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The Influence of Corporate Debt Maturity Structure on Corporate Growth: evidence in U.S. Stock Market

Yingda Tang[1] and Kaixian Xu[2,*]

[1] Anderson School of Management, University of California, Los Angeles, 90095, US, E-mail: ytang1@ucla.edu

[2] Risk & Quant Analytics, BlackRock, 50 Hudson Yards, New York, 10001, US, E-mail: kx374@nyu.edu

*Corresponding Author, email: kx374@nyu.edu

Abstract: This study aims to investigate the impact of debt maturity structure on corporate growth in U.S. firm. Using unbalanced panel dataset of 2,774 firms from 2013 to 2022, this study utilizes two-way fixed effects regression model. The findings of this study uncover the positive effects of long-term debt maturity on corporate growth, suggesting that firms engaged in longer debt maturities invest in projects with substantial growth potential. These results remain robust with alternative explained variable approach. Additionally, heterogeneity analysis results show that firms with high reputation, strong innovation, and shorter debt recovery periods are more pronounced to the effects of long-term debt maturity on corporate growth. These findings lead managers and policymakers to leverage long-term debt in debt structure to support investments in projects with high growth potential.

Keywords: *Corporate debt maturity structure; Corporate growth; Corporate innovation; Firm reputation; Average recovery period*.

1. **Introduction**

The phenomenon of corporate debt maturity structure gained significant importance in the U.S. stock market due to its substantial impact on corporate financial health and growth strategies. As per the recent reports, the total outstanding corporate debt has been reached at $11 trillion, with firms making efforts to diversify their debt portfolios to manage risk and gain growth [1]. The growing debt size pushed firms in U.S. to strategize their debt maturity to manage liquidity risks, mitigate financial constraints, and deal with interest rate volatility [2]. Recent literature shows that enterprises with an optimal mix of short and long-term debt could be able to manage their cash flows more efficiently and thus mitigate financial distress risk and achieve enhanced growth [3]. Moreover, the increasing trend of refinancing in U.S market urges academicians and researchers to examine the influence of debt maturity structure on corporate growth, as enterprises are required to

navigate fluctuating interest rates and economic cycles [4]. In recent years, end-to-end learning models have excelled in optimizing complex systems, aiding enterprises in debt management under dynamic market conditions[5]. In this context, the current study focuses on exploring the crucial role of debt maturity in shaping corporate growth within the U.S. stock market.

Despite extensive literature on corporate debt, a major issue persists regarding the lack of a comprehensive understanding of the optimal debt maturity structure that could lead to maximize corporate growth. Existing studies present mixed results on whether short-term or long-term debt could be beneficial for corporate growth [6], and thus lead to complexity regarding the debt maturity influence on corporate growth. Precise data feature extraction offers enterprises new insights for optimizing asset and financing portfolios, similar to the process of refining debt maturity strategies[7]. Some researchers state that short-term debt push managers to follow a discipline to make efficient investment decisions [8], while other argue that relying solely on short-term debt could result in liquidity constraints and also hinders long-term strategic planning, thereby negatively affecting the corporate growth [9]. These conflicting views pushed us to further delve into how the debt maturity structure could influence corporate growth under various market conditions in the U.S. Therefore, this study aims to examine how debt maturity structure interacts with firm characteristics of innovation, debt recovery period, and goodwill to frame corporate growth in U.S. stock market.

Prior literature extensively explored various aspects of corporate debt maturity, however only a few investigated its direct effects on corporate growth, especially in context of U.S. stock market. Barclay and Smith Jr [10] and Stohs and Mauer [11] show that firm size, asset maturity, and profitability are the significant factors to frame corporate growth. The debt maturity structure is found to significantly influence corporate growth even in absence of the market-specific conditions [12]. Mitchell and Stafford [13] examined debt maturity's influence on growth but focused on global markets, ignoring the unique characteristics of American stock market. Additionally, Ahangar [3] delved into the effects of economic downturns on firms' debt maturity strategies, yet did not show the subsequent impact of debt maturity on corporate growth. Meanwhile, corporate governance and financial transparency significantly influence debt choices, highlighting how internal governance factors drive growth by optimizing debt structures[14]. In addition, the impact of supply chain concentration on operational efficiency and financial health underscores the importance of the external environment in optimizing debt maturity structures[15]. Therefore, a significant research gap exists in understanding how debt maturity structure could influence the corporate growth in U.S. stock market, accounting for market-specific factors. Current study bridges this gap by providing a comprehensive analysis of debt maturity's effect on corporate growth by considering innovation, goodwill, and recovery period turnover characteristics.

