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Financial Flexibility and Firm Behavior: Evidence from Emerging Market

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A firm deliberately maintains the debt capacity to issue debt in the future to undertake investment opportunities that increase shareholder value. Therefore, the purpose of this study is twofold: to explore the difference in characteristics of financially flexible firms from non–flexible firms. Secondly, to investigate the effects of this flexibility on financial decisions and the value of a firm. The sample is drawn from the KSE100-indexed firms listed at the Pakistan Stock Exchange, showing 80 percent of the market capitalization. The data is collected for eight years from 2015-2022. The ordinary least square regression with year and industry fixed effect is used to estimate the proposed hypotheses. The results of the study revealed that financial flexibility has a significant and positive effect on the profitability, dividend payout, and cash holdings of Pakistani firms. At the same time, it significantly negatively influences the firm's value and investment ability. The results reveal a significant difference between financially flexible firms. FF firms have higher ROA, cash holdings, and dividend payout than non-FF firms and lower leverage ratios than non-FF firms. Financial decision-making has a significant effect on the firm value. The consequences of maintaining financial flexibility or low leverage below the optimal debt level remain a puzzle. The financial markets need to improve, which provides more debt and equity securities for firms to improve their financial mix. The stock market improvement also adds to the emerging market's economic health. This study added to the limited literature on financial flexibility or low-leverage puzzle in the emerging market. The results prove that listed firms maintain their debt capacity to avoid future uncertainty when profitable investments are available.

1. Introduction

Given the increasing uncertainty in the world economy, emerging markets can be more vulnerable due to low financial/trade openness and institutional quality (Trung, 2019). As a result, being financially flexible is particularly important for firms in these markets to buffer the negative effects of uncertainty. Financial flexibility (FF hereafter)is defined as "the ability of a firm to access and restructure its financing at a low cost" (Gamba & Triantis, 2020). FF accredits firms to maximize their value and stand solid in times of unexpected backlashes (Arslan-Ayaydin, Florackis, & Ozkan, 2014; Ferrando, Marchica, & Mura, 2017; Cherkasova & Kuzmin, 2018; Bhagat & Bolton, 2019)

Financial flexibility enables firms to better cope with the adverse effects of external shocks than firms that are not financially flexible. Maintaining spare debt capacity allows the firms to raise finance immediately when needed and thus ensure the firm's smooth operation. Indeed, Bancel & Mittoo (2021) suggest that achieving financial flexibility is considered one of the essential objectives when making financial decisions for corporations. Organizations may opt for several alternatives, such as debt policy, payout policy, cash policy, and equity policy, to keep intact their FF (Bancel & Mittoo, 2021). The liquidity curtailment enlarges extensively through financial calamity, and finance attainability becomes extra difficult. In such sort of calamity, firms route towards cash holdings in order to meet their obligations well-timed and maintain their routine operations (Dewally, Shao, & Singer, 2013; Dengleri, Lois, Thrassou, & Repousis, 2019; Santoro, Thrassou, Bresciani, & Giudice, 2021).

Financially flexible firms possess a greater ability to capture investment opportunities since they are less relied on internal funds. Leverage-oriented flexibility is considered a more reliable predictor of firm performance (Arslan-Ayaydin et al., 2021). On average, the firm's leverage is founded less than suggested by influencing theories; financial flexibility has been considered a missing link in capital structure (DeAngelo, DeAngelo, & Stulz, 2022). Financial flexibility could be measured through the unused debt capacity of the firm, which can be used to improve the investment ability of firms (Ferrando et al., 2017). Despite being a critically important research area, a literature review reveals that empirical research on the financial flexibility of corporations is limited in both developed and emerging markets (Marchica & Mura, 2010; Arslan-Ayaydin et al., 2021).

Thus, to address the gap, we examine the relationship between financial flexibility and corporate policies in Pakistan. We choose Pakistan because of the following reasons. First, Pakistan is an important emerging stock market in Asia. It was ranked as Asia's best-performing stock market in 2016[1]. Second, compared with developed stock markets, emerging markets with more volatile capital flows are argued to be more vulnerable to policy uncertainty (Trung, 2019), thus offering a better context to study the important role of financial flexibility.

