The Effect of Corporate Strategy and Capital Structure on Performance of Banking Sector of Pakistan

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Abstract - The finance literate has widely discussed two important relationships: (1) Corporate strategy and firm performance. The present study identifies the dimensions and variables using prior research within each of the constructs studied under the management and corporate finance domains, vis-a-vis corporate strategy, capital structure and firm performance. (2) Capital structure and firm performance However, most studies ignore the combined effect of corporate strategy and capital structure on firm performance. Our study tries to tackle this issue and uses sample from the listed companies in Pakistan which will prove the commonalties that exist between these domains of business research. This will help support the arguments of some researchers in the banking industry who have stressed the importance of assessing the firm’s strategies using concepts in finance. The overall objective of this study is to test the viability of the “effect of corporate strategy and capital structure on firm’s performance” using strategic management and corporate finance theory.

Keywords : Corporate strategy; Capital structure; Firm performance.

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(1) Corporate strategy and firm performance  
(2) Capital structure and firm performance

However, most studies ignore the combined effect of corporate strategy and capital structure on firm performance. Our study tries to tackle this issue and uses sample from the listed companies in Pakistan which will prove the commonalities that exist between these domains of business research. This will help support the arguments of some researchers in the banking industry who have stressed the importance of assessing the firm’s strategies using concepts in finance. The overall objective of this study is to test the viability of the “effect of corporate strategy and capital structure on firm’s performance” using strategic management and corporate finance theory.

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I. INTRODUCTION


Some of the research work done in the late eighties was aimed at testing the model of Porter (1980, 1985) and Miles and Snow (1978) in terms of the effects of competitive strategy on firm performance. Other efforts of the likes of Schmelzer (1992) delved into firm structure and tried to explain the components of organizational structure that have an effect on strategy and performance of firms. What emerged from these individual research efforts was the concept of the “Co-alignment Model”. The theoretical underpinnings of the model explicate the co-alignment between the environment domain, competitive methods, core competencies, and firm performance, considered to be the recipe for firms’ success. The key for superior firm performance is firm strategy formulation and implementation decisions (Hill and Jones 1995). It then became the paradigm that explains the effect of environment, corporate strategy, and structure on firm performance (Olsen et al., 1998, Chathoth 2007). The combined effect of corporate strategy and capital structure explain well for the difference in firm performance. The capital structure will have an impact on the overall performance of firms as tested. Therefore, capital structure should be given added emphasis for firms trying to add value to their stockholders’ and bondholders’ (Gi – Shian Su 2010).

This is important to mention that, complete "Co-alignment Model," is only tested in hospitality industry while the impact of firm strategy and capital structure (only internal forces) on firm performance is tested for Vietnam’s listed companies of all kind and not any specific industry with considering only one control variable for industry. The results of this research contradicted from earlier researches’ results due to firms’ size & structure and customers’ behavior. The performance of firms becomes the single most important construct that has been studied by management researchers, hospitality strategy researchers, as well as corporate finance researchers. Since performance objectives are what firms wish to accomplish, this construct will be scrutinized to reveal the key variables that represent it. The overall objective of a firm’s existence is to continue to survive through the crests and troughs of the industry life cycle. And in order to do so, firms need to insure that the performance objectives are met consistently. Researchers have emphasized on various performance measures that range from stockholder satisfaction measures, vis-a-vis return on equity and earnings per share to operational performance measures, i.e
return on sales and gross operating profit. These measures also vary from accounting measures to market-based measures. This study will identify various performance measures by examining the work of researchers who have advocated the use of key performance variables, both accounting and market measures, which represent the outcome variables of a firm.

We want to test this model for Pakistani listed companies only for Banking Sector. Data will be collected from secondary sources that will enable effective testing of hypotheses. Since the model pertains to testing the effects of single and multiple dependent constructs/variables, i.e. corporate strategy on capital structure and their impact on firm performance; the unit of analysis will be the firm’s corporate level for variables that pertain to corporate strategy, capital structure, and firm performance. We will use two dimensions of corporate strategy most relevant to capital structure i.e. growth and liquidity. The dimensions of corporate strategy, i.e. growth will be operationalized using sales growth and growth potential; and liquidity will be operationalized using the firm’s investment in cash and marketable securities as a percentage of total assets. The capital structure of the firm will be operationalized using the debt ratio while firm performance will be operationalized using the two dimensions, cash flow (Free Cash Flow per share) and accrual returns (return on equity).

The present study is an attempt to test the model using theories in corporate finance and strategic management, which will also clarify the commonalities that exist between these domains of business research. This will help support the arguments of some researchers who have stressed the importance of assessing the firm’s strategies using concepts in finance. The present study will identify the dimensions and variables using prior research within each of the constructs studied under the management and corporate finance domains, *vis-a-vis* corporate strategy, capital structure, and firm performance. Subsequently, the relationship between these constructs and dimensions will be tested for the dependencies between them through *a priori* hypothesized relationships. The unit of analysis will be the corporate level, and hence, the study will include corporate level data of banking sector. The research design will include cross-sectional data of banks averaged across an *a priori* defined time period. This will help address the lead and lag effects of variables across the time period. The overall objective of this study is to test the viability of the model tested by recent researcher using strategic management and corporate finance theory to find any discrepancies exist in behaviors of variables like debt, liquidity and firm size for particular service i.e. banking sector of Pakistan.

