. Contr. 111, 103829.
16. Jiang, J.L., Liu, B., Yang, J.Q., 2019. The impact of debt restructuring on firm investment: evidence from China. Econ. Modell. 81, 325–337.
17. Sundaresan, S., Wang, N., 2007. Investment under uncertainty with strategic debt service. Am. Econ. Rev. 97 (2), 256–261.
18. Antill, S., Grenadier, S.R., 2019. Optimal capital structure and bankruptcy choice: dynamic bargaining versus liquidation. J. Financ. Econ. 133 (1), 198–224.
19. Silaghi, F., 2018. The use of equity financing in debt renegotiation. J. Econ. Dynam. Contr. 86, 123–143.
20. Nishihara, M., Shibata, T., 2016. Asset sale, debt restructuring, and liquidation. J. Econ.
21. Dynam. Contr. 67, 73–92.
22. Fan, H., Sundaresan, S., 2000. Debt valuation, strategic debt service and optimal dividend policy. Rev. Financ. Stud. 13 (4), 1057–1099.
23. Tan, Y.X., Luo, P.F., Yang, J.Q., Ling, A.F., 2020. Investment and capital structure decisions under strategic debt service with positive externalities. Finance Res. Lett. 33, 101193.
24. Tan, Y.X., Yang, Z.J., 2017. Growth option, contingent capital and agency conflicts. Int. Rev. Econ. Finance 51, 354–369.
25. Luo, P., Tian, Y., Yang, Z., 2020. Real option duopolies with Quasi-hyperbolic discounting. J. Econ. Dynam. Contr. 111, 103829.
26. Pawlina, G., 2010. Underinvestment, capital structure and strategic debt restructuring. J.
27. Corp. Finance 16 (5), 679–702.
28. Marinovic, I., Varas, F., 2019. CEO horizon, optimal duration and the escalation of short-termism. J. Financ. 74, 2011–2053.
29. adika, T., Sautner, Z., 2020. Managerial short-termism and investment: evidence from accelerated option vesting. Rev. Financ. 24, 305–344.
30. Aktas, N., Boone, A., Croci, E., Signori, A., 2021. Reductions in CEO career horizons and corporate policies. J. Corp. Finan. 66, 101862.
31. Aboody, D., Lev, B., 2000. Information asymmetry, R&D, and insider gains. J. Financ. 55, 2747–2766.
32. Edmans, A., Fang, V., Huang, A., 2018. The Long-Term Consequences of Short-Term Incentives. Working paper.
33. Daniels, K., Ejara, D., & Vijayakumar, J. (2010). Debt maturity, credit risk, and information asymmetry: The case of municipal bonds. The Financial Review, 45, 603–626.
34. Croci, E., Gonenc, H., & Ozkan, N. (2012). CEO compensation, family control, and institutional investors in Continental Europe. Journal of Banking and Finance, 36(12), 3318–3335. https://doi.org/10.1016/j.jbankfin. 2012.07.017
35. Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and capital structure. Journal of Financial Economics, 3, 305–360. doi:10.1016/0304-405X(76)90026.
36. Wei, C., & Yermack, D. (2011). Investors' Reactions to CEO Inside Debt Incentives. Review of Financial Studies, 24(11), 3813–3840. https://academic.oup.com/rfs/
37. article-abstract/24/11/3813/1587735? redirectedFrom=fulltext.
38. Cassell, C., Huang, S., Sanchez, J., & Stuart, M. (2012). Seeking safety: The relation between CEO inside debt holdings and the riskiness of firm investment and financial policies. Journal of Financial Economics, 103, 588–610. doi:10.1016/j.jfineco.2011.10.008.
39. Edmans, A., & Liu, Q. (2011). Inside debt. Review of Finance, 15, 75–102. doi:10.1093/rof/rfq008.
40. Belkhir, M., & Boubaker, S. (2013). CEO inside debt and hedging decisions: Lessons from the U.S. banking industry. Journal of International Financial Markets, Institutions and Money, 24, 223–246. doi:10.1016/j. intfin.2012.11.009.
41. Hilary, G., Hsu, C., Segal, B., 2013. The bright side of managerial over- optimism. Unpublished working paper. INSEAD and Hong Kong University of Science and Technology.
42. Campbell,   C.,Gallmeyer,M.,Johnson,S.,Rutherford,J.,Stanley,B.,2011.   CEO optimismandforcedturnover.JournalofFinancialEconomics 101,695–712.

43. Keiber, K., 2005. Managerial compensation contracts and overconfidence. Unpublished working paper. Europa-Universität Viadrina Frankfurt (Oder).

