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Impact of Debt Financing on Operating, Financial and Stock Market Performance: Does Economic Cycle Empirically Matter?

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ABSTRACT

Keywords: Book-Leverage, Market-Leverage, operating performance, financial performance, stock market performance, GDP, economic cycle The Corpus of a mix of financing inserts a substantial force to drive the direction of the outcome of the firm. The motive of this paper is to realize the maximum contribution of debt financing on lifting the performance in the sugar sector of Pakistan in consortium with the changing paradigm of GDP. To gauge the contribution of the debt financing in the total financing has been operationalized through book-leverage and market-leverage whereas the firm's performance is considered as operating, financial, and the stock market. The Panel Regression Analysis was employed on the data of 27 firms in the sugar sector, itemized in the Pakistan Stock Market for the period of 2001-19. The outcomes revealed that book leverage influenced the operating and financial performance of the firms negatively while having a positive impression on stock market outcomes. In the case of the sub-sample, measured by an economic cycle taking the low percentile and high percentile of GDP, the effect became deviant. The said effect in the case of the overall sample was observed consistent when GDP was in the high percentile. In the case of low GDP, the impression of leverage was favorable in all three performing areas of the firm. The study contributes valuable insights into the existing literature, especially in the context of the influence of the economy on the usage of debt and firm performance and to the policymakers relating to borrowing and lending schema for being alert in the financing decision.

INTRODUCTION

It is pertinent to answer the questions; How much effect of book and market leverage on operating, financial, and stock performance be perceived with the changing level of debt? Which time is suitable for firms to get debt financing while adding firm's value? And how much risk being associated with the increasing debt financing with the changing of economic conditions? Though, these questions are directly or indirectly linked with the attribute of the company and the accurate decisions on the acquisition of debt financing by the management. According to Begenau & Salomao (2018), 25% of companies get debt and equity payout in the

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boom period. Leveraged firm's profitability concerns with internal and external hurdles. The organizational managers attempt to decide to most fitting debt-equity mix from various levels of the financial leverage being a source of sufficient reward (Gleason et al., 2000). Commonly financial leverage has a positive impact on firm value because it increases the performance productively (Huynh et al., 2022; Ghosh, 2007). Firms take a higher level of leverage to add value in the performance but sometimes it works inversely (Weill, 2008). High leverage indicates incremental agency costs due to the self-interest of shareholders and debt holders. This indication is negatively linked with performance (Michael & William, 1976). Outcomes of research show that firm performance is higher if we consider debt and operate on equity (Vătavu, 2015). The previous study shows the conflict between financial leverage on firm performance. Originations firms' performance narrates the process of limited resources at firms operated effectually to reach the main function of the organization for current and upcoming prospects. Monetary force measures to find out the financial risk involved in the firms. High levels of financial leverage allow taking shareholder return of high level but taking high level of risk (Wayongah & Oima, 2019). Reviewing the link between financial leverage and firm performance has clashing outcomes. Some authors debate the difference in the outcomes may be due to using different approaches for analysis (O'brien, 2003). Some previous studies (King & Santor, 2008). And (Phillips & Sipahioglu, 2004) find out the direct link between financial leverage and firm performance whereas other (Jermias, 2008) find out the comparative effect of the competitive strength and firm strategy on the relationship between leverage and firm performance.

Modigliani & Miller (1958) recommended the financial leverage is unrelated to firm performance. Some studies (Jensen & Meckling, 1979), (Brander & Lewis, 1986), and (Jensen, 1986) recommended a positive link between financial leverage and firm performance. Other hand studies (Myers, 1977) and (Titman, 1984) suggest a negative relationship.