II. Literature Review

The underlying theme common to all strategy definitions given by different scholars like Chandler (1962), Hofer & Shendel (1978), Thompson & Strickland (1981), Bourgeois (1978) and Mintzberg (1981) etc. is the ability of the organization to meet its objectives by directing its efforts in a resourceful manner, aligning them to the developments in the external environment. Having identified this theme in the definition of strategy, it becomes essential to identify whether each individual research domain within the field is a proponent of this ideology proposed by eminent researchers. To do so, it is essential to pinpoint the orientations of the sub-domains in the field of strategy.

The strategic management model suggests that intended strategy is an outcome of certain distinct actions taken by firms. These actions can be categorized as the product of a firm’s external analysis and internal analysis (Hill & Jones, 1995). The external analysis is about understanding the firm’s external environment to identify opportunities and threats. This analysis includes analyzing the firm’s remote environment domain, task environment domain, and industry environment domain in order to identify the forces driving change and their impact on the organization during a given time period (Olsen et al. 1998). On the other hand, the internal analysis entails pinpointing what the strengths and weaknesses of the firm are in order to identify the quantity and quality of resources available to the organization (Hill & Jones, 1995). The concept that entails analyzing the firm’s external and internal environment and subsequently identifying the appropriate strategy comes under the *strategy formulation* sub-domain of strategy research.

On the other hand, the sub-domain that deals with designing organizational systems and structures in order to put the strategy into action is termed as strategy implementation. Strategy choice is a component of strategy formulation that entails identifying the strategic alternatives in tandem with the firm’s strengths and weaknesses. Since strategy is about identifying the appropriate courses of action, these alternatives vary depending on the hierarchical levels of the organization confirmed by, for instance, Hofer & Shendel (1979), who point out that strategy content varies with the level of organizational hierarchy. The hierarchical levels identified by various management theorists in the strategy domain are functional level, business level, and corporate level strategies (Hill & Jones, 1995).

a) Corporate Level Strategy Construct

The corporate level strategy entails decisions made by corporate managers to insure that company stakeholders are satisfied at all times. With this as the goal, the managers at the corporate level of company
hierarchy decide to invest in business(es) that result in long-term profit maximization and increased returns to the firm’s stockholders. Corporate strategies entail two distinct dimensions that include measures pertaining to growth (Zook & Rogers, 2001) and liquidity (Kim et al., 1998). Corporate managers decide what businesses to invest in and how liquid the assets of the firm should be to maximize the value of the firm, both in the short and long term scenario. Corporate strategy entails top management’s decision to invest in businesses, which they consider as the most value adding investments. It revolves around the basic premise of defining the firm’s objective of which business(es) to be in (Olsen et al., 1998). Corporate strategy influences all levels of strategy formulation including business and functional level, in that the decisions made at this level becomes the blue print of strategy formulation at the business level, which in turn influences the functional level. This does not mean that functional level and business level strategies do not influence corporate strategies. Even though there may be influence from both these levels of strategy formation on corporate strategy, it is how the corporation’s top management defines the strategy of the company as a whole that will influence the company’s strategy at various levels of its hierarchy.

i. Growth

Growth is considered to be one of the key benchmarks of success by practitioners in most industry settings. The banking industry setting is no different, in that firms within the industry have used this strategy as one of the key elements of success. Several researchers have suggested that growth strategies need to be managed well so that the firm can plan its orientation towards its market as well as its stakeholders appropriately. For instance, "aggressive and rapid growth could increase risk by straining a firm’s human resources and its ability to develop efficient controls and an effective internal structure. Growth ought to be carefully managed while developing an internal structure that is capable of coping with that growth while maintaining control of the firm’s operations" (Borde, 1998). Hill and Jones (1995) suggest that firms that grow through diversification into more unrelated business, will do so by sacrificing profitability, as the competencies of the company to produce adequate returns on investments in business ventures that they have little expertise in can lead to a decline in profitability. Furthermore, growth brings in positive return only to a certain extent, beyond which the firm’s managers will sacrifice the wealth of its stockholders to achieve higher growth. By testing the relationship between firm growth strategies and performance, it would be clear if there exists a significant relationship between the two constructs.

Three measures of firm growth will be used in this study. The first measure, i.e. sales growth will capture increased sales through Mark-up/Return/Interest Income, Fee, Comm., and Brokerage Income. It is essential for both researchers and practitioners to find out if sales growth adds value to the firm, which will be tested in this study. The second measure, i.e. asset growth will capture the growth in market value of assets, which will indicate if a firm that adds to its asset base will at the same time add more value to the firm. The third measure, i.e. growth potential will capture the future growth of the firm, which will be captured by using the ratio of market value of assets to book-value of assets. Note that this measure will tell us about the growth opportunity set of the firm as a result of its investment strategy. The relationship between these measures and measures of the capital structure and firm performance constructs will help conceptualize the dynamics of growth strategy more comprehensively.

