

Bank-SMEs Relationship: A Critical Review of Firm & Industry Specific Determinants Influencing Banks' Performance

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Abstract

This study critically reviews the existing literature corresponding to banks' performance in SMEs sector and investigates the Bank-SMEs relationship. The issues are highlighted with theoretical background of banks' performance from SMEs financing perspective. Further, it elaborates the financial performance of firms which theoretically supports the banks' credit rationality. The subsequent sections explain each determinant of SME firms by identifying the theories that individually elucidate firm-specific variables i.e., firms' performance, financial need, capital structure and growth of banks. Additionally, it explores the association between SMEs loan requirements, length of relationship, product/services and banks' performance. Moreover, the current study appraises some earlier researches which have examined the direct and indirect relationships among industry specific variables and firm-bank performance. Based on existing information, the final section articulates the gaps identified in literature to summarize the findings and areas for future researches.

Keywords: Bank; SMEs; Financial performance; Relationship; Firms; Industry.



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1. Introduction

Small and medium enterprises (SMEs) are the core of most economies and are a major source of economic growth. In recent times, banks have been actively involved in financing of SMEs through the provision of loans to this sector. To harmonize the size and categories of enterprises, SME sector has not been explained by any across the board or legal definition. Hence, it is difficult to maintain a benchmark besides other countries' to establish areas of business interventions and to monitor the firms' growth in economy. Different government institutions and public sector departments have developed separate definitions for SMEs according to their own standards. The World Bank uses three quantitative criteria for defining SMEs: number of employees, total assets in U.S. dollars and annual sales in U.S. dollars (Independent Evaluation Group, 2008). A business must meet the quantitative criteria of number of employees and at least one financial criteria to be categorized as micro, small or medium business.

1.1. Definitions of Small & Medium Enterprises

Table-1.1. SME Firms: Definition by European Union Commission

Categories	No of Employees	Total of Balance Sheet	Turnover
Micro	< 10	< 2 million €	< 2 million €
Small	< 50	< 10 million €	< 10 million €
Medium	< 250	< = 50 million €	< = 43 million €

Source: EC, User Guide to the SME Definition, 2015

Table-1.2. SME firms: Country-wise distribution based on No. of Employees

Country	Micro Firms	Small Firms	Medium Firms	SME	Corporate
EU Countries	1-9	10-49	50-249	1-249	250+
Australia	0-9	10-49	50-199	0-199	200+
Canada	0-9	10-49	50-499	0-499	500+
Japan	4-9	10-49	50-249	1-249	250+
Korea	5-9	10-49	50-199	5-199	200+
Mexico	0-10	11-50	51-250	1-250	251+
New Zealand	1-9	10-49	50-99	0-99	100+
Turkey	1-19	20-49	50-249	1-249	250+
United States	1-9	10-99	100-499	1-499	500+

Source: (OECD Publishing, 2010)

These definitions have established on the basis of firms' borrowing patterns from formal and informal financial sources.

Table-1.1. SME Firms: Definition in North America and European Countries

Countries	No. of Employees	Invested Capital
United States of America	1-500	Up to 100 US\$ Million
Canada	1-500	Up to 20 C\$ Million
European Union	1-250/10-500	NA
France	10-500	NA
Sweden	1-200	NA
Denmark	50-100	NA

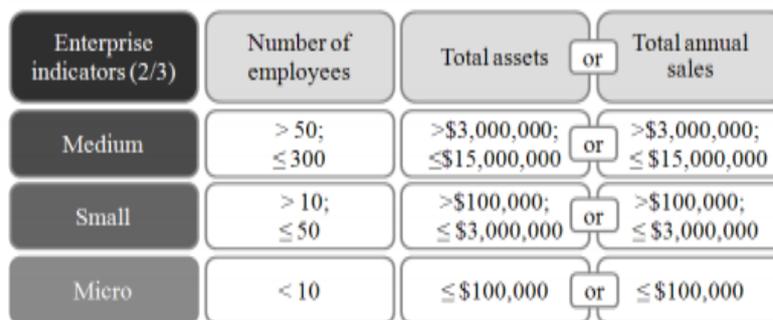
Source: (USITC, 2010)

Table-1.2. Definition by International Finance Corporation and World Bank

Category	No of Employees	Invested Capital	Annual Turnover
Micro	Less than 10	Less than 100,000 US\$	Less than 100,000 US\$
Small	10-50	100, 00 to 300,000 US\$	100, 00 to 300,000 US\$
Medium	51-300	30, 00,000 to 15,000,000 US\$	30, 00,000 to 15,000,000

Source: (World Bank, IFC, & SME, 2002; OICA, 2006)