Capital markets in emerging economies like Pakistan are in progressive era both at macro level and micro level where financing opportunities are difficult to be reaped by the business ventures to take the advantage for the firm. Managers of the ventures are required to first understand the value additivity of the mix of financing in performance outcome at various business stages. Macro environment of the country matters a lot in inserting the impact of economic movements managerial decisions for optimal usage of financing (Pham, & Nguyen, 2020). Studies like Huynh et al. (2022), Kijkasiwat et al. (2022), Pham and Nguyen (2020), Aziz and Abbas (2019) and Nazir et al. (2021) had highlighted the diverse outcome of debt financing on performance, but no study exerted the influence of economic cycle. Iqbal et al.

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(2020) described that uncertainty in the economy changes the direction of the performance. Therefore, we have two primary aims to discuss in this paper. The first one is to find out the influence of book and market leverage on firm performance and the second to investigate the said effect in case of different economic cycle taking operating, financial and stock market perspective on sugar industry of Pakistan for the period of 2001 to 2019. The sugar industry of Pakistan is one of the main manufacturing industries of Pakistan. Sugar industry has100,000 labor force and rural population of 9 million of people is involved with sugar industry. Sugar industry contributed 1.9% in the total GDP of Pakistan in 2000 which increased to 3.4% in 2014. In year 2018 it was observed another record season for the sugar production at 81.102 million tons, which showed 7.4 % increase over the last year production. As per the requirement of operating mills during the season, especially at the start of the season, this sector used to borrow funds from commercial banks and take credit from suppliers (*Agriculture 2018*).

The study highlighted mixed effects of financial leverage either in the form of book leverage or market leverage on interior and exterior areas of performance of the business. Debts in the books of accounts of the firm measured as book leverage has negative influence on operating and financial outcome whereas it has affirmative pressure on stock market performance. The said influence was observed in case high percentile of GDP but in case of low percentile GDP, the use of leverage was positive for all three performances of the firm.

After introductory section explaining the leverage with respect to firm performance context, next section entails the detail of theoretical and empirical literature on the topic with proposed hypotheses. Section III indicates the methodology of the study and section IV discusses the outcome of the testing of hypotheses. Last section concludes the results.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The competence of the firms to the management team is found out the performance of the organization reflecting the role of any firm carrying out the specific task. Performances refers to how well the firms are managed and how well the human and other resources are used in the firms, mainly measured in monetary and non-monetary methods (Eneizan, Wahab, et al., 2016), Eneizan 2015 and Mowen 2016). The previous studies segregated the performance into economic and innovation performance. Economic or pecuniary routine is commonly connected to the development of bids, thruput, professional, or stock charges (Havnes & Senneseth 2001). Firm performance is an ability how the firms can work and attain the target for profit .to find out the firm performance is valuable information about the money and deposit flow of the organization, the use of funds, effectiveness, and efficiency also this information can help out in the optimal decision making for mangers (Eneizan, Abd Wahab, et al., 2016). Debt is costly



due to repayment of the amount is in case the firm not able to pay a debt or maybe is the default. Debt is also a tax benefit. Rajan and Zingales (1995) described influence as the ratio of entire obligations and resources. This is a lasting right of the equity container. Aquino (2010) achieved a study about the Philippines firms. His examination revealed the great commitment amount is a direct link with the company growth rate and profit. Aivazian (2005) reviewed the impact of budgetary uses on the assumption ranges and found a negative relationship. In other investigations, Ahn (2006) establishes the negative impact on the budgetary use on the interest in the unrelated areas is much essential than the key parts. Leverage is not always poor, however, enhances the shareholder earning on the invested fund and make better uses of the tax profits related to the debt financing.

Rendering to the Trade-off aspect, the mix of financing select the composition of loan commitment in their monetary set up to insert the maximum benefit of the financial charges. (Detthamrong, 2017). As per pecking order theory, it is not used in optimal structure in starting point, but in its place emphasis on the experimental fact that organization shows a different preference for using internal finance (as retained earnings or excess liquid assets) over external finance. Pecking order theory posited investment opportunities calculated in light of market to book value prospect. Both theories are favorable for the firm (Gweyi & Karanja, 2014).