This study contributes to existing literature by incorporating the long-term debt consideration into a framework, and thus showing a more nuanced understanding on how debt maturity can frame corporate growth. The debt maturity itself is framed by the market conditions such as interest rate changes, monetary market environment, and others [16], and thus current study delves into that how market conditions could interact with firm-specific characteristics to shape their growth in U.S. stock market. Moreover, this study shows that how firm characteristics of innovation, debt recovery period, and goodwill could influence the nexus between debt maturity and corporate growth. This study addresses the current research gap with focus on U.S. market's specific dynamic, and thereby contributing both theoretical insights and practical implications for the corporate financial management.

This study has the potential to examine the intricate relationship between corporate debt maturity and growth, which is a crucial aspect of financial decision making. Previous literature focused on debt determinants or isolated the effects of short-term and long-term debt, while current study is focused on firm's long-term debt maturity structure influence on its growth [17]. U.S. stock

market operates under unique dynamics, diverse regulatory environment, and market expectations [18], so understanding these implications is crucial to present significant support to the finance managers across the world. This study offers practical insights for managers, investors, and policymakers by clarifying how different financing strategies can support their growth [19]. This research contributes to the broader discourse on financial stability and market efficiency with emphasize on how optimal debt maturity may support sustainable corporate growth in an evolving economic landscape [20]. By considering characteristics of innovation, goodwill, and debt recovery period, this study shows that how debt maturity's effects on corporate growth are changed across these characteristics.

Remaining of this paper is structured as follow: Section (2) presents literature review and highlights research gap; Section (3) covers the data, variables, and econometric modelling of paper; Section (4) offers results of the empirical tests, and Section (5) concludes the paper and presents policy implications.

2. **Literature Review and Research Summary**

Corporate debt maturity is crucial for an enterprise to manage as it influences a firm's liquidity, refinancing risks, and financial and operating flexibility directly. The management of debt maturity balances short-term cash flows and long-term investments, thus frames a company's stability and growth [21]. For enterprises, it a key area to focus for managing debt maturity and to balance risks and financial flexibility. Myers, et al. [22] revisited the pecking order theory and suggested that a firm's capital structure is directly influenced by its internal financing needs and the potential costs linked with the issuance of new debt. Korteweg [23] further examined trade-off theory, arguing that firms with higher growth potential support short-term debts as they are focused to mitigate the overinvestment risk. On the other side, firms with predictable cash flows utilize long-term debt to reduce refinancing risks and thereby ensuring the stability [24]. Brick and Ravid [25] argue that debt maturity is closely linked to the market conditions, leading firms to prefer longer maturities during the economic stability periods. This foundation led a growing interest in exploring how debt maturity structure affects corporate growth, especially in diverse market conditions.

The nexus between corporate debt maturity and firm performance garnered significant attention among scholars and academicians. Arslan-Ayaydin, et al. [26] show that firms using more short-term debts gain higher performance because of the disciplining effects on the management of these firms. However, they also argue that relying heavily on short-term debt could result in liquidity risks, potentially leading to suboptimal investment decision during the financial constraints. Opler, et al. [27] state that firms with access to long-term financing would have greater capacity to invest in long-term projects, and thus gaining a sustainable growth. In contrast to this, Wang, et al. [28] show that firms engaged in using long-term debt could suffer from reduced flexibility to respond changing market conditions, which might negatively affect corporate growth in the long run. Despite these mixed findings, there is need of consensus that the choice between short and long-term debt maturity is a critical factor to shape the corporate strategies to gain the sustainable growth.