44. Hackbarth, D.,2008.Managerialtraitsandcapitalstructuredecisions. Journal ofFinancialandQuantitativeAnalysis43,843–881.

45. Hackbarth, D.,2009.Determinantsofcorporateborrowing:abehavioral perspective.JournalofCorporateFinance15,389–411.

46. Gervais,S.,Goldstein,I.,2007.Thepositiveeffectsofbiasedself-perceptionsinfirms.ReviewofFinance11,453–496.

47. Ben-David,I.,Graham,J.,Harvey,C.,2013.Managerialmiscalibration. QuarterlyJournalofEconomics128,1547–1584.

48. Bebchuk, L. A., & Fried, J. M. (2003). Executive Compensation as an Agency Problem. Journal of Economic Perspectives, 17(3), 71–92. https://doi.org/ 10.1257/089533003769204362

49. T. T. N., & Canil, J. M. (2016). CEO pay disparity: Efficient contracting or managerial power? Journal of Corporate Finance, 54(1), 168–190. https://doi.org/10. 1016/j.jcorpfin.2016.10.002

50. Barnea, A., & Rubin, A. (2010). Corporate social responsibility as a conflict between shareholders. Journal of Business Ethics, 97(1), 71–86. https://doi.org/10.1007/ s10551-010-0496-z

51. Milbourn, T. (2003). CEO reputation and stock-based compensation. Journal of Financial Economics, 68(1), 233–262. https://doi.org/10.1016/S0304-405X(03) 00066-7

52. Malmendier, U., & Tate, G. (2015). Behavioral CEOs: The role of managerial overconfidence. Journal of Economic Perspectives, 29(4), 37–60. https://doi.org/ 10.1257/jep.29.4.37

53. Kadiyala, P., & Rau, P. R. (2004). Investor Reaction to corporate event announcements: Under reaction or overreaction? The Journal of Business, 77(2), 357–386. https://doi.org/10.1086/381273

54. Benz, M., Kucher, M., & Stutzer, A. (2001). Are stock options the mangers blessing? Stock option compensation and institutional controls. Zurich IEER working paper NO 61. http://dx.doi.org/10.2139/ssrn.251009

55. Cyert, R. M., Kang, S. H., & Kumar, P. (2002). Corporate governance, takeovers, and Top-management compensation: Theory and evidence. Management Science Journal, 48(4), 453–590. https://doi.org/10. 1287/mnsc.48.4.453.205

56. Core, J., & Guay, W. (1999). The use of equity grants to manage optimal equity incentive level. Journal of Accounting and Economic, 28(2), 151–184. https:// doi.org/10.1016/S0165-4101(99)00019-1

57. Masulis, R., & Reza, S. (2015). Agency problems of corporate philanthropy. Review of Financial Studies, 28(2), 592–636. https://doi.org/10.1093/ rfs/hhu082

58. Milbourn, T. (2003). CEO reputation and stock-based compensation. Journal of Financial Economics, 68(1), 233–262. https://doi.org/10.1016/S0304-405X(03) 00066-7

59. Kisgen, D. J. (2006). Credit ratings and capital structure. Journal of Finance, 61, 1035–1072. Norden, L., & Weber, M. (2004). Informational efficiency of credit default swap and stock markets: The impact of credit rating announcements. Journal of Banking & Finance, 28(11), 2813–2843.

60. Graham, J. R., & Harvey, C. R. (2001). The theory and practice of corporate finance: Evidence from the field. Journal of Financial Economics, 60(2-3), 187–243. Gu, J., Jones, J. S., & Liu, P. (2014). Do credit rating agencies sacrifice timeliness by pursuing rating stability? Evidence from equity market reactions to CreditWatch events. Theoretical Economics Letters, 04(05), 311–322.

61. Goldstein, M., Kaminsky, G. M., & Reinhart, C. (2000). Assessing financial vulnerability: An early warning system for emerging markets. Institute for International Economics.

62. Cheng, M., & Neamtiu, M. (2009). An empirical analysis of changes in credit rating properties: Timeliness, accuracy and volatility. Journal of Accounting and Economics, 47(1-2), 108–130.

63. Gu, J., Jones, J. S., & Liu, P. (2014). Do credit rating agencies sacrifice timeliness by pursuing rating stability? Evidence from equity market reactions to CreditWatch events. Theoretical Economics Letters, 04(05), 311–322.

64. Cantor, R. (2001). Moody's investors service response to the consultative paper issued by the Basel Committee on Bank Supervision "A new capital adequacy framework,". Journal of Banking & Finance, 25(1), 171–185.