The small and large size of firms can easily compete with the small and large market. Economic Theory suggests that there is a positive relation between firm profitability and firm size (Lee, 2009). The small and large size of firms is a political debate as per the interest of policymakers in the growth of the small and large size of firms (Karlsson,2020). Large size of firm links trade-off between debt and equity financing over their economic cycle, small firms play between sources of financing being procyclical. Every firm has a different economic cycle and its funding need(Begenau & Salomao, 2018). Firms have different types of methods to fulfill their debt financing their own need. Karlsson (2020) investigated the relationship between firm performance and firm size. The result shows the small firms facing problems regarding equity financing, however large firms facing hurdles regarding completion and enrolment. Financial leverage impact on firm performance over the economic cycle respond that which time is suitable for the borrowing of firms and at which time firms raise equity capital? Some large companies get debt in the boom period and payout the equity in the boom. On the other hand, a small firm's debt policy is procyclical. According to the trade-off theory of capital, structure results suggest that's firm specifications link with the economic cycle (Begenau & Salomao, 2018).

Huynh et al. (2022) analyzed the firms of Pakistan bourse for 2011-2021 and asserted that leverage provided tax shield to the firm but it also enhanced the cost of financial distress. Pham and Nguyen (2020) demonstrated the debt as harmful cause of the listed firms in Vietnam for the period of 2013 to 2017. Likewise, Kijkasiwat et al. (2022) took emerging economies like Pakistan, India, Taiwan and Turkey, and developed economies like Austria, Belgium, China, Denmark, Finland, France, Germany, Great Britain, Hong Kong, Japan, Korea, Switzerland, and the United States in the context. They demonstrated negative assertion debt on the firm performance for both types of economies. Outcome of the Aziz and Abbas (2019) and Nazir et al. (2021) were consistent with the work of of Pham and Nguyen (2020) and Kijkasiwat et al. (2022). Iqbal et al. (2020) described that uncertainty in the economy changes the direction of the performance. Due to varied causal impact of the debt on firm performance, it is therefore can be hypothesized that:

- **1.** Leverage contributes positively (negatively) in the operating performance of the business in high (low) GDP.
- **2.** Leverage contributes positively (negatively) in the financial performance of the business in high (low) GDP.
- **3.** Leverage contributes positively (negatively) in the stock market performance of the business in high (low) GDP.

RESEARCH METHODOLOGY

The manufacturing sugar sector in Pakistan comprising of twenty-seven listed companies was chosen to assess the impact of book and market leverage on operating, financial and stock exchange prices, particularly highlighting their influence in case high and low economic cycle (Iqbal et al., 2020). Being quantitative research, the secondary data was inserted. We used the deductive method for the sake of theoretical reasoning. To get authentic outcome, the data for the research was sourced from the audited annual reports of the sugar sector for the period of 2001-19. Some of the financial data was sourced from the annual analysis published by the State Bank of Pakistan.

Table no 1 describes the variables. Dependent variables are Profit Margin, Return on Assets and Market to Book ratio. Profit margin was measured as net income scaled by total revenues (sale). Return on assets measured by net profit of sugar industry scaled by total assets (Hussain & Waheed, 2019). Market value per share scaled by book value per share was proxied for Market to book value ratio (Detthamrong, 2017). Book leverage was calculated by book assets less book equity divided by book assets. Division of the value of the assets in books less value of equity in books with book value of liabilities plus market value of equity was proxied for



market leverage (Chung, 2013). Size was measured by log of total assets of sugar industry. Age was calculated by the difference between data year and incorporation of the company year (Hussain, 2018). Tax determines the corporate tax of sugar sector. GDP evaluated the value of GDP of Pakistan used for economic cycle. How the economic resources of the firm were financed using equity and debt was proxied by the debt-to-equity ratio (Badar & Saeed, 2013). How much of the total income distributed to the shareholders was depicted in payout ratio. Tax and payout aspects were added in the analysis to demonstrate the clarity in income distribution having any impact on or advantage for the firm execution because it was said that dividend behavior did not variate because of tax imposition (Rafique, 2012).

