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AN INVESTIGATION INTO THE INTERACTIVE ROLE OF INTEREST RATE SPREAD, INFLATION, FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH IN THE CORPORATE DEBT FINANCING: A CASE STUDY OF PAKISTAN

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ABSTRACT

This study aims to investigate the dynamic relationship among the corporate financial policy, macroeconomic and institutional factors through error correction model in Pakistan over the period from 1975 to 2013. We used the cointegration methodology to study the long run short run effect of selected macroeconomic factors on the corporate borrowing patterns. The direction of causality is studied by Granger causality test within the framework of VECM. We note that inflation, foreign direct investment, and economic growth are significant determinants of long-run corporate financial policy. Interest rate spread has a negative short-run impact on the corporate borrowing. There is a long run capital structure equilibrium and any deviation from the long-run path is corrected at the rate of 23% annually if other things remain same. We also found that there is a reciprocal causal relation between corporate financial policy and economic growth. Corporate financial policy induces the FDI in the short run. The empirical results indicate that the corporate financial policy shares a stochastic linear trend with a country's macroeconomic and financial conditions.

Keywords: Corporate financial policy, Economic growth, Fiscal policy, Adjustment speed

INTRODUCTION

In normal discourse, good economic conditions and the vibrant financial environment is attributed with a better supply of funds for investment in debt and equity securities. Vibrant financial markets by efficient channelizing of funds from lenders to borrowers reduce the transaction cost. Low transaction cost gives financial flexibility and enables firms to formulate effective financial policy by structuring optimum capital mix. It is, therefore, expected that corporate financial policy economic conditions and fiscal policy have a meaningful economic relationship.

According to the dynamic version of Trade-off Theory, random shocks in the economy and financial markets cause deviation from the target capital structure. Firms adjust their capital structure towards target if the benefit of adjustment outweighs the cost of adjustment (e.g., Fischer, Heinkel & Zechner, 1989; Titman & Tsyplakov, 2007). Transaction costs are higher in developing markets therefore adjustment to target capital structure becomes a relatively costlier trade off.

Capital structure theories and models mainly presume the financial environment of developed countries. Very little is known about the dynamics of the corporate financial policy of developing economies like Pakistan. Financial environment of developed countries is not directly comparable to

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that of developing countries due to social, institutional, legal, political and economic differences (e.g., DeGregorio & Guidotti, 1995). Therefore, the results of corporate finance research cannot be instinctively generalized to developing countries. In developing countries firms face a different kind of impediments, which are non-existent in developed countries, to execute the pensive financial policy (e.g., Maddison, 2013; Desai, Foley & Hines, 2004; Chuhan, Claessens & Mamingi, 1998). This study strives to fill this gap in literature.

This paper contributes to the existing finance literature in three novel ways. First, the study used the longest available data of non-financial corporate sector and selected macroeconomic indicators starting from 1975 to 2011 for robust results. To the best of author's knowledge, this is the first study of capital structure which used time series methodology. Secondly, this is a pioneer study which used error correction model for estimation of capital structure adjustment speed toward long-run equilibrium path in addition to the direction of causality between the corporate financial policy and macroeconomic variables. Third, this study investigates the dynamic relationship between corporate financial policy and macroeconomic variables by applying the robust econometric methodology such as cointegration approach to testing the presence of long run relationship among the model variables and the direction of causality by Granger causality within the framework of vector error correction model (VECM). The investigation into the direction of causality between the corporate leverage and macroeconomic variables has great policy implications. The results of this study offer viable solutions to policy makers to formulate economic policy favoring the efficient utilization of capital by the corporate sector.

The empirical results show that financial policy and macroeconomic variables of the country share a stochastic linear trend. Inflation, economic growth, and foreign direct investment induce the corporate leverage in the long run. Banking sector performance has a negative impact on financial leverage in Pakistan but the relationship is not statistically significant. Any disequilibrium from the long run path due to random economic shocks is corrected at the rate of 22% each year.

Rest of the paper is organized as follows. Section two is the short account of the existing research relevant to the topic of interest. Section three outlines the data collection methods economic measurement of variable sand the specification of the model. In section four we elaborate and discuss the empirical finding and section five concludes the research with some policy implications.