Figure-1.1. Definition of SMEs by World Bank standards. (Source: Independent Evaluation Group (2008))



1.2. Banks/Financial Institution

A bank is a financial institution which accepts money from the public for the purpose of lending or investment repayable on demand or otherwise withdrawable by cheques, drafts or order or otherwise (Banking Companies Ordinance, 1962). Banks are financial institutions that accept deposits from the public and creates credit (Bank of England, 1978). Lending activities can be performed either directly or indirectly through capital markets. Due to their importance in the financial stability of a country, banks are highly regulated in most countries. Thus, we can say that a bank is a financial institution which deals in debts and credits. It accepts deposits, lends money and also creates money. It bridges the gap between the savers and borrowers. Banks are not merely traders in money but also in an important sense manufacturers of money. Banks can be classified into commercial banks and central bank. Commercial banks are those which provide banking services for profit. The central bank has the function of controlling commercial banks and various other economic activities. There are many types of commercial banks such as deposit banks, industrial banks, savings banks, agricultural banks, exchange banks, and miscellaneous banks

1.3. SME Financing & Banks' Performance

Most of the previous studies are dealing with determinants that affect the banks' profitability. The early investigations were conducted by Bourke (1989); Short (1979). Performance of the banks has empirically

investigated in various countries i.e. USA (Angbazo, 1997; Berger, 1995; Berger A. N., 2005), (Barajas *et al.*, 1999) explored in Columbia, (Afanasiyev *et al.*, 2001) have identified banks' profits in Brazil, Spain (Vivas, 1997), Taiwan (Chen, 1998), Malaysia (Guru *et al.*, 1999), Tunisia (Naceur, 2003), Turkey (Yildirim, 2002), India (Badola and Verma, 2006), Philippines (Sufian and Chong, 2008), Greece (Kosmidou and Zopounidis, 2008); Alexiou and Sofoklis (2009), Switzerland (Dietrich and Wanzenried, 2011), Czech Republic (Horvath, 2009), Japan (Liu and Wilson, 2010), Romania (Andries and Corcis, 2010), Pakistan (Javaid *et al.*, 2011), Korea (Sufian, 2011), Croatia (Ana and Roberto, 2011).

Traditionally, profitability of the banks has been investigated by observing at some internal and external factors. The earlier literatures have included elements which are under the control of bank's management. However, later studies contained those factors that are beyond its control. Rasiah (2010) reviewed the former literature on determinants that effect bank profitability and extended some internal factors which includes changes in capital and asset risk, loan pricing, bank deposit and credit strategies, management objective differences, cost structure of the banks, portfolio of assets and liability, operating efficiency, interest rates and product mix. Moreover, these internal determinants are supposed to impact on bank's ability to deal with any economic and financial crises (Beltratti and Stulz, 2012).

Additionally, banks profitability has been depending on some non-financial reporting factors as characteristics and number of bank branches (Liang *et al.*, 2013), bank location, associated economies of scale, bank size (Petersen and Rajan, 2002), banks focus on shareholders in place of stakeholders (Llewellyn, 2005), use of technology (DeYoung, 2005); DeYoung *et al.* (2007) and diversified investment strategies (Berger *et al.*, 2010). Based on the ideas of Rasiah (2010), certain external factors such as market characteristics, concentration, share, growth and competition supposed to impact on banks performance. Though, competition structure (Berger A. N. *et al.*, 2000), ability to face financial crises (Beck *et al.*, 2006), bank's corporate governance (Micco *et al.*, 2007), its practical concentration (Iannotta *et al.*, 2007), and financial regulatory practices (Zou *et al.*, 2011) are also found to effect banks profitability.

According to Gunji and Yuan (2010) profitability of small and large scale banks with different liquidity levels affect by another external factor that is monetary policy. Besides of the fact that former literature has discussed bank specific factors in details regarding banks profitability but latter research stream does not pay remarkable attention to the starring role of Firm-Bank relationship between institution and its customers. Interestingly, there are complex and strong relationships, developed by banks with their clients in general and with SMEs in exceptional (Elyasiani and Goldberg, 2004).