Our study contributes to the current literature in several ways. Firstly, this study contributes to the literature on financial flexibility, the value of firms, investment ability, dividend payout,

[1] https://www.bqprime.com/markets/what-s-next-for-asia-s-best-performing-stock-market

and cash holding. This study examines the effect of financial flexibility on corporate policies (investment ability, firm value, dividend policy, and cash holding policy). According to the literature, flexible financial firms perform more efficiently than non-financial firms (Meier, Bozec, & Laurin, 2013). This study also compares the corporate policies of firms with financial flexibility with counterparts.

The remainder of this research paper is structured as follows: section 2 reviews the current literature on financial flexibility from which relevant hypotheses are developed. Data and variable measurements are discussed in section 3. Section 4 presents our data analysis, results, and discussion of the main results. Lastly, Section 5 concludes the study.

2. Literature Review

2.1 What is financial flexibility?

Financial flexibility (FF) is defined as "the ability of a firm to access and restructure its financing at a low cost" (Gamba & Triantis, 2020). It also refers to the "ability of a firm to respond in a timely and value-maximizing manner to unexpected changes in the firm's cash flows or investment opportunity set" (Denis, 2011). Bancel & Mittoo (2021) Consider FF as a business strategy firms use to improve decisions regarding capital structure. Firms have to deal with their FF in the best way in terms of different prices, i.e., taxes and transaction costs, and then ensure the value of FF in different circumstances (Gamba & Triantis, 2020). FF allows the firm to be better positioned to make investments and avail rapid opportunities constantly, even during a crisis. Thus, FF is likely to positively impact the firm value, especially in developing economies (Yung, Li, & Jian, 2015). A firm can become financially flexible by maintaining a reduced debt ratio and increased cash holdings (Setianto & Kusumaputra, 2019).

2.2 Financial Flexibility and Firm Value

Financial flexible firms can have less total equity payout, enhanced investment ability, more cash holdings, and thus more firm value than non-financial flexible firms. Yung et al. (2015) examined 33 developing economies and found that financial flexibility positively correlates with firm value, especially during financial crises. The firms having FF have more capability to tackle the undesirable effects of destructive external shocks. According to Mirkhalili & Mahmoudabadi (2018), FF has a meaningful association with the firm's value as it allows firms to make investments and increase profitability. Financial flexible firms have high performance in operations, ultimately improving profitability and value (Marchica & Mura, 2010).

2.3 Financial Flexibility and Firm Cash Holdings

Financially flexible firms are also found to accumulate more cash than their peers, especially during the financial crisis. The study conducted in Indonesia (2017) found that firms with FF are likely to have a lower amount of leverage and a higher amount of cash holdings because these cash holdings may act as a buffer to attain FF. Contemporarily, investors are more anxious about gauging the unfolded earnings of the firms and optimally using them (García-Teruel et al., 2009; Vo & Chu, 2019; Hamdan, 2020). Several researchers stressed the significance of maintaining FF through modest cash holdings or low leveraging (Byoun, 2008;

Campello et al., 2010; Lins et al., 2010). Cash retention is the most convenient way to increase financial flexibility (DeAngelo et al., 2018). Firms going through investment resentment can optimize their investment decisions through cash holdings since these are available at the actual realized value at the decision time. So, by making decisions with cash in hand, firms may evade potential risks linked with uncertain cash flows (Chen, Guedhami, Yang, & Zaynutdinova, 2020).

Financially constrained firms have more cash holdings that enable them to avail opportunities of an investment than non-constrained firms during the financial crisis. This study also proves that cash can be a valuable tool for firms, especially during negative shocks (Arslan et al., 2006). Brick and Liao (2017) find a positive relationship between cash holding and debt maturity, particularly among financially constrained firms in the US. In another context (Hong Kong),debt capacity is negatively associated with corporate cash reserves and cash holdings. This relationship is observed in financially constrained firms and firms with higher investment opportunities and hedging requirements (Chen & Lin, 2017). Similarly, Bancel and Mittoo (2021) research in France documented that firms with higher FF are more likely to have higher cash ratios/cash holdings and lower leverage.

2.4 Financial Flexibility and Firm Payout

A significant relationship between FF and equity payout is also reported in extant literature. Particularly, financially flexible firms are found to have less equity payout than their peers. When a firm becomes financially flexible, the financial resources in the firm become too scarce to pay a high dividend (Yung et al., 2015). Rapp, Schmid, & Urban (2014) Conducted their study in Germany and found that more financially flexible firms are expected to have lower dividend payout and leverage ratios. Firms with high liquidity and low debt ratio tend to pay a low dividend compared to those with less liquidity and high debt ratio (Blau & Fuller, 2008). The influence of financial flexibility on a firm's payout policy is also reviewed (Denis, 2011). Specifically, firms with high external financing costs and volatile investment opportunities tend to pay less to shareholders. However, there is a "dark side" of flexibility; firms with poor investment opportunity sets tend to pay out more as the agency cost of cash holding is high.