LITERATURE REVIEW

The existing literature suggests that good economic conditions provide more financing opportunities to firms when compared to bad economic conditions. The extant literature clearly indicates that the prevailing economic conditions induce the correction of capital structure deviations from target, caused by random economic shocks (Cook & Tang, 2010). A famous study by Graham and Harvey (2001) concluded that capital structure is most deliberate decision and firms strives to maintain a range of capital structure which they deem an optimal capital structure or also called target capital structure. Their large survey results revealed that an over whelming majority of the company CFOs have definite aim about capital structure and they strive to keep capital structure within the acceptable range by rebalancing if the adjustment is financially feasible. Korajczyk and Levy (2003) empirically

investigated the adjustment process and found evidence in favor of their supposition that financially constrained firm's financing choices were different than financially unconstrained firms. Financially unconstraint firms make financial decisions according to changing economic conditions, unlike financially constraint firms. Halling and Zechner (2014) also found more or less similar results to Korajczyk and Levy (2003) with minor methodological differences. Bancel and Mittoo (2004) added to the dynamic capital adjustment domain by reporting that favorable economic conditions speed up the adjustment towards target capital structure if the firms have financial capability to support the restructuring; however, during bad economic conditions the adjustment process is slow for all companies no matter financially constrained or now. Leary and Roberts (2005) suggested that the cost of adjustment towards the target capital structure is an important impediment and has clustering effect. Gaud et. al. (2005) analyzed the capital structure of the Swiss companies and reported that the adjustment to target capital structure was influenced by institutional factors. The adjustment speed was slower in Swiss companies compared to other European countries. Another empirical study conducted by Drobetz and Wanzenried (2006) on Swiss companies also reported that the process of capital structure adjustment to target capital is affected by macroeconomic factors. Hackbarth Miao and Morellec (2006) proposed a model of capital structure adjustment process articulated with cash flows of the firm to study the impact of macroeconomic factors on the financing decisions. They found that firms strive to exploit favorable economic conditions and this tendency was more in those firms whose cash flow was determined by economic conditions.

A significant dimension of capital structure adjustment process which is recently explored intensively is mean revision supposition of capital structure. Byoun (2008) posited that capital structure adjustment decision depends on the firm's need of funds rather than the prevailing economic conditions. Contrary to pecking order theory, need-based model imply that firms adjust their capital structure only if firms deviate from the target and they have surplus fund. Chang and Dasgupta (2009) criticized the existing tests of dynamic trade-off models on the grounds that they lack the sufficiency to prove the underlying claims of the dynamic version of trade-off theory. Therefore, the inferences drawn on the basis of the results of such models are biased. Huang and Ritter (2009) applied a modified version of the statistical model normally used for estimation of adjustment speed and concluded that historical values of cost of capital affect the concurrent financing decisions. . Their analysis covered financing decisions of the US firms. They found that US firms adjust their capital structure with moderated speed. Almost all the aforementioned studies used dynamic trade off model and strived to estimate the adjustment speed towards the long-run equilibrium by using firm specific pooled data. There are number of limitations in panel data methodology especially when data is non-negative, capital structure is a typical case of limited variable bias. To overcome the shortcomings of panel data regression we applied cointegration approach on time series data of corporate sector and selected macroeconomic variables.

VARIABLES

Inflation:

It is a stylized fact that the inflation has great implications for almost all economic decisions.

It was established in the early theories of economics that higher rate of inflation affect the economy negatively. Particularly, inflation affects the capital structure and capital budgeting decisions of firm in many different ways (Harris & Raviv 1991). From supply of funds perspective higher inflation rate requires higher return thus makes debt financing costlier source of capital for corporate sector (e.g., Van Horne, 1971; Cooley, Roenfeldt & Chew, 1975; Berger, Ofek & Yermack, 1997; Rappaport & Taggart 1982). In accordance with the dynamic trade off model, inflation forces the existing capital structure to deviate from the optimal capital structure and requires adjustments to correct the variance if adjustment is financially viable (Ozkan 2001; Frank & Goyal 2004; Huang & Ritter 2009; Öztekin & Flannery 2012; Elsas & Florysiak 2015). The economic relationship between capital structure and inflation is already established, we further dig the relationship into short and long run parameters and direction of causality.

Interest Rate Spread:

There are several implications of interest rate spread for corporate financing decisions. High interest rate spread, at macro level, signifies inefficiency of the financial sector. Firms tend to reduce borrowing through banks in high interest rate spread (Elton et. al, 2001 Campbell & Taksler 2003; Chen, Lesmond & Wei 2007). Interest rate spread also indicate the level of development of financial system of a country (Fofack, 2016), it is observed that spread is higher in developing countries and lower in developed countries (Campbell and Shiller 1991). Thus, we expect that interest rate spread as a proxy for financial system development will have economic relationship with the corporate financial policy.