1.4. Bank-Firm Relationship

The above mentioned situation is significantly true for local banks that dealing with small and medium firms (Scott, 2004). As explained by Petersen and Rajan (1994), the earlier research on Firm-Bank relationship has explored the effect of these correlations on SME firms and identified that firms are more benefited from this intense relationship by giving easier financial access to credit and reducing their cost (Berger and Udell, 1995). However, these investigations also suggest that local commercial banks which are specialized in lending to small firms can benefited from these strong relationships. But it depends on the ability of banks to evaluate the customer's quality, business opportunities and performance through asymmetric information. Cole *et al.* (2004) further pointed out in consequences that asymmetry issues resolve by various banks in different ways. For instance, large banks mostly exploiting transactional lending that is based on leverage and information provided by interim and annual financial statements, assets of the firm, through credit scoring and credit rating techniques (Berger and Udell, 2006). However, small firms which have asymmetric information problem remain under served by this strategy of small banks. Banks normally granting relationship base lending and rely on relative information in absence of required documents and transparent data. This process of gathering information remains continuous and confidentially maintains by the bank as evidence for future decision making (Berger and Udell, 2006) Actually, access to confidential information and developing an articulate long term relationship with clients is the main objective of small local banks (Berger and Udell, 2002) (Stein, 2002). The authors further argue that relationship managers of banks can extend the availability of hard and soft information about the borrowers and create trust worthy relationships with their obligors (Howorth and Moro, 2006). Further, it can improve their efficiency to selection and evaluation of customers accurately for upsurge in performance of the bank (Baas and Schrooten, 2006)

Banks can avoid shifting of their customers and benefits associated with this long term relationship, when they operate in context of reduced competition (Ergungor, 2005). The same criteria may apply from customer side as they face higher swapping costs in search of substitute bank and production of symmetrical information required by the alternate bank. In fact, high costs of switching are relatively common for small and medium firms due to their struggle for production of ample information require by banks and lack of management skills for proposal evaluation of competitor banks (Howorth *et al.*, 2003). In this situation, banks can increase their profitability due to customer retention and largely benefited from reduced information asymmetry. However, profitability is not exclusively depending on interest and margin charged by banks (Valverde S. C. and Rodriguez Fernandez, 2007).

There may be two massive shortcomings which can be find out in earlier research thoughts. First, it pointed out only those determinants which are measuring overall bank's profitability. However, overall performance normally based on profitability that can be extracted from bank's financial relationship with its customer individually. Secondly, the earlier research does not consider risk factor in depth. The previous research has theoretically explained the inverse impact of loan price on potential firms bearing different risk levels (Stiglitz and Weiss, 1981); (Wette, 1983) and the tools applied by banks to minimize this inverse effect (Bester, 1985). Nevertheless, cross sectional and empirical

studies have concentrated on overall profitability but there is limited consideration on the fact that higher interest rates charged to high risky firms, in short run ultimately generate higher profit margin. Additionally, higher risk associated firms are considered to have weak negotiating powers that means bank can charge higher fees in return. Based on the findings of previous research it can be argued that by observing overall performance and risk mitigation, earlier research has been unable to identify the firm related determinants of bank's profitability (Fredriksson and Moro, 2014).

2. Theories of SME Financing

2.1. Trade-off Theory

The study of literature contains many explicit and implicit evidences about capital structure and firm's financing decisions. Modigliani and Miller (1958) proposed the modern thinking and basis of capital structure theories as a composition of firm's financial operations and a mixture of short term debt, long term borrowing and owner equity. Further, financial structure contains capital structure of the firm that accounts for only long term debt retained earnings and equity.

Financial structure is based on criteria designed to contribute optimization of financial resources and minimized cost of capita (Allen and Santomero, 1997). On contrary, higher cost of capital is the result of poor financial structure that limiting the entrepreneurial activities and reducing the effectiveness of potential investment (Berger *et al.*, 2004). The MM theory had proposed the foundation of irrelevancy theory which argues that, value of the firm does not affect by capital structure. This principle assumption of irrelevancy theory recognized the researcher's attention to rethink on financing strategies from firm's value perspective.

Further, it escalates the expansion of alternate capital and financial structure theories. Firm's financial structure can theoretically explain by trade-off theory which refers the firm's decision of estimation and use of required loans and equity financing by matching the associated cost and benefits. According to Kraus and Litzenberger (1973) tax-based theory is a classical form of Trade off theory. It presumes an existence of optimum capital structure scenario, where shareholder's wealth has maximized with simultaneous decrease in external claims to firm's wealth. Moreover, it reflects a trade-off between firms' cost of financial burden and tax benefits on debt interest.

2.2. Pecking Order Theory

The above mentioned trade off theory is competed by pecking order theory of capital structure that prioritize firms' financial sources from internal finance to external debts and external debts to further equity financing (Myers and Majluf, 1984). This information asymmetry theory proposed that firms have more information about their internal source of financing. Banks and other investors charge higher premiums to firms with asymmetric information for sensitive securities (e.g. equities). Consequently, firms prefer their own financial hierarchy for financing the investments.