2.5 Financial Flexibility and Firm Investment

The investment ability of firms having FF is not much reliant on inside resources because financially flexible firms are in a better position to access external resources to finance their investment projects. FF in a firm increases its ability to invest in emerging countries, especially during the financial crisis. FF positively affects the firm's future investment (de Jong et al., 2008). Similarly, in another context, FF increases firms' investment ability because firms with FF are expected to undertake investments more consistently due to having more external funds for financing (Setianto & Kusumaputra, 2019). Firms with more cash reserves can enhance their ability to avail fruitful investment opportunities in developing markets during the crisis (Arslan et al., 2006). FF also enhances investment ability, and financially flexible firms are better positioned to invest in valuable projects and mitigate the negative shocks on investment, especially during crises (Marchica & Mura, 2010).

Numerous explorations have been done to investigate the influence of different financing decisions on the performance of Pakistani firms. Financing decisions of Pakistani firms can be determined by debt to equity ratio, and its effect was studied on different performance indicators (Salih Memon et al., 2017). The association of dividend payout, investment ability, and cash holdings with performance has been studied separately by many authors in Pakistan (Kanwal & Hameed, 2017; Shah et al., 2017). Shahid (2017) investigated the internal and external liquidity for investment opportunities in the case of India and Pakistan from 2010 to 2017.

3. Methodology

3.1 Sample and data

The sample included the firms of the KSE-100 index listed at the Pakistan Stock Exchange. The KSE-100 index represents more than 80 percent of the capitalization of the overall market. The sample is restricted to non-financial firms because financial and non-financial firms' investment activity and business operations are different. Therefore, financial flexibility and its consequences in non-financial firms cannot be compared with financial firms. The data is collected for eight years, from 2015 to 2022. Most of the data is collected from the financial reports of selected companies. Data regarding economic variables are collected from the World Bank website.

3.2 Model specification and variable measurements

A firm is classified as financially flexible if it has 3 consecutive years of unused debt capacity. The difference between optimal and actual leverage is calculated to measure unused debt capacity. Lagged independent variables remove the possible effect of endogeneity between dependent and independent variables. The optimal leverage is determined using the regression model proposed by (Marchica & Mura, 2010; de Jong et al., 2012).

$$\mathbf{LEV_{it}} = \alpha_1 \text{LEV}_{it-1} + \beta_1 \text{Industry Leverage}_{it-1} + \beta_2 \text{MTB}_{it-1} + \beta_3 \text{Size}_{it-1} + \beta_4 \text{Tangibility}_{it-1} + \beta_5 \text{Profitability}_{it-1} + \beta_6 \text{Inflation}_{it-1} + \text{firm fixed effects} + \text{year fixed effects} + u_{it} \quad (1)$$

The definitions of all variables used in this study are as follows:

Table No 1: Definition of variables

Variable		Definition
Financial Flexibility	FF	A firm is financially flexible if it has 3 consecutive years of unused debt capacity.
Cash holdings	CASH	Cash and cash equivalent to total assets
Investment ability	INVEST	Percentage change in fixed assets divided by total assets
Dividend Payout	DV	Total cash dividends to total sales
Profitability	ROA	Return on assets which are computed as net income divided by total assets
Leverage	LEV	Total debt to total assets
Market-to-book ratio	MTB	Market to book ratio, calculated as book value of assets plus market value of equity minus book value of equity divided by book value of assets.

Firms with actual leverage lower than the optimal leverage are considered to have unused debt capacity and are regarded as financially flexible. In comparison, those with actual

leverage greater than or equal to the optimal leverage do not have financial flexibility. Furthermore, the firm having FF (unused debt capacity) for consecutive 3 years is given the value of 1, while zero value is assigned to the firms that do not have 3 consecutive years of FF. In this way, the sample is divided into two groups, one of flexible firms and another of non-flexible firms, and then the performance and value of these two groups are compared using a t-test. Afterward, the effect of this flexibility on financial performance and decisions is analyzed using regression analysis.