Gross Domestic Product:

GDP growth as measure of economic growth is attributed to enhancement of economic activity expansion of business sector and improved quality of life. A steady economic growth spurs the expansion of corporate sector and resultantly requires restructuring of asset base as well as capital structure. Similarly the negative growth can also be expected to squeeze the business activity and resultantly affect the existing capital structure of the company (Rajan & Zingales 1995; Michaelas, Chittenden & Poutziouris, 1999; De Jong, Kabir & Nguyen, 2008). Theoretically the GDP as a sound indicator of economic activity has very strong relation with capital structure decisions. However, the extant literature does not clearly indicate the nature and magnitude of the relationship.

Foreign direct investment:

It is conventional wisdom that foreign direct investment is one of the most significant sources of capital for corporate sector in growth economies. FDI affect the financial markets of the country and resultantly the economic growth. Many scholars by using different methodologies and models have reported that a prudent FDI policy has significant economic relationship with financial development of the country (see e.g., Hermes and Lensink 2003; Alfaro *et. al* 2004; Görg & Greenaway 2004; Ang 2009; Duarte, Kedong & Xuemei 2017). Market signaling theory of capital structure predicts that capital structure decisions are influenced by the developments in the financial markets

markets (Brounen, Jong & Koedijk, 2006; Ishikawa & Takahashi 2011; Warr *et.al.* 2012; Bonaimé, Öztekin & Warr, 2014; Dhaene *et.al.* 2017). Therefore a meaningful relationship between corporate capital structure and FDI is anticipated, which is not previously researched meritoriously. We explore the dynamics of the relationship with robust methodology.

METHODOLOGY

We model the empirical relation among the variables under the consideration as the following log-linear general equation.

$$lnCS = f(lnIF, lnBK, lnEC, lnFD) \quad (1)$$

Where:

CS	Aggregate capital structure measured as debt to total assets ratio
IF	Inflation, consumer price index (annual %)
BK	Interest Rate Spread, difference between lending and borrowing rate
EC	Annual Gross Domestic Product Growth Rate
FD	Foreign direct investment, net inflows measured as percentage of GDP

The dataset consists of discrete time series of the aggregate capital structure of the non-financial corporate sector of Pakistan and selected macroeconomic factors from the year 1975 to 2013. Annual data of aggregate leverage of non-financial corporate sector and interest rate spread was extracted from the Hand Book of Statistics of Pakistan published by State Bank of Pakistan (various issues). Data of selected macroeconomic variables such as inflation, economic growth, and FDI was collected from the World Development Indicators 2015. All the variables are used for analysis in logarithm form.

The time series properties of the variables under the consideration are tested through the standard unit root test such as ADF and PP test of stationarity. We used PP test to investigate the order of integration. To run a VAR model the presence of long run relationship is precondition which is checked through various cointegration tests. There are numerous approaches to test the presence of cointegration among the model variables. We apply Johanson test of cointegration to confirm the presence of log run relationship among the variables. The short run and long run dynamic relationship and direction of causality are achieved by applying VECM. The cointegration methodology combines the short run effect with the long-run trend path without losing the long run information in differencing the data

Model Development:

Dynamic tradeoff model suggests a convergence of capital structure ratios to long run targets if deviated due to random economic shocks. The existing research about the capital structure adjustment speed normally used partial adjustment model for estimation of capital structure adjustment speed towards long-run targets. We argue that VAR models can be applied to capture the adjustment speed on the country level historical data.

The first difference of explained variable is regressed with a range of first difference of lagged values of explanatory variables and the long run association term as shown in Equation-1 within parenthesis.

$$\Delta y_t = \delta_0 + \sum_{i=0}^{n} \delta_i \Delta x_{t-1} + \sum_{j=1}^{k} \eta_i \Delta y_{t-j} - \lambda\left(y_{t-1} - \alpha - \beta x_{t-1}\right) + \varepsilon_t \quad (2)$$

where Δ is a sign of first difference operator of model series and Y_t is *P*1* vector at the level I(0), In

this equation sign d represents *P*1* constant vector shows a linear trend in the system. The sign K denotes the lag length which was estimated at step one through lag selection criteria. e indicates the *P*x1 noise residual vector. The d and h signs represent the *P*P* matrices indicating a short-run association amongst cointegrated variables across P equations at the j[th] lag, selected through lag selection criteria. The sign l represents finite dimension vector of long run association. The first half of the term on the right-hand side of the equation as shown below in equation 1-A represents the short run dynamics of the association between dependent and independent variables.