Another theory of capital structure is Agency cost theory propounded by Jensen and Meckling (1976) identified two different kinds of conflicts of interest among stakeholders. First conflict is between firm's management and shareholders and secondly, between debt holder and equity holder (Harris and Ravii, 1991). Most recent theory of capital structure is Market timing theory, based on imperfect market conditions, developed by Baker and Wurgler (2002).

It proposed the relationship between market timing and equity and asserts that overvalued stocks signal the equity issuance in open market (Graham and Harvey, 2001). All theories mentioned above provide the foundation of firm's financial structure and directed the academics to judge additional determinants of financial structure with reference to age, size of the business and investors profitability.

3. Firm-Specific Determinants and Bank Performance

In emerging economies, significant impacts of capital structure have been reported on firms' performance and on credit market, specifically in short term debts. SMEs are considered as blood for social and business economy, hence it is essential to investigate firm specific determinants which may affect the performance of all stakeholder associated with the firms' business. In this section we identify how demand side financing to SMEs may affect the firms' financial structure and profitability of funds provider or banks. An investigation of the earlier researches interprets that very limited literature has evidenced on SMEs' financial structure as compare to corporate entities. According to Timmons and Spinelli (1994), capital requirements of the firm are different and depend on the level of firms' growth.

Younger firms can manage their capital needs from internal funding sources i.e. retained earnings and informal sources such as financing from friends and family. For a successful business, growing firms require higher amount of capital to finance their growth and ultimately, firms move towards external sources of funds such as financing from banks. Subsequently, the relationship among firm growth, capital requirements and bank financing is expected as positive.

Cook (2001), highlighted that United Kingdom and United States are the main contributors of research on SME financing. This indicates that prior studies on financing decisions of SMEs have originated by developed economies. Earlier research has denoted that banking sector is the major external source of capital for small and medium firms (Cole and Wolken, 1995; Petersen and Rajan, 1994; Scherr *et al.*, 1993). Nevertheless, it is difficult for the small firms to acquire bank loans as compared to large firms (Binks *et al.*, 1992; Orser *et al.*, 1994; Peterson and Shulman, 1987).

3.1. Capital Structure of SMEs

The firm's capital structure has been examined on the basis of factors influencing the leverage of small firms in previous researches. Elements of firms' capital structure may be quantitatively measured or qualitatively explored. However, variables that are specified in numerical values can be considered as quantitative whereas other qualitative factors have descriptive nature and examine the opinion, attitude, and belief of target respondents (Nguyen and Ramachandran, 2006). The preceding literature reveals that most of the researches have concentrated on quantitative factors to measure the SMEs capital structure (Dogra and Gupta, 2009). However, limited literature has identified the relationship of bank specific and firm specific factors of SMEs capital structure (Zabiri, 2013).

Further, various studies have empirically investigated the firm's profitability, size, growth, age and tangibility as main variables effecting the capital structure of small firms (Beck *et al.*, 2008; Daskalakis and Psillaki, 2008; Degryse *et al.*, 2012; Hall G. *et al.*, 2000; Mateeva *et al.*, 2013; Serrasqueiro, 2011; Watson R. and Wilson, 2002). Though, it seems essential to study and summarize the effect of these factors on firm-bank relationship.

The impact of firm specific variables can be analysed on the basis of leverage and supply side financing to SMEs that ultimately measures the bank specific determinants. Different measures have been applied to calculate short term, long term and total leverages of the firm. The literature review suggests that mostly SMEs in under-developed countries are depending on short term debts (Abor, 2005; Abor and Biekpe, 2009; Amo, 2011). Based on the requirements of short term debts only, capital markets are still under-developed and consequently financial institutions are averse to finance SMEs in developing economies (Abor, 2007b; Odit and Gobardhun, 2011). This situation generates a mega financing gap for financial institutions and banks are yet to grab this opportunity. Subsequently, banks are dropping a major portion of their loan portfolio that eventually affects their profitability. Further, these arguments also support another problem of financial access to SMEs. This problem explains a benevolence financing gap where underdeveloped financial institutions are reluctant to finance due to unfavorable macro-environment or risk associated projects (Sub-Prime crisis 2007 – 2009). Based on the findings of literature, it can be argued that SMEs' reliance on short term leverage is negatively associated with profitability as firms with less profits are inclined more towards short-term financing.