4. Data analysis and results

We compare firm value, financial performance, dividend payout, cash holdings, and investment ability of FF firms with those of non-FF firms to investigate the impact of financial flexibility on these corporate activities.

4.1 Descriptive statistics

Our sample includes 75 non-financial firms in KSE 100 index from 2015 to 2022. First, the descriptive analysis is performed based on which the normality and basic features of data are analyzed. Table 2 summarizes descriptive statistics of all the current study's independent, dependent and control variables.

Table No 2: Descriptive statistics

Variables	Mean	Median	STDV	P25	P75
CASH	.062	.019	.099	.005	.078
INVEST	.37	.335	.293	.172	.529
DV	.778	.331	1.879	.019	.831
ROA	-.149	.082	5.944	.032	.145
MTB	2.318	1.319	6.349	.975	2.191
SIZE	16.866	16.93	1.54	16.05	17.82
LEV	.821	.52	6.087	.3	.68
FF Firms	246				
Non-FF Firms	280				

Table 2 shows the mean, median, standard deviation, and 25^{th} as well as 75^{th} percentile values for all variables in our study. The cash ratio (Cash) has a mean value of 0.062 and a standard deviation of 0.099. The mean of Investment ability is 0.37, with a median of 0.335 and a standard deviation of 0.293. The next key variable of the study is the dividend payout, with the mean, median, and standard deviation values of 0.778, 0.331, and 1.879, respectively. The mean value of ROA is -0.149, the median is 0.082, and the standard deviation is 5.944. The MTB ratio shows a mean value of 2.32, a median of 1.32, and a standard deviation of 6.35.

4.2. Difference in Firm Characteristics between Financially Flexible Firms and Non-Financially Flexible Firms

To examine the difference in firm characteristics of the two groups, the two-sample t-test is applied concerning investment ability (INVEST), Dividend payout ratio, ROA, leverage, and cash ratio (Cash). For this test, firms not having spare debt capacity are grouped as 1, and financially flexible firms as 2. Table 3 provides a summary of results for the difference of means between both groups:

Table No 3 Two-sample t-test for difference of means

Variable	Mean (non-FF)	Mean FF	Difference in means	p-value
INVEST	.42	.326	.095	.000
Dividend payout ratio	.652	.943	-.291	.087
ROA	.059	.137	-.079	.002
LEV	.685	.35	.335	.000
CASH	.043	.076	-.033	.000

It can be seen in Table 3 that there are significant differences between mean values of INVEST, ROA, leverage, and Cash between FF and non-FF firms. Particularly, capital expenditures of financially flexible firms are significantly lower than non-FF firms (p-value<0.01). FF firms' EBIT, ROA, and cash holdings are also significantly higher than non-FF firms (p-value<0.01), suggesting that FF firms are more profitable and hold more cash than non-FF firms. Moreover, the leverage ratio of FF firms is significantly lower than that of non-FF firms because they have to maintain their unused debt capacity. Financially flexible firms also pay more dividends than non-flexible firms (p-value<0.1).

4.3 Regression Analysis

We further conduct multiple regression analysis to analyze the impact of financial flexibility on firm profitability, value, cash, investment ability, and dividend payout. The results are presented in Table 4.

Table 4 Regression Results

Variable	Dependent (ROA) (1)	Dependent (FV) (2)	Dependent (DP) (3)	Dependent (CASH) (4)	Dependent (INVEST) (5)
FLEXIBILITY	0.088730***	-1.473253***	0.297535*	0.021711**	-0.107758***
	(0.010079)	(0.238372)	(0.174799)	(0.011359)	(0.025856)
LEVERAGE	-0.005729	-0.920168**	-0.003903	-0.004070	-0.003985*
	(0.017990)	0.412842	(0.014543)	(0.019601)	(0.002151)
SIZE	0.002921	-0.187072**	0.025612	-0.002972	-0.018993**
	(0.002956)	(0.067846)	(0.061116)	(0.003217)	(0.009040)
INVEST	-0.027387**	0.157129		-0.041537**	
	(0.013644)	(0.312862)		(0.014697)	
MTB Ratio	0.022918***	9.085572***			
	(0.002023)	(0.729694)			
PROFIT				0.083158*	
				(0.045991)	
C	-0.025579***	4.921602***	0.222389*	0.110688	0.750099***
Adj R-squared	0.350957	0.276696	0.000584	0.052625	0.030596
DW	1.308087	0.635702	0.999537	0.510698	0.819122
Year Fixed	YES	YES	YES	YES	YES
Industry Fixed	YES	YES	YES	YES	YES
Standard errors in parentheses *** p < 0.01, ** p < 0.05, * p < 0.1					