Table 1: Variables

Variables	Measurements	Citation		
Profit Margin (PM)	Net Profit/Sales	(Hussain & Waheed, 2019		
Return On Assets (ROA)	Net profit/Total assets	(Hussain & Waheed, 2019)		
Market to Book (MB)	Per share market value scaled by per share book value	(Detthamrong, 2017)		
Book Leverage (BL)	Book value of assets less book value of equity scaled by book value of assets	(Chung, 2013)		
Market Leverage (ML)	division of the value of the assets in books less value of equity in books with book value of liabilities plus market value of equity was proxied for market leverage	(Chung, 2013)		
Debt to Equity (DE)	Total debt/Equity	(Badar & Saeed, 2013)		
Size	Log of total Assets	(Hussain, 2018).		
Age	Year-incorporation of Company year	(Hussain, 2018).		
Dividend Payout Ratio	% of Payment of Dividend	(Rafique, 2012)		
(Div)				
Tax	Corporate Tax	(Rafique, 2012)		
GDP	GDP of Pakistan	-		

Panel Regression Models

To test the hypotheses on the premise of the relationship between leverage and firm performance, this consideration contains three models which are profit margin, return on assets, and market to Book value.

Model 1:

 $PM_{it} = \beta_0 + \beta_1 BL_{it} + \beta_2 ML_{it} + \beta_3 Size_{it} + \beta_4 AGE_{it} + \beta_5 Div.payout_{it} + \beta_6 C.Tax_{it} + \beta_7 GDP_{it} + \epsilon_{it}$

Model 2:

 $ROA_{it} = \beta_0 + \beta_1 BL_{it} + \beta_2 ML_{it} + \beta_3 Size_{it} + \beta_4 AGE_{it} + \beta_5 Div.payout_{it} + \beta_6 C.Tax_{it} + \beta_7 GDP_{it} + \epsilon_{it}$

Model 3:

 $MB_{it} = B_0 + \beta_1 BL_{it} + \beta_2 ML_{it} + \beta_3 Size_{it} + \beta_4 AGE_{it} + \beta_5 Div.payout_{it} + \beta_6 C.Tax_{it} + \beta_7 GDP_{it} + \epsilon_{it}$

ANALYSIS AND DISCUSSION

Panel regression along with descriptive and pairwise correlation tests was applied in this section and results are demonstrated in the tables accordingly. Fundamental statistics of the variables used in the study are given in table no. 2.

Variable	Obs	Mean	St. D	Min	Max
PM	400	-0.022	0.330	-5.613	0.429
ROA	401	0.018	0.097	-0.498	0.513
MB	399	0.634	5.938	-96.380	21.720
BL	401	0.829	0.514	0.119	1.000
ML	401	0.737	0.244	0.027	1.000
DE	401	-5.592	143.111	-2736.454	176.960
Size	401	3.429	0.417	2.336	4.762
Age	405	35.186	13.441	13.000	69.000
Div	204	41.369	58.399	0.000	530.000
Tax	401	4077.912	5518.224	58.250	48879.790
GDP	405	20671.670	9772.442	7005.350	37972.310