In depth study of the literature reveals that profitability is negatively related with external funding because of risk averse nature of small firms. Profitable firms provide stability in their earnings and less preferred to external findings (Michaelas *et al.* (1999); (Daskalakis and Psillaki, 2008; Forte *et al.*, 2013; Hall G. C. *et al.*, 2004; Mateeva *et al.*, 2013; Sogorb-Mira, 2005; Van Caneghem and Van Campenhout, 2012; Zhang, 2010). Lack of access to long term loans leads to the lack of available securities for remortgage required against long term debts (Michaelas *et al.*, 1999). This situation validates a positive association between assets structure and long term loans of the firms (Abor and Biekpe, 2009; Benkraiem and Gurau, 2013; Hall G. C. *et al.*, 2004; Odit and Gobardhun, 2011). Risky ventures such as SMEs are required to provide collaterals for borrowing long term debts from banks and financial institutions (Titman and Wessels (1988)).

But there is a negative correlation between short term debt and assets structure because SMEs are unable to provide valuable collaterals to the banks for taking long term funding (Cassar and Holmes, 2003; Hall G. *et al.*, 2000; Nguyen and Ramachandran, 2006; Psillaki and Daskalakis, 2009) identified a negative association between leverage and assets structure from significant and empirical evidence of SMEs in France, Greece and Italy. Based on the evidences it can be argued that firms with stable earning and adequate tangible assets are discouraged to obtain external financing that also affect the banks' profitability.

3.2. Financial Structure of SMEs

Small and medium enterprises are contributed an energetic role for the growth and development of world economies. Around 95% of the world enterprises, 60% of private employment, firms with 250 number of employees and up to €50 million annual turnover are considered as SMEs (Ayyagari *et al.*, 2011); (OECD, 2004). Further, SMEs are positively contributed to the economy and thus key drivers for the advancement and growth in developed i.e. Japan, UK and USA and developing countries i.e. China, India (Beck *et al.*, 2005); (Ayyagari *et al.*, 2011).

SME firms can grow from fragile undertaking to well established enterprises and accelerate the development of country by providing back-up to the large firms. A dynamic and vigorous SME sector has tremendous abilities to change the economic scenario as it generates employment opportunities, fund mobilization and utilization of resources by increasing country's national income. As explained by Green *et al.* (2002), finance is a source that mutually combines all the determinants of SMEs. The financial practices of small firms as compared to publicly large listed firms are under-researched, as highlighted by Zingales (2000), empirical emphasis on corporate firms leads us to ignore rest of the world for SMEs that have not access to debt and equity markets.

On one hand, SMEs are continuously enhancing the country's economic activities and creating blue ocean market for potential entrepreneurs, on the other hand financial constraints directly effect and slow down their development and growth (Beck *et al.*, 2006; Petersen and Rajan, 2002; Wagenvoort, 2003); (Ayyagari *et al.*, 2008; Beck, 2007); (Klonowski, 2012; Woldie *et al.*, 2012; Wu *et al.*, 2008). Particularly, small opaque firms with asymmetric financial information and weak capital structure are also ignored by lending institutions and reducing market share of the banks that ultimately distract the bank's profitability (Mirzaei *et al.*, 2013). Based on the findings, these evidences justify the motive of studying SME's financial and capital structure and its impact on banks profitability.

3.3. Short Term & Long Term Loans Available to SMEs

Loan projection is one of the main issues challenged during financing of the investment to upsurge the firm's growth. This growth push forward the SMEs managers-owners to borrow additional long term debts because of financial burden on retained earnings (Abor and Biekpe, 2009; Forte *et al.*, 2013; Nguyen and Ramachandran, 2006; Odit and Gobardhun, 2011; Van Caneghem and Van Campenhout, 2012). On one hand, (Mac and Lucey, 2010; Sogorb-Mira, 2005; Zhang, 2010) argue that to avoid future conflicts between firms' managers and lending institutions, SMEs prefer less amount of debt in order to avail higher level of growth opportunities for the short term period. On the other hand Zoppa and McMahon (2002) proposed that firm's turnover growth also generates a pressure on internal retained earnings, that may be released through short-term loans. However, it becomes difficult for newly established firms to borrow short term and long term debt from banks because of small age, size and less credit worthiness.

Therefore, younger SMEs are more relying on internal sources of funds as an optimal solution to meet their financial demands (Benkraiem and Gurau, 2013; Psillaki and Daskalakis, 2009). Moreover, older firms are also financially constrained and incapable to obtain long term debts because of information asymmetry, non-availability of credit worthiness record (Forte *et al.*, 2013). Another credible reason is that old firms are more conservative in borrowing from banks while younger firms have more aggressive and bank oriented approach.