Table 4 shows that financial flexibility has a significant positive impact on firm profitability (ROA) (β=0.088, p<0.01). One unit increase in the firm's financial flexibility is

associated with around 0.088 times increase in the ROA of the firm. Among control variables, These results align with the previously found results of the Two-sample t-test because they also showed that the ROA of FF firms is significantly higher than that of non-FF firms. The adjusted R-squared of this model is 35% which means that the independent variables of this model have explained 35% of the variation in ROA. Hence, results revealed that the profits of FF firms are significantly higher than non-FF firms.

Results regarding the impact of financial flexibility on the firm value (table 4) show that financial flexibility has a significant but negative effect on the firm's value. The effect of flexibility on firm value is negative but significant (p-value<0.01). It means that one unit increase in flexibility causes a significant decrease in the firm value by -1.47 times. The results related to control variables show that leverage and size also have significant but negative effects on firm value, while earning ratio is significantly positively related to the firm value. However, the results have not significantly supported the impact of INVEST on the firm's value. The overall model has an adjusted R-squared of 27.77%, which indicates that the independent variables of this model have explained the 27.77 percent variation in the firm value. Hence, it is found that FF significantly decreases the firm value.

The next regression model was run to check the effect of FF on the dividend payout ratio along with control variables of size and leverage. The impact of flexibility on the dividend payout ratio is positive but has found marginal support because the p-value against this effect is <0.1. Based on these results, it can be found here that flexibility significantly positively influences the dividend payout ratio of firms, as one unit increase in FF has caused a 29.8% increase in the company's dividend payout. Therefore, it is evident that FF and dividend payout are positively related, so financially flexible firms pay a higher dividend than non-FF firms. The impact of both control variables, i.e., leverage and size, on the dividend payout ratio is insignificant because the p-value against their effects is>0.05. Overall, this model has not a good fit because the adjusted R-square for this model is too small.

Results regarding the effect of FF on the firm's cash holdings reveal a significant positive impact of flexibility on the firm's cash holdings; however, the effect finds marginal support due to the p-value >0.05 and <0.1. Based on the p-value <0.1, this hypothesis is accepted, and it is found that financial flexibility significantly enhances the firm's cash holdings because firm maintaining their financial flexibility tend to hold more cash in hand.

Two control variables, including size and leverage, did not show any significant effect on the firm's cash holdings; however, the firm's profit has a significant positive impact on the firm's cash holdings (p-value<0.1). The impact of INVEST on the firm's cash holding is negative and significant (p-value<0.01) because firms with more investment ability tend to have less cash in hand. Hence, the firm's cash holdings decrease due to undertaking investment. This model has an adjusted R-squared of 0.052, which is too small. Therefore, it can be found here that the variations in cash holdings are not strongly explained by flexibility and other control variables of this model.

The last regression was run to assess the effect of FF on the investment ability of the firm. Results reveal that there is a significant negative effect of flexibility on the INVEST because one unit increase in FF causes a 10.8% decrease in the INVEST of the firm (p-value<0.01). It means that firms that achieve FF tend to control their capital expenditure.

The leverage and size also negatively and significantly impact the INVEST (p-value<0.1 and p-value<0.05, respectively), which means they significantly decrease the firm's investment ability. Overall, the model has the adjusted R-squared of 0.031, so the independent variables of this model are not efficiently explaining the variation of INVEST. Concluding the results of all regression models, it is found here that financial flexibility positively influences the firm's cash holdings, dividend payout, and ROA. At the same time, it significantly decreases the investment ability and firm value.

4.5 Discussion of Results

The results regarding the cash ratio suggested that flexible firms are more likely to hold more cash than non-flexible firms. It is found that FF positively and significantly affects the firm's cash holdings. These results are consistent with the findings of Yung et al., who found that FF enables a firm to accumulate cash during the financial crisis, so reliably, flexible firms have more cash holdings. They found that FF positively influences firm cash holdings (Yung et al., 2015). Setianto & Kusumaputra (2019), who conducted a study in the Indonesian context, also proved same results, and it was found that firms with FF have higher cash holdings because these cash holdings may act as a buffer to attain FF. The results of the current study regarding cash ratio are also constant with the results of Bancel & Mittoo (2004), who conducted research in France and found that higher FF enables firms to have higher cash ratios and cash holdings. However, contrary results were revealed by Chen et al. (2020) in Hong Kong, who revealed that debt capacity is negatively associated with cash reserves and cash holdings of financially constrained corporations with higher investment opportunities and hedging requirements (Chen & Lin, 2017).