 Table 2: Descriptive Statistics

As per the results, earning outcome of the concern sector have been in loss zone as depicted by average value of profit margin i.e. -0.022 with a deviation of 0.330 which means that the profitability of the sugar sector is in the negative zone over the period. However, as per maximum value, some firms are showing positive profitability and same is the case in return on assets position of the firm. Approximately, same is the case in return on assets. The marketto-book ratio has an average value of 0.634 and a standard deviation of 5.938, both of which show that there is significant price volatility, increasing corporate risk. As per the record of the book leverage, the average value of this leverage in sugar sector is 0.829 which shows that firms are used to rely heavily on borrowed funds and same is being observed in in case of market leverage. Value of the sugar sector's size shows little variation over time, indicating a need for long-term resources (mean is 3.429 with a deviation of 0.417). The average age of the firms in sugar sector is 35.186 years. The minimum age in this sector is 13.00 and the maximum age is 69.00. These values portray the sugar sector as one of the oldest sectors in Pakistan. The dividend payout ratio of the sugar sector is looking good because the mean value is 41.369 % the deviation and maximum value is 58.39 % and 530 % respectively. Tax paid during study period is Rs. 4077.912m with the maximum paid value of Rs. 48879.79m.

Correlation analysis explain the relationship between two variables. One can trace the relationship's range from -1 (perfectly opposite relationship) to 1. (perfect positive). Tables 3 explains the correlation analysis of the sugar sector. At a level of 5%, relationship value is



significant. The correlation coefficient between PM and ROA is 0.4276, indicating a strong and significant association. Value of 0.0391 between MB and PM is also a positive relationship. The relation between MB and ROA is positive (i.e. 0.1139*) and the significant at 5%. There is negative significant relationship between book leverage and Profit margin (i.e. -0.1988).

I ADIC J. CONCLAUDII ANALYSI	Table 3:	Correlation	Analysis
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Variabl											GD
es	PM	ROA	MB	BL	ML	DE	Size	Age	Div	Tax	Р
PM	1										
	0.4276										
ROA	*	1									
		0.1139									
MB	0.0391	*	1								
	-	-									
ы	0.1988 *	0.4563 *	-	1							
BL	Ŧ	Ŧ	0.0886	1							
	- 0.1662	- 0.4570	- 0.1887	0.5528							
ML	0.1002 *	0.4370 *	0.1007 *	0.5528 *	1						
			0.9275	-	-						
DE	0.0152	0.0562	*	0.0243	0.0477	1					
				-		-					
			-	0.2967		0.029					
Size	0.043	0.0392	0.0217	*	0.0636	9	1				
				-	-						
				0.3475	0.2065	0.028	0.080				
Age	0.0375	0.0889	0.0289	*	*	8	8	1			
	0.3751	0 2055		- 0.2262	- 0.2906	-	0.245	-			
Div	0.5751 *	0.3955 *	0.0365	0.2202 *	0.2900 *	0.079 7	0.245 6*	0.128 5	1		
DIV			0.0505	_	_	-	0	5	1		
	0.1749	0.1677	_	0.2906	0.0986	0.040	0.829	0.100	0.292		
Ltax	*	*	0.0094	*	*	4	2*	2*	1*	1	
	-	-									
	0.1116	0.1032		-		0.039	0.512	0.318	0.243	0.488	
LGDP	*	*	0.0141	0.0286	0.0649	2	7*	4*	1*	2*	1

NOTE: * shows the significant value at 5%

The Relationship between Book leverage and ROA value is -0.4563* showing the strongly negative and significant relationship. Value of -0.0886 between BL and MB is also a negative relationship between the variables. Seemingly, market leverage (ML) has negative significant relation with all the three performance areas of the firm. Strong Positive and significant relationship between DE and MB value exist which is 0.9275*. The relationship between DE with PM and ROA values are 0.0152 and 0.0562 respectively. Values shows the positive relation variables. The relationship between DE with BL and ML values is -0.0243 and -0.0477 showing the negative relation variables. The relationship between size with PM, ROA, and ML values are 0.043, 0.0392, and 0.0636 respectively, which shows a positive relationship between size with MB and DE values are -0.0217 and -0.0299 which shows a negative relation with Size. Value is -0.2967* BL relation with Size that is a strongly

negative and insignificant. The relationship between BL and ML with age values are -0.s are -0.475*and -0.2065* which shows that there is a strong negative relationship with age.