Hence, there is a mixed relationship (positive/negative) that exists between age of SMEs and long term borrowings. Further, an inverse relationship exists between short term debts and firm' age (Benkraiem and Gurau, 2013; Serrasqueiro, 2011). SMEs require long term credits as continuous financial source for diversification and expansion of the business. As identified by Amo (2011) large firms reveal more transparency and less information asymmetry, so equity can be issued comparatively at lower cost. This situation indicates a negative relation of firm's size with leverage. However, in those countries where equity financing is not approachable and bond/securities markets are under developed, larger SMEs borrow short term loans to finance their instant working capital requirements. In contrast, these large firms can provide transparent information to authorized banking channels and face less difficulties in sanctioning loans by the banks. Consequently, banks and financial institutions find smooth and easier lending transactions with large SMEs. This indicates positive relationship between firm's age and long term debt (Abor and Biekpe, 2009; Forte *et al.*, 2013).

However, firms' profitability has significant negative association with banks performance. Finally, Andrea (2014) argue that according to pecking order theory profitable firms are less dependent on banks loans and generate internal funds to finance their operations that may negatively effect on bank profitability.

3.4. Assets Structure of SMEs

Financing decision of small firms build a capital structure for the business. So, firms always plan their financing activities strategically in such proportion that would minimize the capital cost and maximize the firm's value. SMEs need investment in different portfolios i.e. assets acquisition, up-gradation of technology, market development, diversification and capacity enhancement which require long term financing. This scenario, creates tremendous opportunities for local commercial banks to finance such short term working capital and long term debt requirement of small and medium firms. The firm's capital structure highlights the financing options of banks, so it is critical to examine the financial position of SME firms and their association with bank's profitability. The term capital structure is normally based on the concept of gearing or "leverage" that concerns with borrowing of funds by firm to purchase assets that will generate revenue with assumption that revenue would be higher than debt cost. This process comprises risk also due to uncertainty about expected income and capital return through these assets, whereas the payment of principal and cost of interest is likely to be ongoing practice. So, SMEs evaluate their current financial structure that reveals the firm's present option to access finance and preferable capital structure that represents all available financial resources in the fund market (de la Torre, Levy-Yeyati *et al.* (2010). Additionally, the entrepreneurial firms with higher leverage, usually reevaluate their asset structures to enhance the book value of fixed assets in order to obtain bank loans on lesser rates. Khalil *et al.* (2019).

In this way to overcome the problem of financial constraint and timely supply of funds banks and other financial institutions are the key sources to support capital structure of the firm in developed markets (Agarwal and Ann Elston, 2001; Ferri and Messori, 2000; Moro and Fink, 2013; Shen and Wang, 2005). However, SME firms are more credit constraint in developing countries specifically in South Asian emerging market. For instance, formal SMEs credit portfolio of Pakistan banking sector is only 7% as compared to 32% in India and 33% in Bangladesh (World Bank Group, 2011). This position indicates the presence of a significant financing gap and it is essential to address this issue in our study as it ultimately influence the profitability of banking industry in context of emerging economies.

3.5. Working Capital Requirements of SMEs

The earlier discussions explain how different factors define the issues of financial access to SMEs from demand side. Thus, the interaction of decisions among firm specific variables, bank specific variables and owner-manager attributes concludes the demand side financial requirements of SMEs. Both qualitative and quantitative determinants can be examined on the assumption of capital structure theories to investigate financial practices observed by small firms. Based on the hypothetical arguments on firms' assets structure, the most relevant theory applicable to public-listed firms is trade-off theory due to their large-scale operations. Trade off theory enables such corporate firms to trade-off between cost and benefit of their debts (Marsh, 1982; Taggart, 1977). On contrary, the practical application of trade-off theory is unable to defend the financial threats of small firms in under-developed emerging economies.

However, pecking order theory is moderating the financial decisions of small firms in developed countries. Nevertheless, SMEs are yet to develop their financial hierarchies as proposed by pecking order theory because of asymmetric information, adhesive attributes of managers and developing capital markets.

According to Newman *et al.* (2012) another reason of this problem is the easy access of informal and other financial sources available to SMEs. Further, basic objective of all these financial theories, is to maximize the wealth of shareholders. However, for SMEs certain other objectives i.e., monetary issues, autonomy, taxes and family matters are also significant while determining their financial and assets structure (Auken, 2005). Hence, firm-specific determinants that initiated through different finance based theories are inadequate to explain the firms' assets structure and banks' performance. Therefore, to design a practical model for SME lending from formal financial resources, factors beyond the investigation of firm's financial structure should be examined in the current studies.

3.6. Length of Firm-Bank Relationship

As advocated by Norton (2003) the most frequent and common source of funding obtained and used by the SMEs is bank financing. Banks' lending to SME firms is monitored by Basel II. It allows the lower capital requirements for SME firms by addressing their issues of expensive terms of credit. In spite of lower credits requirements from banks, asymmetric information is one of the most critical constraint linked with SMEs financing.