$$\delta_0 + \sum_{i=0}^{p} \delta_i \Delta x_{t-1} + \sum_{j=1}^{k} \eta_i \Delta y_{t-j}$$

The second half of the term on the right-hand side within parenthesis represents the integration also referred to as long run association between dependent and independent variables. The parameter coefficient α and β are unknown parameters which are estimated simultaneously. With this context α and β are estimates rather than estimators which hold the equilibrium.

$$\lambda(y_{t-1} - \alpha - \beta x_{t-1})$$

The term represents equilibrium cointegration function which may also be expressed in linear regression equation as. Angel and Granger (1987) showed that the parameter coefficients can be estimated by ordinary least square as shown below with the hat signs on the parameter coefficients.

$$y^E = \alpha + \beta X^E \quad \text{Or} \quad \hat{y} = \hat{\alpha} + \hat{\beta} x_t + \hat{\mu}_t$$

As we know the ordinary least square parameter β is consistent and it is also true for parameter α; therefore, the parameter in the equation term within parameters in initial ECM equation the following notation is a true representation.

$$\hat{\beta} \xrightarrow{p} \beta; \hat{\alpha} \xrightarrow{p} \alpha$$

The ordinary least square parameters *α hat* and *β hat* can be used in the original equation and it can be represented as follows:

$$\Delta y_t = \delta_0 + \sum_{i=0}^{p} \delta_i \Delta x_{t-1} + \sum_{j=1}^{k} \eta_i \Delta y_{t-j} - \lambda\left(y_{t-1} - \hat{\alpha} - \hat{\beta} x_{t-1}\right) + \varepsilon_t$$

If we replace l with 0g- the final equation of error correction model takes the following form. The equation-2 is our target model.

$$\Delta y_t = \delta_0 + \sum_{i=0}^{p} \delta_i \Delta x_{t-1} + \sum_{j=1}^{k} \eta_i \Delta y_{t-j} - \gamma_0 + \hat{\nu}_t$$

Three steps were followed to develop our model. Since the cointegration relationship amongst variables was unknown it was therefore not desirable to estimate restricted VAR without fulfilling the preconditions. At the first step we investigate the order of integration and selection of optimal lag length by running unrestricted VAR model and applying lag selection criteria like sequential modified LR test statistic (each test at 5% level), final prediction error, Akaike information criterion, Schwarz

information criterion, Hannan-Quinn information criterion were used to select the most appropriate and reliable lag-length. At the second step, Johnson Cointegration test was run by lag length selected at the first step. On the basis of cointegration results the target model was selected. The I(1) level integration is the precondition to run Johansen Cointegration test. Philips Parrent test of stationarity was used to check the order of integration among the model variables. After checking the order of integration, the Johansen Cointegration test was run and the target model was selected. At the end VECM model was estimated to analyze the dynamic relationship among the variables. The VECM is specified as follows:

$$\Delta \ln CS_t = \psi_0 + \sum_{j=1}^{p} \psi \Delta \ln IF_{t-j} + \sum_{k=1}^{q} \psi \Delta \ln BK_{t-k} + \sum_{l=1}^{r} \psi \Delta \ln EC_{t-l} + \sum_{m=1}^{s} \psi \Delta \ln FD_{t-m} + \sum_{m=1}^{i} \psi \Delta \ln CS_{t-m} + \psi ECT_{t-1} + \varepsilon_t$$

Where :

Δ is the difference operator, ECT_{t-1} is the error correction term and ε is the white noised residual error.

RESULTS AND DISCUSSION

The time series properties of the variables were tested through the PP test. The test results indicate that all the variables are stationary at I(1) level but not at their level. Unrestricted Vector Autoregressive model was run at the first place, tentatively; with two periods lag length. With the results of unrestricted VAR lag selection, various criteria were applied to determine the optimal lag length which was later used for Johansen cointegration test. The results of the various lag length criteria are presented in table1.