65. Altman, E. I., & Rijken, H. A. (2004). How rating agencies achieve rating stability. Journal of Banking and Finance, 28(11), 2679–2714. Cantor, R. (2001). Moody's investors service response to the consultative paper issued by the Basel Committee on Bank Supervision "A new capital adequacy framework,". Journal of Banking & Finance, 25(1), 171–185.

66. Cantor, R., & Mann, C. (2007). Analyzing the tradeoff between ratings accuracy and stability. The Journal of Fixed Income, 16(4), 60–68.

67. Aivazian, V. A., Ge, Y., & Qiu, J. (2005). Debt Maturity Structure and Firm Investment. Financial Management, 34(4), 107–119. https://doi.org/10. 1111/j.1755-053X.2005.tb00120.

68. 01466216880120041oCrouzet, N. (2016). Default, debt maturity, and investment dynamics. Meeting Papers, Society for Economic Dynamics, Vol. 533.

69. Khaw, K. L. H., & Lee, B. C. J. (2016). Debt maturity, underinvestment problem and corporate value. Asian Academy of Management Journal of Accounting & Finance, 12 http://dx.doi.org/10.21315/aamjaf2016.12.S1.1

70. Le, D. H., Nguyen, H. M., Luu, T. D., Nguyen, P. T. P., & Chan, X. C. (2017). The impact of debt maturity structure on investment decisions of processing and manufacturing enterprises. Economy and Forecast Review, 664(3–7).

71. Scherr, F., & Hulburt, H. (2001). The Debt Maturity Structure of Small Firms. Financial Management, 30 (1), 85–111. https://doi.org/10.2307/3666392

72. Barclay, M. J., & Smith, C. W. (1995). The Maturity Structure of Corporate Debt. Journal of Finance, 50(2), 609–631. https://doi.org/10.1111/j.1540-6261.1995.tb04797

73. Schiantarelli, F., & Sembenelli, A. (1997). The maturity structure of debt: Determinants and effects on firms' performance: Evidence from the UK and Italy. Policy Research Working Paper #1699. World Bank.

74. Rashedi, P., & Zadeh, H. R. (2015). The relationship between debt maturity and firms investment in fixed assets. International Journal of Applied Business and Economic Research, 13(6), 3393–3403. https://serial sjournals.com/abstract/99303_3393-3403.

75. Terra, P. R. S. (2011). Determinants of corporate debt maturity in Latin America. Journal of European

76. Barnea, A., Haugen, R. A., & Senbet, L. W. (1980). A rationale for debt maturity structure and call provisions in the agency theoretic framework. The Journal of Finance, 35(5), 1223–1234. https://doi.org/ 10.1111/j.1540-6261.1980.tb02205.

77. Weinberg, J. A. (1994). Firm Size, Finance, and Investment. FRB Richmond Economic Quarterly, 80(1), 19–40. https://ssrn.com/abstract= 2125388

78. Gala, V., & Julio, B. (2016). Firm Size and Corporate Investment. Working paper. https://dx.doi.org/10. 2139/ssrn.1787350

79. Saquido, A. P. (2003). Determinants of corporate investment. Philippine Management Review, Discussion Paper, 402, 1–15.

80. Aivazian, V. A., Ge, Y., & Qiu, J. (2005). Debt Maturity Structure and Firm Investment. Financial Management, 34(4), 107–119. https://doi.org/10. 1111/j.1755-053X.2005.tb00120.

81. Hasan, I., Hoi, C.,Wu, Q., & Zhang, H. (2014). Beauty is in the eye of the beholder: The effect of corporate tax avoidance on the cost of bank loans. Journal of Financial Economics, 113, 109–130.

82. Smith, C., & Warner, J. (1979). On financial contracting: An analysis of bond covenants. Journal of Financial Economics, 7, 117–161.

83. Childs, P., Mauer, D., & Ott, S. (2005). Interactions of corporate financing and investment decisions: The effects of agency conflicts. Journal of Financial Economics, 76, 667–690.

84. Myers, S. (1977). Determinants of corporate borrowing. Journal of Financial Economics, 5, 147–175.

85. Childs, P., Mauer, D., & Ott, S. (2005). Interactions of corporate financing and investment decisions: The effects of agency conflicts. Journal of Financial Economics, 76, 667–690.

86. Flannery, M. (1986). Asymmetric information and risky debt maturity choice. The Journal of Finance, 41, 18–38.

87. Diamond, D. (1991). Debt maturity structure and liquidity risk. Quarterly Journal of Economics, 33, 341–368.

88. Merton, R. C. (1974), On the Pricing of Corporate Debt: The risk structure of interest rates, Journal of Finance 29, 449-470.