ii. Liquidity

According to Kallberg & Parkinson (1992), corporate liquidity is a strategy that top management pays attention to in connection to the management of the firm’s assets. Firms typically manage their liquidity through resource allocation decisions that are directed towards more liquid assets (Kim, Mauer, and Sherman; 1998). The objective is to increase the liquidity of the firm but while doing so, managers may have to consider the pros and cons associated with the trade-off between investments in liquid or illiquid assets. Some authors, for example Huberman (1984), Ang (1991), and Myers and Rajan (1995) have provided explanation to the theory that more liquid assets may lead to agency problems as compared to less liquid assets. The literature on the investment preference of firms in liquid assets purports that either firms should hold large amounts of liquid assets (e.g. Myers and Majluf, 1984) or no liquid assets (e.g. Jensen, 1986). According to John (1993), "liquid assets constitute a considerable portion of total assets and have important implications for the firm’s risk and profitability". John (1993) points out that "the assets of a firm also have a natural categorization based on liquidity. Cash or cash like (marketable) securities are liquid assets. Long-term investments (such as plant and machinery) which may only produce liquid assets in the future may be called illiquid assets". Kim et al. (1998) proposed that the relationship between the liquid asset holdings and the firm’s growth opportunities may be positive. This notion is supported by Lakonishok, Shleifer and Vishny (1992), who argued that firms with large intangible assets would have higher costs of financial distress and therefore would invest more in liquid assets to minimize this cost. This is further supported by Myers (1977), who also posited that maintaining excess liquidity may help in reduction of financial distress.

Kim et al. (1998) also proposed that investment in liquid assets is positively related to the return on liquid
assets, while it will be negatively related to the current rate of return on investment in production. Also, the authors state that the future economic conditions affect investment in liquid assets. The better the future is in terms of investment opportunities, the more the investment will be in liquid assets. Also, Baskin (1987) pointed out that as the firm’s debt ratio increases, the cost of funding the assets to maintain a higher level of liquidity increases, thereby reducing the level of funds that will be used to maintain higher levels of liquidity.

There are industry effects associated with liquidity. Different industries have different levels of liquidity to take care of operational requirements as well as managing the rate of return of the firm. Damodaran (1997) points out that the difference in how firms maintain different levels of liquidity position with respect to cash and marketable securities is reflected across industry groupings. This is reflected in the ratio of cash and marketable securities taken as a percentage of total assets, which Damodaran suggests is the case as the demand for cash and cash equivalents is different across industries. Because of the industry effects of liquidity strategy, the need to test the liquidity strategy of firms in the banking industry is warranted, as similar studies in banking research have not been conducted.

Lancaster, Stevens, & Jennings (1999) tested the industry effects of the “distinctive relationships between cash flow, accrual income and liquidity measures”. The results supported the proposition that significant industry effects exist in many of the relationships. For instance, the authors found that industry differences exist in relationships between liquidity, accrual income, and cash flow. The authors point out that “these findings are consistent with other studies where industry effects are found in capital structure, risk, returns, and financial ratio patterns”. However, they could not generalize the effects of cash flow from operations to have significant incremental explanatory power for change in static liquidity, which were found only in the case of manufacturing firms. This will be tested in the present study with respect to the sample of organizations, which will be service-industry based, i.e. banks within the banking industry.

b) The Capital Structure Construct

The capital structure of a firm involves two key components, i.e. debt and equity.

Ross et al. (1999) point out that the goal of management is to maximize the market value of debt and the market value of equity. By doing so, the firm is able to maximize its total value. The optimal capital structure of the firm is one that minimizes the cost of capital. In other words, an optimal balance between the proportion of debt and the proportion of equity would result in the overall minimization of the cost associated with these components. Furthermore, it is essential that these costs are weighted across the various sources of funds to insure that the overall cost is the minimum.

Based on the basic concepts of the capital structure, firms’ managers make decisions on what type of funds and at what levels in terms of magnitude, will lead to the overall minimization of the costs associated with procuring these funds. Therefore, the demand and supply of funds affect the capital structure, but at the same time, the riskiness associated with the firm’s cash flows affects the capital structure. In other words, the more the volatility of the cash flows of the firm, the more will be the impact of this risk on the firm’s ability to raise debt and/or equity. Therefore, it can be stated that the capital structure decisions are based on the impact of the external environment on the firm and the strategies the firms use to insure that the value of the firm is maximized. This would vary from period to period, from firm to firm, and from industry to industry. The capital structure decisions, which are dependent on the financing decisions of the firm, can be met using the firm’s own cash flow to meet the requirements of capital spending and net working capital.

Therefore, firms with more retained earnings will typically use this source of funds as compared to debt or outside equity, which might decrease the leverage of the firm during those years when profitability and thus retained earnings are high. The fact reported above, that firms use internal sources of funds more to invest in new projects is validated by Donaldson (1961) and Myers (1984), who found that the funds that managers typically use as the first source to fund projects are internally generated, especially for positive NPV projects. The use of externally generated funds is never the first consideration, and within externally generated types of funds, debt is preferred over common stock. This concept brought forth the notion of the pecking order theory in corporate finance. Although debt financing is preferred over equity financing, it must be noted that as a result of financial distress and bankruptcy costs, firms typically do not fund the investments with debt alone. Ross et al. (1999) point out that firms that pursue high growth strategies will have lower levels of debt as compared to firms that pursue low growth strategies.