Table: 1 Lag Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-451.8475	NA	45305.43	27.7483	28.0204	27.8399
1	-343.6827	170.4415	593.89	23.3747	25.2794*	24.0156
2	-285.5666	70.4438*	195.83*	22.0343	25.5715	23.2245*
3	-242.1119	36.8706	249.46	21.5825*	26.7523	23.3220

The results indicate that two-period lag is an optimal lag for this model. The steric sign at the two periods lags corresponding value of LR (sequential modified LR test statistic (each test at 5% level)) indicates that two-period lag is the most optimal lag length. Final prediction error (FPE) also indicates the two-period lagged as the appropriate lag length. Akaike information criterion (AIS) however, indicates three lag period as suitable lag length. Schwarz Information Criterion(SC) indicates one period lag as the optimal lag length. Hannan-Quinn information criterion (HQ:) also indicate two-period lag as suitable lag length. There is strong indication that the two-period lag is optimal lag length for further investigation into vector integration as the three out of five criteria suggests two-period lag as optimal lag length. The majority of the criteria decision is normally accepted in case there is the inconsistency of results among the different criteria. Therefore, two-period lag was accepted as optimal lag for further analysis.

Table: 2 Unrestricted Cointegration Rank Test

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.7433	44.8739	33.8769	0.0017
At most 1 *	0.6507	34.7093	27.5843	0.0051
At most 2	0.4704	20.9786	21.1316	0.0525
At most 3	0.2600	9.9385	14.2646	0.2160
At most 4	0.0072	0.2381	3.8415	0.6256

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level

* Denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

The long run and short run parameter coefficient estimates are presented in table 3. The results show that inflation, foreign direct investment, and economic growth have a positive impact on the corporate leverage in the long run. However, the long-run relationship between banking sector performance and corporate financial leverage is negative but statistically insignificant. A1% increase in the inflation adds 1.28% to borrowed funds in the capital mix of the corporate sector of Pakistan at 1% significant level. A 1% increase in foreign direct investment cause 2.88% increase in the debt financing at 5% significant level. A 1% increase in GDP corresponds to 1.13% increase in financial leverage at 1% significant level in the long run. Banking sector performance significantly causes a decrease in the financial leverage of corporate sector in the short run. Inflation is another short run significant determinant of the corporate financial leverage.

Table: 3 Long run and short run analysis

CS as dependent variable			
Variables	**Coefficients**	**Std. Error**	**T-Statistics**
Long run relationship			
Constant	0.1835*	0.0559	3.2846
BK_{t-1}	-1.0818	0.9687	-1.1168
IF_{t-1}	1.2844**	0.5683	2.2599
FD_{t-1}	2.8868*	0.4557	6.3349
EC_{t-1}	1.1344	0.1733	6.5433
Short run relationship			
ΔBK_t	-0.7166*	0.2370	-3.0232

ΔBK_{t-1}	0.0795	0.2818	0.2821
ΔIF_t	1.3632*	0.4873	2.7978
ΔIF_{t-1}	0.5176	0.6199	0.8349
ΔFD_t	0.3658***	0.1944	1.8815
ΔFD_{t-1}	0.2857	0.1739	1.6432
ΔEC_t	0.1485*	0.0307	4.8371
ΔEC_{t-1}	-0.6413	4.2727	-0.1501
ΔECT_{t-1}	-0.2273*	0.0638	-3.5621
Diagnostic tests			
Adj. R^2	0.5824		
F-Statistics	16.28253*	(0.0000)	
D-Watson	2.2460		
$\chi^{2normal}$	1.1342	(0.2917)	
$\chi^{2serial}$	0.8234	(0.6482)	
χ^{2white}	2.2873	(0.1789)	
*, ** and *** shows 1%, 5% and 10% respectively P-values in brakets			

The results indicate that the ECT_{t-1} is statistically significant at 1% level. The ECT_{t-1} represents the correction term which is an expression of long run association. The results are consistent with our supposition about the long-run causality running from a capital structure and macroeconomic and institutional factors. It is found that variables share a stochastic linear trend, in other words, they grow proportionally. The parameter coefficients individually depict mix trend. Most of the parameter coefficients are statistically significant. However to check for the joint effect of two periods consecutive lag Wald Test was performed. The model statistics shows that model is statistically significant and has strong explanatory powers. An R-squire value equal to 0.5824 indicates that 58% variation in financing decision is because of dependent variables. A p-value less than 5% indicates the statistical significance of the model. Overall the model is best fit and can help in explaining the short run and long run variations in the capital structure decisions of the corporate sector.