89. Fama, E. F. (1990), Contract costs and financing decisions, Journal of Business 63, S71-

90. S91.

91. Stohs, M. H. and Mauer, D. C. (1996), The determinants of corporate debt maturity structure, Journal of Business 69, 279-312.

92. Flannery, M. J. (1986), Asymmetric information and risky debt maturity choice, Journal of

93. Finance 41, 19-37.

94. mond, D. W. (1991), Debt maturity structure and liquidity risk, Quarterly Journal of Economics 106, 709-737.

95. Barclay, M. J. and Smith, C. W. (1995), The maturity structure of corporate debt, Journal of Finance 50, 609-631.

96. Barnea, A., Haugen, R. A. and Senbet, L. W. (1980), A rationale for debt maturity structure and call provisions in the agency theoretic framework, Journal of Finance 35, 1223-1234.

97. Kim, C. S., Mauer, D. C and Stohs, M. H (1995), Corporate debt maturity policy and investor tax-timing options: theory and evidence, Financial Management 24, 33-45. Barclay, M. J. and Smith, C. W. (1995), The maturity structure of corporate debt, Journal of Finance 50, 609-631.
98. Guedes, J. and Opler, T. (1996), The determinants of the maturity of corporate debt issues, Journal of Finance 51, 1809-1833.
99. Stohs, M. H. and Mauer, D. C. (1996), The determinants of corporate debt maturity structure, Journal of Business 69, 279-312.
100. Ozkan, A. (2000), An empirical analysis of corporate debt maturity structure, European Financial Management 6, 197-212.
101. Stohs, M., Mauer, D., 1996. The determinants of corporate debt maturity structure. J. Bus. 69, 279–312.
102. Berger, A.N., Espinosa-Vega, M.A., Frame, W.S., Miller, N.H., 2005. Debt maturity, risk, and asymmetric information. J. Financ. 60, 2895–2923.
103. Barclay, M., Marx, L.M., Smith, C., 2003. The joint determination of leverage and maturity. J. Corp. Finan. 50, 609–631.
104. Johnson, S., 2003. Debt maturity and the effects of growth opportunities and liquidity risk on leverage. Rev. Financ. Stud. 16, 209–236.
105. Datta, S., Datta, M., Raman, K., 2005. Managerial stock ownership and the maturity structure of corporate debt. J. Financ. 60, 2333–2350.
106. Brockman, P., Martin, X., Unlu, E., 2010. Executive compensation and the maturity structure of corporate debt. J. Financ. 65, 1123–1161.
107. Baranchuk, N., Kieschnick, R., Moussawi, R., 2014. Motivating innovation in newly public firms. J. Financ. Econ. 111, 578–588.
108. Edmans, A., Fang, V., Lewellen, K., 2017. Equity vesting and investment. Rev. Financ. Stud. 30, 2229–2271.
109. Manso, G., 2011. Motivating innovation. The. J. Financ. 66, 1823–1860.
110. Gopalan, R., Milbourn, T., Song, F., Thakor, A.V., 2014. Duration of executive compensation. J. Financ. 59, 2777–2817.
111. Lerner, J., Sorensen, M., Str¨omberg, P., 2011. Private equity and long-run investment: the case of innovation. J. Financ. 66, 445–477.
112. adman, B., Sunder, J., 2014. Investor horizon and CEO horizon incentives. Account. Rev. 89, 1299–1328.
113. Chang, Y.C., Huang, M., Su, Y.S., Tseng, K., 2021. Short-Termist CEO compensation in speculative markets: a controlled experiment. Contemp. Account. Res. 38, 105–2156.
114. Barclay, M., Smith, C., 1995. The maturity structure of corporate debt. J. Financ. 50, 609–631.
115. Diamond, D.W., 1991. Debt maturity structure and liquidity risk. Q. J. Econ. 33, 341–368.
116. He, Z., Xiong, W., 2012. Delegated asset management, investment mandates, and capital immobility. J. Financ. Econ. 107, 239–258.
117. Fung, S. Y. K., & Goodwin, J. (2013). Short-term debt maturity, monitoring and accruals-based earnings management. Journal of Contemporary Accounting &
118. Economics, 9(1), 67–82. https://doi.org/10.1016/j.jcae. 2013.01.002
119. Fu, X., & Tian, T. (2016). Corporate debt maturity and acquisition decisions. Financial Management, 45(3), 737–768.
120. Wang, C. W., Chiu, W. C., & King, T. H. D. (2020). Debt maturity and the cost of bank loans. Journal of Banking and Finance, 112, 105235.