The industry effects of capital structure are important to consider. Titman (1984) pointed out that firms of industries that find liquidation costly would relatively use less debt. Other studies reveal that the debt ratios of high growth industries indicate that they are low, whereas industries with low growth prospects use more debt financing (Ross et al. 1999). The authors further point out that there are four important factors in the final determination of a target debt-equity ratio: (a) taxes, (b) types of assets, (c) uncertainty of operating income, and (d) pecking order and financial slack. The two reasons that directly apply to this study are: (1) type of assets, and (2) uncertainty in operating income. The type of assets influences the debt-equity ratio because
of the financial distress concerns that managers have. Firms with large investments in tangible assets have lower costs of financial distress than firms with intangible assets. This is so because of the resale value of the tangible assets that can be more easily assessed as compared to intangible assets. Firms with uncertainty in cash flows are more prone to financial distress, even with low levels of debt or no debt. Therefore, these firms typically rely on equity financing than debt financing to fund their investments in assets. Lowe, Naughton and Taylor (1994) point out that capital structure decisions are behavioral in nature more than financial. Ross et al. (1999) also support this reasoning while stating that there are no straightforward formula that help figure out the optimal capital structure of a firm in the real world.

c) The Firm Performance Construct

A firm's performance can be measured in terms of its profitability and market performance. Typically, profitability is measured in terms of return on the capital invested in the business or return on the revenues generated during a given period. On the other hand, market performance is measured in terms of market indicators such as share price and dividend yield ratio. The objective of this study will be to operationalize those measures of performance that have been tested in past studies to have a significant relationship with the corporate strategy, and capital structure of the firm. Beard and Dess (1981) used return on investment as the measure of firm performance, which was used to test the relationship between corporate level strategies and firm performance using regression analysis. Results revealed that corporate level strategies influenced firm performance. Hall and Weiss (1967) used “Return on Assets” as the performance measure to test the relationship between firm size and profitability. Correlation analysis was used as the statistical method and results indicate that a negative correlation exists between firm size and profitability. This study will incorporate both market performance measures as well as firm profitability measures to test the relationship between the corporate strategy, capital structure, and their impact on performance. The profitability of a firm can be measured to include the effects on two stakeholders, i.e. bondholders and stockholders. Since these two groups of investors have different perspectives on a firm’s performance, it is essential to pinpoint which group will be benefited because of corporate strategy and capital structure decisions. Therefore, the performance construct will be operationalized to include measures that are a barometer of stakeholder satisfaction, categorized as two distinct types, i.e. accounting measures and cash flow measures. Indicators such as return on equity and return on assets are accounting measures which reflect stockholder satisfaction, and indicators such as free cash flow per share are finance-related ratios that may indicate bondholders’ willingness to invest in the firm.

d) Relationship Between The Constructs

Growth strategies can be achieved through related or unrelated diversification strategies (Rumelt, 1974), which may in turn result in better firm performance, an outcome with mixed yet inconclusive results as far as past research in this area is concerned (Hoskisson & Hitt, 1990). Moreover, according to Kim et al. (1998), industry effects may lead to different performance outcomes, vis-a-vis the relationship between growth and firm performance. Note that Hall & Weiss (1983) tested profitability to have a positive relationship with asset growth. The concept of growth in this case is based on firms’ capabilities to increase their asset base in order to meet the market growth opportunities. The relationship between liquidity and performance has been tested, which reveals a positive relationship between liquidity and cash flow measures, i.e. free cash flow (Kim et al., 1998). Ross et al. (1999) suggest that firms with higher growth potential will have lower debt as compared to firms that have a lower potential to grow. The strategy domain has witnessed research work pertaining to the relationship between firms’ strategy and structure, pioneering as early as 1962 by Chandler, who suggested that structure follows strategy. Other studies that delved into corporate strategies include Ansoff (1965). The relationship between growth strategy and performance has not been tested in the banking industry. The relationship between growth strategies and liquidity tested by Kim et al. (1998) indicate that the direction of the relationship was positive. Higher growth strategy of firms will be based on a higher level of liquidity that such firms will have. The relationship between the growth strategy and the capital structure constructs was suggested by Barton & Gordon (1987). The authors propose that a firm’s sales growth rate will have a positive relationship to debt levels. This further indicates that if the environmental conditions are favorable for the firm’s growth, debt will be used lesser to fund that growth than equity. On the other hand, Ross et al.(1999) suggest that firms with high growth potential or from industries that grow at a faster rate have lower levels of debt as compared to firms from low growth industries.

The need to test proxies for growth in relation to firm performance is called for in the case of banks, as the industry has seen the use of this strategy as a primary vehicle of value addition. This notion is not yet proven to be the case, which needs to be tested for stakeholders of the industry to be certain about the outcome between growth and firm performance, and the level to which this strategy needs to be used. This will in
turn help in the formulation and implementation of effective corporate and business level strategies.

The relationship between liquidity and capital structure of the firm was tested by Kim et al. (1998) who found that as the firm invests more in liquid assets, it will result in lower reliance on debt, and hence, will result in a lower debt ratio. This was confirmed by Baskin (1987), who reported that the relationship between debt and liquidity is negative. On the other hand, the relationship between debt structure and performance was reported by Capon et al. (1990), who suggested that out of the 149 relationships reported using debt as the independent variable and firm performance as the dependent variable, 90 reported a negative relationship between firm debt level and performance. Shah (1994) demonstrated that changes in capital structure affects stock prices, which in some ways was confirmed by Harris and Raviv (1990), who suggested that there is a positive correlation between leverage and firm value. Note that liquidity strategy can be used by firms to increase their value, which needs to be tested in the context of the banking industry.

i. Summary

The literature in strategic management and corporate finance pertaining to the definition and theoretical underpinnings of the constructs defined within the model i.e. "Effects of corporate strategy and capital structure on firm performance" from recent study. The constructs and their dimensions were identified and the variables that represent each dimension were explored in terms of the research that exists in the domains. The interaction between the constructs and variables in terms of the work done by researchers were explored to highlight the key relationships that will be used in the development of hypotheses, which will be explored in the following work.