Recent literature explored the impact of external factors, such as credit conditions and market liquidity, on firms' debt maturity choices. Custódio, et al. [29] stated that firms prefer short-term debt when they experience high market liquidity, aiming at taking advantage of favorable refinancing conditions. Similarly, Goyal and Wang [30] argued that firms are engaged in adjusting their debt maturity structure in response to the changes in credit market conditions, particularly during economic uncertainty times. Extending this view, Badoer and James [31] emphasized market timing role to determine optimal debt maturity structure, indicating that firms issue debt during low-interest-rate environments for long maturities to lock in favorable rates. Based on these findings, we can argue that market conditions play a crucial role in shaping firms' debt maturity strategies and thus indirectly influencing the corporate growth rate.

Firm-specific characteristics, such as managerial and governance practices, also directly influence the debt maturity decisions. Elyasiani and Jia [32] state that firms with strong corporate governance prefer to adopt long debt maturity choices, which can mitigate agency conflicts between creditors and managers. Ahn, et al. [33] suggested that firms with high managerial ownerships are engaged in using more short-term debt to align management's incentives with those of the creditors. Similarly, Harford, et al. [34]indicated that firms with significant cash holdings don't rely heavily on long-term debt, as they use internal financing and thus enhance their flexibility in capital allocations. These studies show that interplay between governance, managerial practices, and debt maturity structure could be complex and would have direct impact on firm's growth potential. There is still gap exists in current literature that how long-term debt maturity could influence the corporate growth in U.S. stock market.

The nexus between corporate debt maturity and growth is extensively explained by the agency theory, which addresses conflicts of interest between managers and shareholders. Meckling and Jensen [35] propose that short-term debt work as a monitoring mechanism, compel managers to focus on projects that could enhance firm value and, in turn, increase significant growth. Myers [36] cautioned that with an excessive focus on short-term debt, firms could be misled to underinvestment in profitable long-term projects, ultimately limiting the growth potential. Hart and Moore [37] extended this view by suggesting that debt maturity structure serves as the governance tool to manage the agency costs of free cash flows. Marks and Shang [2] documented that firms with balanced debt maturity structures could be in better position to invest in growth-intensive projects. Despite these insights, the literature remains limited on showing that how optimal debt maturity strategy can allow to achieve corporate growth objectives.

In summary, prior literature explored various aspects of corporate debt maturity, including its key determinants, influence on corporate performance, and role of market and firm-specific factors to shape it. While numerous studies provided insights into how firms' debt maturity choices are shaped by both internal and external factors, however, there is still a lack of consensus on how choices could directly affect corporate growth, especially in context of U.S. stock market. Most of the research focused on determinants of debt maturity and its potential impact on firm performance, without delving into its direct link with growth. There is still gap exists in understanding the interplay between debt maturity structure and growth, underscoring the need for more empirical work that could directly explain the nexus between debt maturity and corporate growth. Based on this gap, this study examines how corporate debt maturity structure influences corporate growth in U.S. firms, thereby contributing to a more comprehensive understanding of corporate financing strategies. Moreover, this study accounts for goodwill, innovation, and debt recovery period to show their influence on the nexus between corporate debt maturity and growth in context of U.S. stocks.

3. **Data, variables, and empirical modelling**

3.1 Data

This study uses unbalanced panel data of 2,774 U.S. based companies from 2013 to 2022. The sample is constructed is as follow: first, we dropped the companies of financial industry; second, we excluded the firms with missing values; third, we normalized the data for all variables. This study uses long-term debt to total debt as the measure of debt maturity, and annual change in total assets as the measure of the growth in context of U.S. based firms. The data for these companies are sourced from Overseas Market database of CSMAR. Further, we classified groups of samples on the basis of innovation, goodwill, and debt recovery period to account for their effects on the nexus between debt maturity structure and corporate growth.

3.2 Variables of study

Independent variable: The long-term debt to total debt is used as the measure of the debt maturity (DM) in U.S. stock market. This measure extensively captures the effects of long-term debt maturity on corporate growth.

Dependent variable: The annual change in volume of total assets is used as the measure of the corporate growth (Growth) of U.S. based stock. Moreover, we have employed annual change in operating revenues as the corporate growth measure (Growth_1) in robustness analysis.