The results of the current study suggesting that FF increases the investment ability of firms are consistent with the findings of (Yung et al., 2015). Their results also revealed that FF is positively related to firms' investment ability. FF brings a firm in a better position to have access to external resources, make investments, and take advantage of rapid opportunities persistently. Similar results were found by de Jong et al. (2012) that FF has a positive relation with future investments of firms. The current study's findings are also consistent with the findings of Setianto and Kusumaputra (2019), who revealed that having FF, firms are expected to undertake investments more reliably because they have more external funds for financing. It was found that FF enhances the investment ability of a firm. These results align with the view of Arslan et al. (2006) that firms holding more cash reserves can better avail investment opportunities in a crisis. Similar results were suggested by distinctive studies conducted by (Arslan-Ayaydin et al., 2014; Lee, Gupta, Chen, & Lee, 2020) that revealed FF positively impact investment ability. FF can play a vital role in determining the investments of firms. Financially flexible firms are better positioned to invest in valuable projects. Mirkhalili & Mahmoudabadi (2018) et al. also demonstrated similar results in firms listed on the Stock exchange of Tehran and suggested that FF makes a firm more influential regarding future investment.

The current finding reveals that flexible firms are significantly more profitable and have more value than non-flexible firms is consistent with previous findings. The findings of Mirkhalili and Mahmoudabadi (2018) suggested that FF has an important association with a firm's value because it increases the firm's profitability due to more cash, better investment

ability, and less dividend payout. Similar findings were demonstrated by Yung et al. that flexible firms have more value than non-flexible firms. FF has a positive link with the firm's value as it has less total equity payout, enhanced investment ability, and more cash holdings. The current results are also constant with the findings of Marchica and Mura (2015). Their study also found that FF leads towards high performance in operations, ultimately improving the profitability and firm's value.

5- Conclusion

The current research contributes to the limited literature on corporate FF by conducting research in the context of Pakistan. This research tests the association of FF with investment ability, dividend payout, cash holdings, and firm value. The current study also compares the performance and selected characteristics of two groups, i.e., flexible and non-flexible firms. All proposed hypotheses were accepted and confirmed through findings. The results revealed that FF enhances the performance and value of the firm. It enhances the cash holdings and investment ability of the firm while negatively impacting its dividend payout. The findings are mostly consistent with existing studies. The current research will contribute to the limited literature on the importance of FF and its association with cash holdings, investment ability, dividend payout, and firm value. It would help firms and managers to recognize the benefits of FF and to understand how FF can be used to be more valuable even during negative shocks. It would be beneficial for managers of firms to achieve FF that will make them in better position to enhance their cash holdings and investment abilities, decrease their payouts and thus enhance value. However, this research is not in the context of any specific sector. Future research can be conducted in a particular sector.

Conflict of interest

All authors declare no conflicts of interest in this paper

References

Arslan-Ayaydin, Ö., Florackis, C., & Ozkan, A. (2021). Financial flexibility, corporate investment and performance: evidence from financial crises. *Review of Quantitative Finance and Accounting*, *42*(2), 211–250. https://doi.org/10.1007/s11156-012-0340-x

Arslan, Ö., Florackis, C., & Ozkan, A. (2006). The role of cash holdings in reducing investment-cash flow sensitivity: Evidence from a financial crisis period in an emerging market. *Emerging Markets Review*, *7*(4). https://doi.org/10.1016/j.ememar.2006.09.003

Bancel, F., & Mittoo, U. R. (2004). Cross-Country Determinants of Capital Structure Choice: A Survey of European Firms. *Financial Management*, *33*(4), 103–132. Retrieved from http://www.jstor.org/stable/3666330

Bancel, F., & Mittoo, U. R. (2021). Financial flexibility and the impact of the global financial crisis: Evidence from France. *International Journal of Managerial Finance*, *7*(2), 179–216. https://doi.org/10.1108/17439131111122157