III. Research Methodology

a) Introduction

The focus of this chapter is to operationalize the constructs identified and described in the previous chapter. The following pages of this chapter include a description of the measures that represent the constructs; and subsequently hypotheses that capture the relationship between the constructs and variables will be developed. The hypotheses development will be aimed at capturing the relationship between the constructs. It is important to restate the research questions before the constructs are operationalized and hypotheses are developed. They include:

1. Do these corporate strategies significantly impact the capital structure of the firm, in that is the choice of capital structure of the firm dependent on corporate strategies? More specifically, do the dimensions of corporate strategy, i.e. growth and liquidity explain a significant amount of variance in the choice of capital structure? If so, what are these impacts in terms of the source of funds and their representation in the capital structure of the firm?

2. Is firm performance better explained by the alignment between the strategy and capital structure constructs?

3. Are growth strategies value adding strategies which result in improved firm performance?

b) Operationalizing the Constructs and Dimensions

The Corporate Strategy Construct:

i. Growth Strategy

The first dimension of the corporate strategy construct is sales growth. Sales growth will be operationalized using the company’s annualized sales growth for the period 2008 through 2011, which will then be averaged over the time period. The averaging of the firm’s sales growth will help address the crests and troughs of growth the company may have had over the time period.

The second dimension of corporate strategy, i.e. asset growth will be operationalized by averaging the firm’s market value of assets reported on an annual basis for the time period 2008 through 2011. Again, by averaging the market value of assets, the crests and troughs of firm’s asset growth will be addressed.

The third dimension of corporate strategy, i.e. the firm’s future growth potential will be operationalized using the firm’s market value of assets divided by its book-value of assets (Kim et al., 1998). This ratio signifies how well the firm manages its investment (Ross et al., 1999). This ratio is interpreted as: a ratio of above 1 implies good investment strategy on part of the firm’s management, and a ratio of below 1 signifying poor investment strategy. Smith & Watts (1992) and Stohs & Mauer (1996) use this ratio as a proxy for growth options. The reasoning provided by the authors is based on the fact that the value of intangible assets is not reflected in the book-value of assets; therefore the ratio of market to book-value of assets would capture the growth options. A higher value of market-to-book-value of assets for the firm is an indicator of more growth options in the firm’s investment opportunity set.

ii. Liquidity Strategy

Liquidity will be operationalized using liquidity ratio (Kim et al., 1998; John, 1993), which is the ratio of cash plus marketable securities to the book-value of assets. This ratio signifies the proportion of the firm’s total assets that are highly liquid, which in turn reflects how well it manages its liquidity position on a period-to-period basis.
c) The Capital Structure Construct

The capital structure construct will be operationalized using the debt ratio (Kim et. al, 1998), which is the firm’s total debt divided by its total assets. Total debt of the firm will be calculated by including both long-term debt as well as current portion of long-term debt, reported in the current liability section of the balance sheet.

d) Firm Performance Construct

The performance construct will be operationalized using traditional measures of firm performance. These measures can be categorized into accounting measures and finance measures of performance. As detailed in Chapter 2, the accounting measures of firm performance include return on assets and return on equity. On the other hand, finance measures of firm performance include variables that capture the cash flows such as free cash flow per share and operating cash flow per share. This study will use both accounting measures as well as finance measures to test the effects of the constructs on firm performance. The measures that will be used will include return on equity that will represent the accounting measure of performance and free cash flow per share, which will represent the finance or cash flow measure of firm performance. The annualized data for these measures will be averaged over the time period 2008 through 2011. This will help in capturing the lead and lag effects between the performance construct and other constructs used in this study.

e) Measuring control variable

Firm size is the control variable that is highly correlated with the dependent and the independent variables. The inclusion of the control variable will help reduce spurious relationships. This control variable will be adopted in the testing of the 6 models in this study. Firm size is measured by logarithm of market value of firm asset.

f) Developing Hypotheses

Our model theorizes the relationship between the constructs vis-à-vis the strategy, structure, and firm performance. The previous sections have explained the relationships between constructs, and this section will develop and propose hypotheses using the variables stated in the previous section. This section is divided into subsections that develop hypotheses depicting the relationship between the independent variable and dependent variable. These sub-sections include:

(a) Corporate Strategy and Capital Structure;
(b) Corporate Strategy and Firm Performance;
(c) Capital Structure and Firm Performance;
(d) Corporate Strategy; Capital Structure, and Firm Performance.

g) Interaction between dimensions of corporate strategy

The corporate strategies as pointed out earlier include growth and liquidity strategies. The relationship between sales growth and liquidity is hypothesized to be positive. The higher the sales growth is, the higher the liquidity position would be. This is true if the percentage increased in sales growth is the same as that of liquidity measured in terms of cash and credit revenue. Given this assumption and the assumption that the cost structure of the firm will increase at decreasing rates when sales increases due to economies of scale (Hill & Jones,1995), the relationship between the firm’s sales growth and liquidity position will be positive. This leads to hypothesis 1(a):

H1(a): There will be a significant positive relationship between sales growth and liquidity position.

The following equation is used to test H1(a).

\[ \text{Ld} = a + b_1(\text{SaGr}) + b_2(\text{FiSi}) + e \]  (1)

\[ \text{Ld: Liquidity} \]
\[ \text{SaGr: Sales growth} \]
\[ \text{FiSi: Firm size} \]

The relationship between firm size and liquidity is hypothesized to be positive as bigger banks have to maintain more liquidity to operate well. The relationship between firm size and growth is also hypothesized to be positive. The logic used in this case is that bigger firms will focus more on growth strategies, which will also lead to higher potential for growth. Therefore, bigger firms will have higher sales growth, and growth potential as compared to smaller firms.