Control variables: Following [1, 2, 10], this study employs Firm size (F_size), Cash holding ratio (Cash), Asset turnover ratio (Ast_TO), Equity multiplier (Eq_Mp), Liquidity ratio (Liq), and Firm profitability (Profit) as the control variables in this study. Firm size is measured as logarithm of total assets, cash holding ratio is measured as the cash to total liabilities, asset turnover ratio is measure as sales revenues to total assets, equity multiplier is measured as the proportion of a company's assets to shareholders' equity, firm liquidity is measured as the current assets divided by current liabilities, and firm profitability is measured as net profit divided by total assets.

3.3 Empirical modelling

This study employs two-way fixed effects regression model with time (t) and firm (i) fixed effects. The model for this study is constructed as follow:

$$Growth_{i,t} = \alpha_0 + \alpha_1 DM_{i,t} + \alpha_2 Controls_{i,t} + \varepsilon \quad (1)$$

where Growth denotes the corporate growth rate of firm i in year t, DM is the debt maturity of firm i in year t, and Controls denote the control variables of the study for sample firms across the given times. α is the regression coefficient, indicating the extent of influence of DM and control variables on growth, and ε is the error term. In addition to this baseline model, we have performed heterogeneity analysis tests which are designed to examine the effects of corporate debt maturity structure on corporate growth across the firm groups based on innovation level, goodwill, and debt recovery period.

4. **Empirical results**

4.1 Descriptive statistics

The descriptive statistics of variables of study are shown in Table 1. Growth has the mean value of 6.972519, suggesting that U.S. based firms experienced positive growth rate over the sample period. Overall, corporate growth rate ranges between -99.838 and 99.0154, indicating the extent of lowest and highest growth of the firms. The debt maturity structure (DM) has shown the mean value of 0.422807, showing that firms are 42% relying on long-term debt to support their debt structure. Moreover, the standard deviation of DM is moderate, leading that firms would have an acceptable range of change in their debt structure. Additionally, control variables such as F_size, Cash, Ast_TO, Eq_Mp, Liq, and Profit have mean values of 9.970411, 0.637101, 0.395022, -0.181690, 2.109331, and 0.869523 respectively. These all values are within an acceptable range as per the prior literature [1, 6].

Table 1: Descriptive statistics.

Variables	Obs.	Mean	Std. Dev.	Min	Max
Growth	11,502	6.972519	20.16528	-99.838	99.0154
DM	11,502	0.422807	0.216437	0.0082	0.97358
F_size	11,502	9.970411	0.927659	6.97193	14.4811
Cash	11,502	0.637101	1.446008	-2.70856	67.1921
Ast_TO	11,502	0.395022	0.477673	-0.11104	5.71685
Eq_Mp	11,502	-0.181690	283.6676	-29871.1	2696.11
Liq	11,502	2.109331	2.084094	-4.04418	74.2131
Profit	11,502	0.869523	6.400248	-151.0287	54.5952

4.2 Correlation matrix

The relationship between dependent, independent, and control variables is shown in Table 2. It is shown in Table 2 that there is a positive relationship exists between DM and Growth, denoted by the correlation coefficient of 0.0038. As per the correlation results, we can claim positive change in long-term debt results in increasing the corporate growth. This result is in line with the view that long-term debt has the positive link with the corporate growth as firms are more concerned with their long-term intensive investments through getting finance via long-term debts. The control variables, Cash, Ast_TO, Liq, and Profit have also shown significant and positive relationship with growth, suggesting that positive change in these variables would allow U.S. enterprises to gain positive growth. Additionally, the extent of relationship of DM is found changing with the control variables over sample period, indicating that how these variables interact with the dependent variable.

Table 2: Correlation matrix.

	Growth	DM	F_size	Cash	Ast_TO	Eq_Mp	Liq	Profit
Growth	1.0000							
DM	0.0038**	1.0000						
F_size	0.0131	0.1592***	1.0000					
Cash	0.0492***	0.0029	-0.1181***	1.0000				
Ast_TO	0.0218**	-0.2263***	-0.1499***	-0.0857***	1.0000			
Eq_Mp	0.0152	-0.0058	-0.0022	0.0009	0.0051	1.0000		
Liq	0.0400***	-0.0024	-0.1971***	0.8058***	-0.0388***	0.0046	1.0000	
Profit	0.1481***	0.0136	0.2054***	-0.0544***	0.2075***	0.0021	-0.0190*	1.0000

Note: *, **, and *** indicate significance level 10%, 5%, and 1%.