The relationship between age with PM, ROA, MB, DE, and size shows a positive relation with age. Dividend payout ratio relationship between PM, ROA, and Size that is a strongly positive and significant relation, values is 0.3751*, 0.3955*, 0.2456* accordingly.

Values of -0.2262* and -0.2906* between association of book leverage and market leverage with dividend payout ratio indicate negative and significant relation. GDP has a positive, negligible relationship with market to book value performance but a negative, substantial relationship with profit margin and return on assets (i.e., -0.1116* and -0.1032*).

Variables	Profit Margin	Return on Assets	Market to Book
	Model -01	Model-02	Model-03
	Fixed Effect Model	Fixed Effect Mod	el Fixed Effect Model
BL	0997865***	0948718***	3.438639***
	(.0231099)	(.0286764)	(.4010806)
ML	000817	0144745	-4.908892***
	(.017372)	(.0215564)	(.4218657)
DE	.0000627	.0001663	.0641042***
	(.0001583)	(.0001964)	(.0025892)
Age	0018169	0078267*	.1082276*
-	(.0035444)	(.0043981)	(.0611564)
Size	.0455899**	0602349**	4863145
	(.0192564)	(.0238947)	(.3263966)
Div	.0002995***	.000437***	0002995
	(.0000454)	(.0000563)	(.0007428)
L Tax	0253519***	.0203315**	.1940876
	(.0073883)	(.0091679)	(.1210797)
L GDP	001713	.0399892	9789398*
	(.0304879)	(.0378314)	(.5148156)
F Statistics	14.02***	17.10*** 1	00.82***

Table 4: Effect of Leverage on Performance

* is p<0.05, ** is p<0.01, *** is p<0.001

Table 4 contains the panel regression analysis, where the Hausman test was used to determine whether a fixed effect model (FEM) or a random effect model (REM) was more appropriate for the investigation. The null hypothesis was that there is no systematic difference in the coefficient, which refers to the use of REM results, and the test guide that there is no connection between independent variables and residuals which support the use of random effect model. After assessing the Hausman characteristics applied on model 1, model 2 and model 3, probability value of chi square test in all three cases was less than significant levels (i.e. 1%, 5% and 10%). This refers to the appropriateness of FEM for the results analysis and discussion. As F- statistics of the model 1, model 2 and model 3 are significant at 1%, it shows that overall model 1, model 2 and model 3 are fit form analysis.

As per the results, book leverage has negative influence on profit margin and return on assets., whereas in case of market performance, book leverage affects market to book value positively.



The said results are highly significant at 1% level of significance. In case of market leverage, it has negative influence on all performance areas of the firm, but effect is significant only in case of market to book value. This asserts that financial leverage of the firm does not favor profit margin (operating performance) and return on assets (financial performance) of the firm. These results are consistent with Pham and Nguyen (2020), Kijkasiwat et al. (2022), Aziz and Abbas (2019) and Nazir et al. (2021). From descriptive statistics table, it was demonstrated that sugar sector of Pakistan, was highly under debt. At lower debt, the situation may be different. As said by Modigliani and Miller (1958), use of debt increases the profitability of the firm at certain level but after a specific ratio of debt, financial leverage has negative influence on the internal performance. So far, results are consistent with the said claim. In case of stock market performance (market to book), influence of leverage was changed from negative to positive which demonstrate that investor in the stock market consider the use of leverage as positive signal for the performance. Other variables in the study have mixed effect on all performing areas of the firm. These results are also consistent with Huynh et al. (2022), Hussain (2018) and Badar & Saeed (2013)