The relationship between the firm’s growth potential and liquidity position will be positive (Kim et al., 1998). This is because a firm with a higher growth potential would need to be more liquid in order to fund its operations and asset growth to meet the growth potential. Moreover, it is assumed that the firm’s liquidity position will influence its market value, which in turn will increase its growth potential. This leads to hypothesis 1(b):

H1(b): There will be a significant positive relationship between the growth potential of the firm and its liquidity position.

Equation (2) is to test H1(b):

\[ \text{Ld} = a + b_1(\text{GrPo}) + b_2(\text{FiSi}) + e \]  (2)

\[ \text{Ld: Liquidity} \]
\[ \text{GrPo: Growth Potential} \]
\[ \text{FiSi: Firm size} \]

In the case of debt ratio, it is posited that the relationship between firm size and debt will be positive. Since firms will use more debt to fund their growth, the ratio of debt to assets will increase as they grow. Therefore, bigger firms will have higher debt ratio as compared to smaller firms.
h) Corporate Strategy and Firm Performance (Return on Equity)

Firms that pursue a high sales growth strategy will have a positive impact on performance (Capon et al., 1990). Performance is measured by return on equity. Firms using assets efficiently results in both sales growth and increasing return on equity. The underlying assumption is that the firm’s cost structure changes at the same rate of sales growth or at a decreased rate because of economies of scale (Hill & Jones, 1995). This leads to hypotheses 2:

H2: There will be a significant positive relationship between sales growth and return on equity.

The relationship between firm liquidity and return on equity is hypothesized to be positive. Firms that are more liquid have more cash reserves and consequently incurs higher opportunity cost (Ross et al., 1999). But banks don’t have to bear much opportunity cost due to immediately lending these reserves. This leads to hypothesis 3:

H3: There will be a significant Positive relationship between liquidity and return on equity.

We use equation (3) test H2 and H3

\[
ROE = a + b_1(SaGr) + b_2(Ld) - b_3(FiSi) + \epsilon \tag{3}
\]

ROE: Return on equity
SaGr: Sales growth
Ld: Liquidity
FiSi: Firm size

The relationship between firm size and return on equity is posited to be negative. Bigger firms may be more oriented towards meeting the goals of debt holders than meeting the stockholder needs. Moreover, since bigger firms will typically be oriented towards growth, such firms will grow at the cost of increased costs associated with growth, resulting in lower return on equity. Also, it is evident from financial theory that explains why firms use debt to grow as compared to equity, which also helps explain the negative relationship between firm size and return on equity. This was confirmed through the study by Hall and Weiss (1967), which revealed that a negative relationship exists between firm size and profitability.

i) Corporate Strategy and Firm Performance (Free cash flow per share)

Firms with a greater potential to grow will have a negative relationship with free cash flow. This is supported by the argument that a firm with higher growth potential will have higher capital expenditures to fund the future growth (Barton & Gordon, 1988), which will lead to lower free cash flow per share. This leads to hypothesis 4:

H4: There will be a significant negative relationship between growth potential of the firm and free cash flow per share. Our model assumes liquidity has a positive impact on free cash flow per share. This is because the firm that pursues to increase its liquidity would typically increase its operating cash flows under the assumption that there is no significant change in the capital expenditure of the firm. This leads to hypothesis 5:

H5: There will be a significant positive relationship between the liquidity strategy of the firm and free cash flow per share.

Equation (4) will be used to test H4 and H5.

\[
FCF = a - b_1(GrPo) + b_2(Ld) + b_3(FiSi) + \epsilon \tag{4}
\]

FCF: Free cash flow per share
GrPo: Growth potential
Ld: Liquidity
FiSi: Firm size

The relationship between firm size and free cash flow is posited to be positive since bigger firms may be able to manage their cash flow from operations as well as capital investments in a better way as compared to smaller firms. Bigger firms may achieve economies of scale in their capital investments, which may lead to lower costs associated with such investments.

j) Capital Structure and Firm Performance

Higher level of debt will have a positive impact on return on equity for banks which are primarily run on debts and earn from advancing further these debts and earn income, unlike other firms where increased debt level increases the debt services through increased interest expense, which lowers the net income available to share holders (Damodaran, 1997; Ross et al., 1999). This leads to hypothesis 6:

H6: There will be a positive relationship between debt level and return on equity.

Equation (5) is used to test H6.

\[
ROE = a + b_1(DeRa) - b_2(FiSi) + \epsilon \tag{5}
\]

ROE: Return on equity
DeRa: Debt ratio
FiSi: Firm size

k) Corporate strategy, Capital structure and firm performance

In our final model, we explore how corporate strategy and Capital structure affect return on equity. This leads to hypothesis 7:

H7: Independent variables of the model (Corporate strategy and Capital structure) will explain a significant amount of variance in return on equity. The corresponding equation (6) is:

\[
ROE = a + b_1(GrPo) + b_2(Ld) + b_3(DeRa) - b_4(FiSi) + \epsilon \tag{6}
\]

ROE: Return on equity
GrPo: Growth potential
Ld: Liquidity
DeRa: Debt ratio
FiSi: Firm size
The Effect of Corporate Strategy and Capital Structure on Performance of Banking Sector of Pakistan

The tested result of this model will explain the combine affects of corporate strategy and capital structure on firm performance i.e performance of banking industry of Pakistan, which has ever found in previous researches.