Bhagat, S., & Bolton, B. (2019). Corporate governance and firm performance: The sequel. *Journal of Corporate Finance*, *58*, 142–168. https://doi.org/10.1016/j.jcorpfin.2019.04.006

Blau, B. M., & Fuller, K. P. (2008). Flexibility and dividends. *Journal of Corporate Finance*,

14(2), 133–152. https://doi.org/10.1016/j.jcorpfin.2008.02.003
Brick, I. E., & Liao, R. C. (2017). The joint determinants of cash holdings and debt maturity: the case for financial constraints. *Review of Quantitative Finance and Accounting*, *48*(3), 597–641. https://doi.org/10.1007/s11156-016-0567-z
Byoun, S. (2008). How and When Do Firms Adjust Their Capital Structures toward Targets? *The Journal of Finance*, *63*(6), 3069–3096. https://doi.org/10.1111/J.1540-6261.2008.01421.X
Campello, M., Graham, J. R., & Harvey, C. R. (2010). The real effects of financial constraints: Evidence from a financial crisis. *Journal of Financial Economics*, *97*(3), 470–487. https://doi.org/10.1016/J.JFINECO.2010.02.009
Chen, R. (Ryan), Guedhami, O., Yang, Y., & Zaynutdinova, G. R. (2020). Corporate governance and cash holdings: Evidence from worldwide board reforms. *Journal of Corporate Finance*, *65*. https://doi.org/10.1016/j.jcorpfin.2020.101771
Chen, T., & Lin, C. (2017). Financial Flexibility and Corporate Cash Policy. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2938306
Cherkasova, V., & Kuzmin, E. (2018). Financial flexibility as an investment efficiency factor in Asian companies. *Gadjah Mada International Journal of Business*, *20*(2). https://doi.org/10.22146/gamaijb.26239
de Jong, A., Kabir, R., & Nguyen, T. T. (2008). Capital structure around the world: The roles of firm- and country-specific determinants. *Journal of Banking & Finance*, *32*(9), 1954–1969. https://doi.org/10.1016/J.JBANKFIN.2007.12.034
de Jong, A., Verbeek, M., & Verwijmeren, P. (2012). Does Financial Flexibility Reduce Investment Distortions? *Journal of Financial Research*, *35*(2), 243–259. https://doi.org/10.1111/j.1475-6803.2012.01316.x
DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2022). Fundamental,Market Timing, and Seasoned Equity Offerings. *National Bureau of Economic Research*, 1–38. https://doi.org/10.3386/w13285
DeAngelo, H., Gonçalves, A. S., & Stulz, R. M. (2018). Corporate deleveraging and financial flexibility. *Review of Financial Studies*, *31*(8), 3122–3174. https://doi.org/10.1093/rfs/hhx147
Dengleri, K., Lois, P., Thrassou, A., & Repousis, S. (2019). Industry Application of Assessment and Forecasting Theories Through Comparative Financial Analysis: The Case of Greek Pharmaceutical Industries Under Crisis Conditions. In *Palgrave Studies of Cross-Disciplinary Business Research, in Association with EuroMed Academy of Business*. https://doi.org/10.1007/978-3-030-17523-8_8
Denis, D. J. (2011). Financial flexibility and corporate liquidity. *Journal of Corporate Finance*, *17*(3), 667–674. https://doi.org/10.1016/J.JCORPFIN.2011.03.006
Dewally, M., Shao, Y., & Singer, D. (2013). The liquidity crisis: Evidence from the US hospitality industry. *Tourism Economics*, *19*(3). https://doi.org/10.5367/te.2013.0214
Ferrando, A., Marchica, M. T., & Mura, R. (2017). Financial Flexibility and Investment Ability Across the Euro Area and the UK. *European Financial Management*, *23*(1). https://doi.org/10.1111/eufm.12091
Gamba, A., & Triantis, A. (2020). The Value of Financial Flexibility. *The Journal of Finance*, *63*(5), 2263–2296. https://doi.org/10.1111/j.1540-6261.2008.01397.x
García-Teruel, P. J., Martínez-Solano, P., & Sánchez-Ballesta, J. P. (2009). Accruals quality

and corporate cash holdings. *Accounting and Finance*, *49*(1). https://doi.org/10.1111/j.1467-629X.2008.00276.x

Hamdan, A. (2020). The role of the audit committee in improving earnings quality: The case of industrial companies in GCC. *Journal of International Studies*, *13*(2). https://doi.org/10.14254/2071-8330.2020/13-2/9