		Low GDP			High GDP	
	PM	ROA	MB	PM	ROA	MB
BL	0.0325	0.107***	1.455**	-0.0844***	-0.0897***	3.789***
	(-1.42)	-4.11	-3.18	(-4.10)	(-3.85)	-8.4
ML	-0.0570*	-0.116***	-5.432***	-0.014	-0.0267	-5.576***
	(-2.06)	(-3.68)	(-9.78)	(-0.84)	(-1.41)	(-14.58)
DE	0.000237	-0.000197	0.104***	-0.000164	0.000154	0.0415***
	-0.74	(-0.54)	-16.23	(-1.03)	-0.86	-14.11
Size	0.0431*	-0.107***	0.281	0.0571***	-0.0486**	0.236
	-2.27	(-4.94)	-0.74	-3.98	(-3.00)	-0.88
Age	0.000378	0.000166	-0.0154*	0.000137	0.0000858	-0.0102*
	-1.19	-0.46	(-2.41)	-0.61	-0.34	(-2.46)
Div	0.00103***	0.00170***	-0.0136**	0.000225***	0.000299***	-0.00121
	-4.45	-6.47	(-2.94)	-5.93	-6.98	(-1.73)
Ltax	-0.0432***	0.0119	-0.148	-0.0253***	0.0147*	-0.201
	(-5.37)	-1.29	(-0.92)	(-4.31)	-2.22	(-1.82)
_cons	0.217***	0.287***	4.709***	0.0981**	0.164***	3.588***
	-5.04	-5.86	-5.46	-3.14	-4.63	-6.19
Ν	98	98	98	106	106	104
R-sq	0.447	0.672	0.826	0.61	0.68	0.844

Table no 05:	Effect of Leverage	on Performance	with respect t	o Economic Cycle

Standard errors in parentheses and * is p<0.05, ** is p<0.01, *** is p<0.001

Table 5 explains the effect of leverage position of the firm on different performing areas of the firms with respect to economic cycle measured by low GDP and high GDP. The results were

measured based on low and high GDP where low GDP means distribution of GDP from 1st to 50th percentile and high GDP means distribution above 50th percentile.

Results are mixed in both samples. Book leverage has a positive, considerable impact on financial performance when GDP is in the low percentile (i.e., ROA) and stock market performance (i.e. MB) whereas the effect of leverage on operating and financial criterion became negative, and affirmative on stock market performance (i.e., MB), in case of high GDP. Influence of financial leverage on different performance criterion given in table 5 are consistent with respect to results given in table 4 particularly in case of high percentile of GDP. Interestingly, market leverage affects all the performances of the firm negatively irrespective of low percentile or high percentile of GDP. These results recommend that in case of low GDP, firms can enhance their performance via financial leverage, but this enhancement reap negative fruits in case of high GDP for internal performance. Another interesting fact is that use of leverage has been consistently affecting stock market of sugar sector affirmatively and significantly. The varied results infer the uncertainty of the economy. Managerial decisions have been influenced by the high and low frequency of the economy (Iqbal et al., 2020).

CONCLUSION

This research focused on the effects of book and market leverage on the operating, financial, and stock market performance of Pakistan's sugar industry. The study highlighted mixed effects of financial leverage either in the form of book leverage or market leverage on performance of the company both inside and externally. Debts in the books of accounts of the firm measured as book leverage has negative influence on operating and financial outcome whereas it has affirmative pressure on stock market performance. The said influence was observed in case high percentile of GDP but in case of low percentile GDP the use of leverage was positive for all three performances of the firm. This refers to the trade-off strategy of the firm with respect to change in economic cycle. The sugar sector of Pakistan is very much procyclical in the practice of financial leverage. If economic cycle as measured by GDP is in low percentile, usage of debt financing is highly appreciating to enhance the profitability and stock market outcome. As economic cycle moves upward in high percentile, situation become deviant and operating and financial performance of sugar sector get negative influenced while stock market performance of the sector took this leverage a positive signal. The investors in market use this affirmative signal to invest in these types of firms. The contribution of the study is evident. The results disseminate clear understanding for the investor and creditor to make their investment and credit policies analyzing the firm's not in isolation but in combination of economic cycle



of the economy. Comparing the sectoral variations in how financial leverage affects performance can improve the study even further.

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