As bank lending requires long-term connections, the bank-firm relationships pose a dynamic role in SMEs financing (Berger and Udell, 1995). This kind of financing is known as relationship lending, and it extensively supports in solving problems related to asymmetric information (Petersen and Rajan, 1994). Further Berger and Udell (1995) also explain that banks normally waive the condition of collateral requirements and charge lower rate of interest if the SME has long term relationship with bank. This highlights that relationship base lending offers a best assessment in umpiring the credit worthiness of borrower.

SMEs face significant credit crunch during financial crises and approach to some alternative external funding source i.e. trade credits (Valverde S. *et al.*, 2016). Based on the analysis from Spanish SME firms, the authors further argue that financial constrained firms depend more on trade credits as external financing and negatively associated with bank loans. In contrast, unconstrained firms are positively associated and more dependent on financing from banking channels. Similarly, Tsuruta (2015) identified a non-linear relationship between bank loans and external financial sources as trade credits. Based on the analysis of Turkish SMEs, he proposed modest negative relationship between firms' profitability and bank loans. However, results showed a positive relationship between bank loans and firm's age, size and foreign sales. Thus the issue of SMEs profitability and bank loans is important but until now the knowledge on the relationship between SMEs financial structure and banks' profitability is insufficient, especially in emerging economies. Moreover, quality of information sharing and lean practices have significant impact on organizational performance of the firms (Khalil *et al.*, 2019).

Several findings have been observed from supply side and demand side of financing available to SMEs. Lin and Chou (2015) have examined the bank credit and trade credit relationship for Chinese SME firms and investigated that how this relation affects the demand of bank loans. In one hand there is significant positive relationship between the supply of trade credit (accounts receivables) and bank loans, on the other hand there is a negative relationship between trade credits' demand (accounts payables) and bank loans. This positive and negative association of bank loans ultimately influences the profitability of banks and other financial institutions. Kondo (2015) proposed that regional banks should support local SMEs to stimulate economies in emerging markets. This analysis of Japanes regional banks located in non-urban prefectures and bank loaned SMES reported a positive effects on lending based income of the banks. The findings suggested that further research could be conducted on loan businesses of financial institutions and local SMEs located in rural and remote territories where economic activities are more vibrant for regional banks.

3.7. Products & Services Available to SMEs

Normally, banks provide additional products to the firms and charge them for services from cash to risk and risk management to payment management. The literature recommends that a value-base differentiation is required in support to maximization of firm's performance and this sense also implies to bank's profitability. Hence, the loan pricing and other services offered by banks to the firms are main factors to build Bank-Firm relationship (Torre *et al.*, 2010). Earlier research highlight that some banks supposed to escape full diversification, especially the banks which are interested in cross selling portfolio have more focused in savings management, while those that are traditional lenders have extra concerned with granting loans and credit management (Ciarrapico and Cosci, 2011).

This is specifically true for small banks. Nonetheless, loan proceeds are the main profitability determinant for large group of banks, as they inclined to manage and deal with complete packages of product mix and banking services (Dietrich and Wanzenried, 2011). Additionally, banks are interested for selling additional product mix and services to the firms and investing more time and efforts as required to enhance business relationship. This strategy can be helpful to identify the relevant needs of clients and marketing of banking services through solid, long term relationships. Clearly, banks are more interested in investment of their time and efforts for selling products and services to firms that required them. However, there are some industry specific variables which may affect the demand of banks' products and services available to SMEs.

3.8. Ownership Structure of SMEs

Organizational performance is a depiction of top managers' choices and decisions taken by its executives (Hambrick and Mason, 1984). The characteristics of higher level authorities and their own preferences may support in articulating the decisions made by the firms. SMEs are not exempted from this fact as firms' financing decisions are mostly controlled by the characteristics and attitudes of owners and managers. The owner/managers' traits have more significance impact on financing preferences of SMEs as compared to corporate firms due to single possession and dispersed ownership. Auken (2005) demonstrated a framework which highlights the characteristics of firm's capital structure and suggested the importance of owners' attributes. It also contains different management determinants i.e. intentions of firm's growth, experiences, growth preferences and relationship that may affect the decisions of SMEs capital structure. Borgia and Newman (2012) has further pointed out the relationships between managerial attributes and total leverage of the firm.