4.3 Benchmark regression results

The effects of debt maturity structure on corporate growth are shown in Table 3. As shown in Column (1) of Table 3, DM has the regression coefficient of 0.0038, in absence of the control variables. This result indicates that firms are able to manage their long-term debt to achieve positive corporate growth in absence of the control variables. In other words, long-term debt maturity significantly fosters the corporate growth in constant terms. Column (2) of Table 3 report the results of regression results for model (1). It can be seemed that DM has regression coefficient of 8.0218, which is significant at 1% significance level. This result is the indication of positive influence of long-term debt maturity on corporate growth in context of U.S. based stocks. It can be argued that U.S. based firms have their positive support from the long-term debt to achieve the positive corporate growth in present of the control effects of variables. These results agree with this view that long-term debt proportion in total debt significantly adds value to the corporate growth. In other words, U.S. firms are engaged in employing long-term debt maturity to achieve the positive corporate growth, specifically, one unit increase in long-term debt maturity results in increasing the corporate growth by 8.02 units. These findings are in line with the existing literature, suggesting that higher long-term debt maturity enhances the firm's potential to leverage long-term investments for achieving higher returns [2, 3, 10]. U.S. firms rely more on long-term debt to have the funds to be invested in projects and thereby getting into a potential through which positive growth rate could have been gained.

Table 3: Baseline regression results.

Variables	Growth	Growth
	(Column 1)	(Column 2)
DM	6.6407***	8.0218***
	(3.68)	(4.48)
F_size		2.5979***
		(6.12)
Cash		-0.3673
		(-1.15)
Ast_TO		-1.3166
		(-1.45)
Eq_Mp		0.0010*
		(1.76)
Liq		0.5456**
		(2.17)
Profit		0.7030***
		(15.71)
_cons	4.1648***	-23.3287***
	(5.34)	(-5.40)
R-squared	0.1492	0.1334
N	11,502	11,502
Firm FE	Yes	Yes
Time FE	Yes	Yes

Note: *, **, and *** indicate significance level 10%, 5%, and 1%. T-statistics are shown in brackets.

4.4 Robustness check

To check the robustness of baseline regression results, we employ alternative variable approach to show that either the positive effects of debt maturity on corporate growth are persistent or not. The annual change in operating revenue (Growth_1) is used as the corporate growth measure to check the robustness of baseline regression results. After incorporating Growth_1 into baseline model,

we run the regression analysis and results are presented in Table 4. As per the reported results in column 1, the regression coefficient of DM is still positive and significant, suggesting the positive effects of long-term debt maturity on corporate growth among U.S. based firms in absence of the control variables. U.S. based firms are engaged in positively leveraging the long-term debts to achieve their growth goals and thus achieving better performance outcomes. After including the control variables in baseline model, the results are reported in column (2) of Table 4. The results show that regression coefficient for DM is 3.5879, which is significant at 1%. Overall, these findings confirm the robustness of baseline regression, and indicate that U.S. firms with long-term debt maturity are more efficient to achieve the positive growth goals. In other words, the role of long-term debt maturity for corporate performance goals is still positive with the alternative measure of the corporate. These results imply that when firms employing long-term debt maturity are more concerned about making long-term investments, which in turn allows them to get positive economic returns. The long-term debt maturity enhances the firms' potential to manage their assets more efficiently and thereby enabling the firms to gain positive growth.

Table 4: Robustness check.

Variables	Growth_1	Growth_1
	(Column 1)	(Column 2)
DM	3.2472***	3.5879***
	(3.47)	(4.45)
F_size		-2.6981**
		(-2.16)
Cash		7.0168***
		(2.56)
Ast_TO		-7.5383***
		(-3.21)
Eq_Mp		0.0004
		(0.02)
Liq		-5.1583***
		(-3.52)
Profit		0.0230**
		(2.01)
_cons	47.4185***	82.9862***
	(3.57)	(4.49)
R-squared	0.1465	0.1781
N	11,502	11,502
Firm FE	Yes	Yes
Time FE	Yes	Yes

Note: *, **, and *** indicate significance level 10%, 5%, and 1%. T-statistics are shown in brackets.