IV. Data and Statistical Results

The criteria for sample selection includes: (a) the audited financial statement should have been published in 2008; (b) each firm should be traded on one of the two exchanges, i.e. Karachi Stock Exchange, or Lahore Stock Exchange. The sample included banks with all size banks. Size is defined as the market value of banks’ assets. Based on our screening criteria, 23 banks were included in the final sample. Multiple linear regression analysis was used to analyze the data.

Testing began with the correlation matrix reported in table 1. Figures show that there is no high correlation between the independent variables. Table 2 indicates that multicollinearity is not a problem because the tolerance and Variance inflation factor for almost all variables of the tested models were close to 1.

<table>
<thead>
<tr>
<th>Equation</th>
<th>Independent measures</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Ld = a + b1(GrPo) + b2(FiSi) + e</td>
<td>GrPo, FiSi</td>
<td>.754</td>
<td>1.33</td>
</tr>
<tr>
<td>3 ROE = a + b1(SaGr) + b2(Ld) + b3*FiSi + e</td>
<td>SaGr, Ld, FiSi</td>
<td>.874</td>
<td>1.14</td>
</tr>
<tr>
<td>4 FCF = a - b1(GrPo) + b2(Ld) + b3(FiSi) + e</td>
<td>GrPo, Ld, FiSi</td>
<td>.737</td>
<td>1.36</td>
</tr>
<tr>
<td>5 ROE = a + b1(DeRa) - b2(FiSi) + e</td>
<td>DeRa, FiSi</td>
<td>.956</td>
<td>1.05</td>
</tr>
<tr>
<td>6 ROE = a + b1(GrPo) + b2(Ld) + b3(DeRa) –b4(FiSi) + e</td>
<td>GrPo, Ld, DeRa, FiSi</td>
<td>.794</td>
<td>1.26</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**
* Correlation is significant at the 0.05 level (2-tailed).

Table 1: Correlation Matrix

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 SaGr (Sales growth)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 GrPo (Growth potential)</td>
<td>-.036</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Ld (Liquidity)</td>
<td>-.38</td>
<td>.424**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 DeRa (Debt ratio)</td>
<td>.61</td>
<td>.356</td>
<td>.79</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 FiSi (Firm size)</td>
<td>.453**</td>
<td>-.284</td>
<td>.371**</td>
<td>.643**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>6 ROE (Return on equity)</td>
<td>.534**</td>
<td>.312**</td>
<td>.437*</td>
<td>.73**</td>
<td>-.412**</td>
<td>1.00</td>
</tr>
<tr>
<td>7 FCF (Free cash flow per share)</td>
<td>.75</td>
<td>-.523**</td>
<td>.28**</td>
<td>.572**</td>
<td>.693**</td>
<td>-.538**</td>
</tr>
</tbody>
</table>

Note: The first column (No.) lists the numbers allotted to the measures in the second column, which correspond to the numbers in row 1 (third column through ninth column).

Results of estimated equation 2 (see table 3) shows that the overall model is significant with p = 0.0001. Furthermore, the r2 of the model indicates that 65 percent of the variance in liquidity is explained by the growth potential and firm size of the firm. The standardized coefficient of 0.42 is significant at p = 0.00013. This supports the hypothesis that there will be a positive relationship between growth potential and liquidity. The control variable is also significant with p=0.0012. Therefore, the hypothesis 1(b) is accepted.

Table 2: Results of assumptionstests
Table 3: Results of regression analysis

<table>
<thead>
<tr>
<th>Equation</th>
<th>Model F Statistic</th>
<th>Model P-Value</th>
<th>Model R2</th>
<th>Adjusted R2</th>
<th>Independent Measures</th>
<th>Co-efficient P-Value</th>
<th>Standardized beta weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Ld = a + b1(GrPo) + b2(FiSi) + e</td>
<td>834.75****</td>
<td>0.0001</td>
<td>.65</td>
<td>.60</td>
<td>GrPo FiSi</td>
<td>0.00013</td>
<td>.42**** .58**</td>
</tr>
<tr>
<td>3 ROE = a + b1(SaGr) + b2(Ld) – b3*FiSi + e</td>
<td>325.94****</td>
<td>0.00011</td>
<td>.43</td>
<td>.42</td>
<td>SaGr Ld FiSi</td>
<td>0.00013</td>
<td>.47**** .64*</td>
</tr>
<tr>
<td>4 FCF = a – b1(GrPo) + b2(Ld) + b3(FiSi) + e</td>
<td>78.8****</td>
<td>0.00013</td>
<td>.79</td>
<td>.77</td>
<td>GrPo Ld FiSi</td>
<td>0.00015</td>
<td>.55**** .71**</td>
</tr>
<tr>
<td>5 ROE = a + b1(DeRa) – b2(FiSi) + e</td>
<td>42.74****</td>
<td>0.0001</td>
<td>.58</td>
<td>.51</td>
<td>DeRa FiSi</td>
<td>0.015</td>
<td>.67*</td>
</tr>
<tr>
<td>6 ROE = a + b1(GrPo) + b2(Ld) + b3(DeRa) – b4(FiSi) + e</td>
<td>217.783****</td>
<td>0.00014</td>
<td>.67</td>
<td>.53</td>
<td>GrPo Ld DeRa FiSi</td>
<td>0.00012</td>
<td>.42**** .73*</td>
</tr>
</tbody>
</table>

*** indicates is significant at the 0.0001 level (2-tailed).
** indicates is significant at the 0.01 level (2-tailed).
* indicates is significant at the 0.05 level (2-tailed).