Kanwal, M., & Hameed, S. (2017). The Relationship between Dividend Payout And Firm Financial Performance. *Research in Business and Management*, *4*(1). https://doi.org/10.5296/rbm.v4i1.10784

Lee, C. F., Gupta, M. C., Chen, H. Y., & Lee, A. C. (2020). Optimal payout ratio under uncertainty and the flexibility hypothesis: Theory and empirical evidence. In *Handbook of Financial Econometrics, Mathematics, Statistics, and Machine Learning (In 4 Volumes)* (pp. 3367–3412). https://doi.org/10.1142/9789811202391_0096

Lins, K. V., Servaes, H., & Tufano, P. (2010). What drives corporate liquidity? An international survey of cash holdings and lines of credit. *Journal of Financial Economics*, *98*(1). https://doi.org/10.1016/j.jfineco.2010.04.006

Marchica, M.-T., & Mura, R. (2010). Financial Flexibility, Investment Ability, and Firm Value: Evidence from Firms with Spare Debt Capacity. *Financial Management*, *39*(4), 1339–1365. https://doi.org/10.1111/j.1755-053X.2010.01115.x

Meier, I., Bozec, Y., & Laurin, C. (2013). Financial flexibility and the performance during the recent financial crisis. *International Journal of Commerce and Management*, *23*(2), 79–96. https://doi.org/10.1108/10569211311324894

Mirkhalili, T. A., & Mahmoudabadi, H. K. (2018). The Effect of Financial Flexibility on Financial Behavior of Companies Listed in Tehran Stock Exchange. *American Journal of Industrial and Business Management*, *08*(01). https://doi.org/10.4236/ajibm.2018.81009

Rapp, M. S., Schmid, T., & Urban, D. (2014). The value of financial flexibility and corporate financial policy. *Journal of Corporate Finance*, *29*, 288–302. https://doi.org/10.1016/J.JCORPFIN.2014.08.004

Salih Memon, D. M., KHAN, A., Shaikh, M., Bashir Shah, A., Zahid, I., & MuhammdShaikh, D. F. (2017). Impact of Financing Decisions on Firm Performance: An Empirical Study of Pakistani Listed Firms in KSE. *INTERNATIONAL JOURNAL OF MANAGEMENT & INFORMATION TECHNOLOGY*, *12*(1). https://doi.org/10.24297/ijmit.v12i1.6058

Santoro, G., Thrassou, A., Bresciani, S., & Giudice, M. Del. (2021). Do Knowledge Management and Dynamic Capabilities Affect Ambidextrous Entrepreneurial Intensity and Firms' Performance? *IEEE Transactions on Engineering Management*, *68*(2),25-39. https://doi.org/10.1109/TEM.2019.2907874

Setianto, R. H., & Kusumaputra, A. (2019). Corporate Financial Flexibility, Investment Activities, And Cash Holding: Evidence From Indonesia. *Indonesian Capital Market Review*, *9*(2). https://doi.org/10.21002/icmr.v9i2.7470

Shah, S., Tahir, S., & Anwar, J. (2017). The impact of investment diversification on firms' performance: A comparison of domestic and multinational firms operating in Pakistan. *Paradigms*, *11*(1), 1d-1d. https://doi.org/10.24312/PARADIGMS110105

Shahid, M. S. (2017). Investment Opportunities & Liquidity Constraints: Evidence from Two Emerging Markets, India and Pakistan. *Journal of Independent Studies and Research-Management, Social Sciences and Economics*, *15*(1),55-69. https://doi.org/10.31384/jisrmsse/2017.15.1.5

Trung, N. B. (2019). The spillover effects of US economic policy uncertainty on the global economy: A global VAR approach. *The North American Journal of Economics and Finance*, *48*, 90–110. https://doi.org/10.1016/J.NAJEF.2019.01.017

Vo, X. V., & Chu, T. K. H. (2019). Do foreign shareholders improve corporate earnings quality in emerging markets? Evidence from Vietnam. *Cogent Economics and Finance*, *7*(1). https://doi.org/10.1080/23322039.2019.1698940

Yung, K., Li, D. D., & Jian, Y. (2015). The value of corporate financial flexibility in emerging countries. *Journal of Multinational Financial Management*, *32–33*, 25–41. https://doi.org/10.1016/J.MULFIN.2015.07.001