4.5 Heterogeneity analysis results

The effects of debt maturity on corporate growth are found positive, however, there can be numerous factors which can influence these effects of debt maturity on growth. In response to this concern, we have utilized corporate reputation, corporate innovation, and debt recovery pace of the firms, to show that how these factors influence the effects of debt maturity on corporate growth.

4.5.1 Corporate reputation

Corporate reputation is the significant factor which can allow the firms to get the trust of creditors and thus enjoying fewer checking while securing the loans. Reputed enterprises are trusted by banks and other financial institutes due to their

Table 5: Firm heterogeneity results: Goodwill

	High Goodwill Value	Low Goodwill Value
Variables:	(Column 1)	(Column 2)
DM	11.9723***	4.0364
	(4.11)	(1.57)
F_size	1.2953*	4.1915***
	(1.90)	(5.36)
Cash	-1.6424**	0.0356
	(-2.04)	(0.09)
Ast_TO	2.8259	-2.1821*
	(1.58)	(-1.86)
Eq_Mp	-0.0008	-0.0058
	(-0.19)	(-1.11)
Liq	2.5747***	0.1264
	(4.30)	(0.41)
Profit	0.6339***	0.7401***
	(7.54)	(12.75)
_cons	-18.1360**	-32.9374***
	(-2.45)	(-4.46)
R-squared	0.1241	0.1462
N	5,743	5,759
Groups	1,189	1,585
Firm FE	Yes	Yes
Time FE	Yes	Yes

Note: *, **, and *** indicate significance level 10%, 5%, and 1%. T-statistics are shown in brackets.

Positive image in market and being relaxed about their payback potential [38]. By considering the goodwill, we run regression model again and results are reported in Table 5. Column (1) shows the regression results for the enterprises with high goodwill, and column (2) reports the results for the enterprises with low goodwill value. As shown in Table 5, U.S. based firms with high goodwill value have been remained more efficient to leverage the debt maturity structure to gain positive growth. The role of corporate reputation is found significant as the firms with high goodwill value have only significant effects of debt maturity on corporate growth. On the other side, for the firms which have low goodwill value, the effects of debt maturity on corporate growth are found insignificant. These results tend us to claim that reputed firms are able to gain high trust value, which enable them to use the long-term debt more exclusively and getting into a position through which they can utilize long-term debt to achieve positive growth.

4.5.2 Corporate innovation

The corporate innovativeness is another crucial factor which can shape the effects of the corporate debt maturity on corporate growth in context of U.S. firms. Highly innovative firms may have their greater focus on increasing their research and development expenditures, and thus gaining a better potential to grow [39]. We grouped the firms on the basis of innovativeness by using the median value of research and development expenditures of U.S. enterprises as threshold to classify. Corporate innovativeness is found a significant factor to influence the effects of debt maturity on corporate growth in context of U.S. firms. Column (1) of Table 6 shows the results of highly innovative firms, whereas column (2) reports the results of less innovative firms. The results show that highly innovative firms are more efficient to leverage the debt maturity to achieve significant positive growth. The effects are found insignificant for the less innovative firms. Overall, these results indicate that debt maturity (DM) is exclusively employed by the highly innovative firms to

achieve a positive growth potential. The firms with long-term debt would have their high potential to invest on research and development, and thus being able to achieve better growth returns.

Table 6: Firm heterogeneity results: Corporate Innovativeness

	Highly Innovative	Less Innovative
Variables:	(Column 1)	(Column 2)
DM	11.1396***	2.3919
	(5.02)	(1.52)
F_size	2.3087***	2.7595***
	(2.87)	(5.56)
Cash	-0.5983	1.0345*
	(-1.23)	(1.88)
Ast_TO	0.3391	-1.4770
	(0.13)	(-1.56)
Eq_Mp	-0.0017	0.0009
	(-0.11)	(1.57)
Liq	0.6062	0.4197
	(1.52)	(1.27)
Profit	0.5959***	0.7487***
	(8.16)	(12.30)
_cons	-17.3328**	-28.0934***
	(-2.14)	(-5.53)
R-squared	0.0267	0.0367
N	3,904	7,598
Groups	844	1,334
Firm FE	Yes	Yes
Time FE	Yes	Yes

Note: *, **, and *** indicate significance level 10%, 5%, and 1%. T-statistics are shown in brackets.