Reported about the estimated equation 3, the results indicate that the overall model is significant at p = 0.00011. The r2 for the model indicates that 43 percent of the variance in the return on equity of the firm is explained by corporate strategies. The coefficient for sales growth is 0.49, significant at p = 0.00013. However, liquidity with a coefficient of 0.64 is highly significant at p = 0.00011. The direction of relation between return on equity and sales growth is positive indicating that the higher the level of sales growth, the higher will be the firm’s return on equity. Control variable is significant at p = 0.012. The direction of relation between return on equity, sales growth and liquidity is positive. Again the control variable is significant at p = 0.00011. The relationship between free cash flow per share and firm size is positive indicating that the higher the level of firm size, the higher will be the firm’s free cash flow per share. Therefore, the hypotheses H4 and H5 are accepted.

In equation 5, results indicate that the overall model is significant at p = 0.0001. The r2 for the model indicates that 58 percent of the variance in the Return on equity of the firm is explained by capital structure strategy. The coefficient for debt ratio is 0.67, significant at p = 0.015. The direction of relation between Return on equity and debt ratio is positive indicating that the higher the level of debt ratio, the higher will be the firm’s Return on equity as same debt becomes the ultimate source of income for shareholders. Size as a control variable, with a coefficient of -0.48 is significant at p = 0.001. The relationship between Return on equity and firm size is also negative indicating that the higher the level of firm size, the lower will be the firm’s Return on equity. Therefore, the hypothesis H6 is accepted.

The empirical results of equation 6 show that the overall model is significant at p = 0.00014. The r2 for the model indicates that 67 percent of the variance in the Return on equity of the firm is explained by corporate strategies and capital structure. The coefficient for growth potential is 0.42, significant at p = 0.00012. The direction of relation between Return on equity and growth potential is positive indicating that the higher the level of growth potential, the higher will be the banks’ Return on equity. The coefficient for liquidity is 0.73, highly significant at p = 0.022. The coefficient
for debt ratio is 0.62, significant at \( p = 0.017 \). The direction of relation between Return on equity and debt ratio is positive indicating that the higher the level of debt ratio, the higher will be the firm’s Return on equity. Size as a control variable, with a coefficient of -0.48 is significant at \( p = 0.002 \). The relationship between Return on equity and firm size is negative indicating that the higher the level of firm size, the lower will be the firm’s Return on equity. Therefore, the hypothesis for H7 is accepted. Beside that, the results also reveal that this is the best model which explains 67% (corporate strategy, capital structure, firm size), as compare to other incremental models that explain 58% (capital structure, firm size) and 43% (corporate strategy, firm size) of the variance in firm performance (ROE).

V. Discussion and Implication

The most important finding of this study is that the combined effect of corporate strategy and capital structure explain well for the difference in banking industry performance. Further more, the liquidity strategy is highly found to be significantly correlated to firm performance unlike other firms as indicated by Gi–Shian Su(2010), because the whole banking industry is based on earning through borrowing and lending concept, so they should put their efforts in boosting liquidity along with focusing on management if they pursue firm performance.

Our study concludes the capital structure will have an impact on the overall performance of banks as tested. Therefore, capital structure should be given added emphasis for firms trying to add value to their stockholders’ and bondholders’.

Moreover, the relationship between growth potential and liquidity is positive for all size of banks. This result contradicts with the findings of Kim et al. (1998), Chathoth(2002), and Gi–Shian Su(2010). The reason for this contradiction is that every size of bank must have to maintain liquidity all time whether growing at bigger scale or smaller scale and making capital expenditures. The relationship between debt and return on equity is posited to be positive for banking industry unlike other firms because debt is the basic source of income for the banks and equity holders which is to be further lent or invested in other projects to boost net income. Due to the same reason the relationship between debt and growth potential for banking industry is found positive unlike other firms.

The relationship between liquidity and return on equity was tested to be highly significant. This finding confirms the finding of Kim et al (1998) who found that there is a positive relationship between these ratios, but contradicts the finding of Gi–Shian Su(2010) who found insignificant relationship between liquidity and return on equity. Besides that, our finding is also different from Baskin (1987) who pointed out that there is a negative relationship. The rationale for our conclusion of the highly significance is debt being the basic source which becomes or boosts the liquidity of banks and ultimately become the source of increasing the return of the equity holders being invested in different projects.

Another finding of this study is there is not much relationship between liquidity and sales growth. Hence, if firms adopt the sales growth strategy, they usually end up with customers delaying their payments, but banking industry even after delay of payments by creditors; don’t face much liquidity problem due to frequent deposits by customers and regular checks by state bank of pakistan. Most strong reason of this concluded by discussion with practitioners is the Pakistani bank customers’ behavior toward plastic money as they don’t like much using it. Perhaps this is the primary reason of Pakistani banks being not much affected by 2008 US baking system’s failure, while following US banking model.

This liquidity and sales growth relationship might be proved significant for other countries’ banking system where customers’ trend is more toward utilizing plastic money, which is needed to be tested.

Our study only focus on internal forces that affect firm performance; macroeconomic environment and law were ignored. Besides, our model included only one control variable i.e. firm size.

References