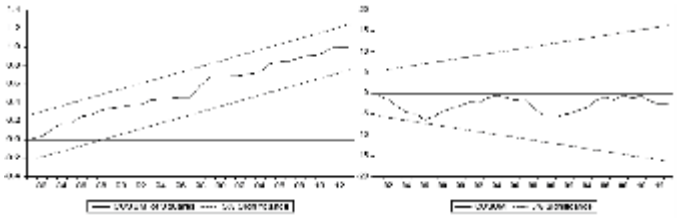

Figure 1: Plot cumulative sum and cumulative sum of squares of recursive residuals

The diagnostic tests and plot of the sum of the cumulative sum and the cumulative sum of squares of recursive residuals favor the robustness of the model. The Chi-Squire statistics and corresponding P-values of the Wald test for the direction of causality are presented in table 4.

Table 4. Results of the VECM Granger causality test.

Variables	CS	BK	IF	FD	EC	ECT_{t-1}
CS		9.3263*	5.1314**	1.8358	3.8358***	-0.2166*
		(0.0025)	(0.0364)	(0.3994)	(0.0658)	(0.0043)
BK	6.5300**		1.3471	3.4871	3.9792	-0.1272
	(0.0382)		(0.5099)	(0.1749)	(0.1367)	(0.0231)
IF	6.4083**	9.0490**		3.2729	1.8061	0.1847
	(0.0406)	(0.0108)		(0.1947)	(0.4053)	(0.2317)
FD	6.8473**	2.5406	1.2598		3.8196	-0.0912
	(0.0326)	(0.2807)	(0.5326)		(0.1481)	(0.2965)
EC	1.1236	0.8076	1.9819	0.2910		θ.1378*
	(0.5702)	(0.6678)	(0.3712)	(0.8646)		(0.0014)

*, ** and *** shows 1%, 5% and 10% respectively

P-values in brakets

The negative and significant lag period value of error correction term represents the long run combined causality running from the set of independent variables to the dependent variables. The results of the long-run direction of causality indicate that economic growth and the corporate capital structure have a reciprocal causal relationship in the long run. Banking sector performance, inflation, and foreign direct investment granger cause the capital structure. The long-run unidirectional causality is also running from the banking sector performance, inflation and foreign direct investment to the economic growth. The short run causality is determined by the combined significance of lag periods individual independent variable achieved through the Wald test. The results indicate that there is a bidirectional causal relationship between capital structure and inflation as well as between capital structure and banking sector performance. We note that a unidirectional causality runs from the economic growth to capital structure. Capital structure Granger causes the FDI. This empirical result suggests that foreign investors prefer to invest in the debt securities than equity. This tendency may be attributed to the volatile and highly uncertain equity market.

CONCLUSION

This study attempts to investigate the dynamic relationship among the corporate financing patterns, banking sector performance, inflation, foreign direct investment and economic growth in Pakistan over the period 1975 to 2013. The presence of cointegration among the model variables indicates that nonfinancial corporate sector of Pakistan has a long-run equilibrium path. This finding validates

the prediction of dynamic tradeoff theory that firms have a long run capital structure target. We found that inflation, FDI and economic growth and significant long-run determinants of corporate capital structure. The bank rate spread has a negative impact on corporate borrowing, in the long run, however, the relationship is not statistically significant in the long run. In the short run, the bank interest rate spread cause decrease in the corporate debt financing. Inflation and economic growth significantly induce corporate borrowing in the short run. The empirical results suggest that corporate financial policy shares a stochastic linear trend with various macroeconomic and institutional factors. The results indicate that any deviation from the long-run equilibrium is corrected at the rate of 23% annually. Thus, it takes on average five years to fully converge to the long-run equilibrium level. Although the adjustment speed estimated through partial adjustment model is not directly comparable to the adjustment speed estimated through error correction model, however, both estimation approaches indicate the financial system efficiency. The causality analysis revealed that economic growth and corporate capital structure have a reciprocal causal relation. Therefore, the optimal use of capital by corporate sector is essential for the balanced economic growth. It is worth considering that the short run causality is running from the capital structure to FDI. The suboptimal equity utilization may attract foreign investment by offering an arbitrage opportunity, this kind of short-term investment may have an adverse effect on the overall economy. There are numerous implication of this result and need further in-depth investigations.

Contrary to the most of the capital structure studies we found that financial policy is not just formulated on the basis of firm-specific internal factors but external factors also play a vital role in the formation of corporate financial policy. Therefore along with demand side factors (internal) supply side factors are also important in shaping corporate financial policy.

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