4.5.3 Debt recovery period

Debt recovery period is another crucial factor which can influence the nexus between debt maturity and corporate growth in context of U.S. based firms. Firms collecting their debts in shorter time are in a stronger position to use internal financing for their investment projects and relying less on debts [19]. On the other firms, when firms are collecting their debt in a longer time, they might not be able to manage their investment position and thereby leading toward the debt financing. By incorporating these effects, we re-estimated regression models and report the results in columns (1) and (2) of Table 7 for firms with high turnover and low turnover respectively. Based on these results, we can claim that debt maturity has more serious effects for the firms with high debt recovery turnover, indicating the when firms are less relying on debts, they could be more efficient to achieve the positive outcomes. It is also important to mention here the debt recovery turnover has differentiated effects for the U.S. firms to leverage debt maturity for growth potential. In simple words, when firms are engaged in utilize debt maturity by getting the debt soon, it results in leading to achieve high corporate growth returns.

Table 7: Firm heterogeneity results: Accounts Receivable Turnover

	High Turnover	Low Turnover
Variables:	(Column 1)	(Column 2)
DM	9.8111***	7.4187***
	(3.80)	(2.76)
F_size	4.0545***	1.1429*
	(6.57)	(1.89)
Cash	0.1257	-0.0767
	(0.21)	(-0.17)
Ast_TO	-18.5415***	-0.2847
	(-3.33)	(-0.26)
Eq_Mp	0.0044	0.0009
	(0.70)	(1.51)
Liq	0.2067	0.6007*
	(0.54)	(1.69)
Profit	1.1072***	0.7018***
	(13.94)	(11.99)
_cons	-34.8576***	-9.3519
	(-5.43)	(-1.51)
R-squared	0.0574	0.0380
N	5,751	5,751
Groups	1,268	1,358
Firm FE	Yes	Yes
Time FE	Yes	Yes

Note: *, **, and *** indicate significance level 10%, 5%, and 1%. T-statistics are shown in brackets.

5. **Conclusion and Policy implications**

This paper aims to examine the effects of debt maturity structure on corporate growth in U.S. firms by using unbalanced panel data of 2,774 firms from 2013 to 2022. We employ two-way fixed effects regression model with time and year fixed effects to show that how long-term debt maturity influences corporate growth. The findings of this study show that long-term debt maturity significantly fosters the corporate growth, implying that firms with long-term debt maturity, are engaged in making investments in those projects that could provide strong growth potential. These results remain robust with alternative explained variable approach. In addition, the results of firm level heterogeneity analysis show that well-reputed, highly innovative firms, as well as those with shorter debt recovery periods, are more efficient in leveraging the benefits of long-term debt maturity. Overall, these results indicate that U.S. firms rely on long-term debt to achieve their positive growth goals and being able to counteract the potential financial challenges [40-46].

The findings of this study present several implications for managers and policymakers. First, Managers of U.S based enterprises should prioritize long-term debt structuring to align with high-growth projects, and thus having sufficient time for returns and reducing the need of frequent refinancing. Second, managers should invest in innovations and build strong reputation, as those both lead to enhance firm ability to leverage long-term debt more effectively. Policymakers may support these efforts by offering incentives to encourage research and development practices and brand development. Third, managers should adopt fast debt recovery paradigm by optimizing cash flow management, implementing effective collection strategies, and securing favorable credit terms, which all would have their definite support toward long-term growth of U.S firms. Fourth, sector-specific incentives should be provided to U.S.-based firms to increase their research and development (R&D) expenditures according to their unique needs. This will help firms strengthen

their market position and maximize the positive impact of long-term debt, enabling them to fully realize their growth potential. Last, U.S firms are required to shorten their average debt collection period so they can reduce cash conversion cycle and being able to leverage internal financing for gaining their growth goals.

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