Based on the findings the authors further argued that by controlling some firm specific variables, higher risk tendency allows owners-managers to borrow and use more debts. Ownership of the firm displays a critical part in determining the capital structure of SMEs. Executive ownerships are managed by the risk of liquidation, insolvency and shareholders' possessions are advised through agency cost. So, debt financing generates higher cost of bankruptcy and both owner-mangers are not comfortable to employ debts in deciding the financial sources of small scale businesses (Abor, 2008). Consequently, fear of external control and risk propensity are substantial attributes of owners-managers for dealing with SMEs capital structure (Watson J. *et al.*, 2009). Managerial skill is another characteristic that exert a strong effect on banks and involves a significant influence on borrowing ability of the owner (Grunert and Norden, 2012). Managerial skills are mainly comprised with soft information such as owner's age, education, gender, experience and expertise of handling the business. When demand side financing intersects with supply of finance to SME firms, banks mostly rely on soft information provided by owners-managers (Grunert and Norden, 2012).

Thus, the abilities of owners and managers to attract the banks' investment determine the concept of relationship lending. In order to finance the small firms' relationship based lending performs a crucial role in providing access to available financial sources. In developed markets, Watson J. *et al.* (2009) identified the financing problems of Australian SMEs' owners and managers and determined the external funding in current capital structure of the firms from demand side financing.

In addition, Van Caneghem and Van Campenhout (2012) highlighted the sensitivity of qualitative and quantitative information in deciding the firms' capital structure. All above studies indicate the importance of firm specific and bank's specific variables, especially for making financial decisions of SMEs.

4. Industry Specific Factors

This study also analyses the impact of quantitative determinants on SMEs financing by banks. The earlier researchers have specifically discussed the firm specific variables of capital structure. However, Abor (2007b) explained that industry specific factors also perform a vital role in examining the financial structure of small firms. Further, Degryse *et al.* (2012) proposes inter and intra -firm specific variables as key elements in evaluating the firm's capital structure. They further argue that Intra-industry determinants i.e., heterogeneity in applied technology, degree of industry competitiveness and agency conflicts are the main drivers of SMEs' financial and capital structure. Additionally, country specific variables that creates macroeconomic environment are also important in determining the financial structure of the firms (Michaelas *et al.*, 1999).

Most of the earlier studies have conducted on industry specific issues for investigating the SMEs capital structure, however limited study has been performed on country and industry specific aspects (Serrasqueiro, 2011). Empirical researches conducted especially on the factors influencing firms' capital structure, highlight the domination of Pecking Order theory (Watson R. and Wilson, 2002); (Beck *et al.*, 2008); (Daskalakis and Psillaki, 2008; Mateeva *et al.*, 2013). However, few studies are significant to provide evidences on agency cost theory (Abor, 2007a; Kyereboah-Coleman, 2007; Lappalainen and Niskanen, 2012) and trade-off theory (Amo, 2011; Zhang, 2010). This exclusive situation indicates risk averse nature of SME ventures. Furthermore there are some alternative financial sources available to SME firms also fulfill their industry requirements as well capture the potential lending portfolio of the banks.

4.1. Alternate Financing Sources to SMEs

A critical factor for SME's development has been observed in the form of finance (Cook, 2001). Firm's capital demand and requirements determine their financial structure. While estimating the budgeted capital of a firm, it is essential to embrace not only factors influencing its financial position but also other elements that investigate the firm's financing constraints to acquire capital. SME's financing preferences can be viewed comprehensively, with the help of financial resources provided from demand and supply sides. Firm's financial sources identify the functions of formal and informal lending available to small firms (Gudov, 2013). Formal sources of finance e.g. institutional financing, bank financing and venture capital financing highlight certain restrictions for SMEs to obtain loans because of asymmetric information, financial statements' availability and credit rationing.

4.2. Informal Funding Sources

As compared to formal sources of finance, informal funding source is linked with an important factor that is Risk. Financing from formal sources demands valuable collateral to be pledged by SMEs. Additionally, cost of

bankruptcy associated with formal borrowing generates financial distress for the small firms. Hence, firms prioritize their financial needs in obtaining loans from different sources of finance.

This hierarchy also supports the pecking order theory and its dominance through empirical evidences in determining the firm's capital structure. The external financing structure of smaller and newly established firms is positively associated with informal funding sources of finance (Beck *et al.*, 2008). The major resources of informal lending are finances provided by the investors or business angles according to the feasibility and idea of potential entrepreneurs and money borrowed from internal sources 3Fs i.e. families, friends and fools or so called love capital (Gudov, 2013). Love capital (F-connections) investments are the form of Quasi-Equity financing as informal resources of finance for SMEs (Zoppa and McMahon, 2002). Furthermore, capital provided by informal sources is comparatively economical and most often used by small firms because of flexible repayment options.

Actually, financing decision involves a dynamic process that is based on operating environment of the firms. In addition to external forces, age of the firm also affects the decisions about financing arrangements. New as well as younger SMEs are extra energetic about bootstrapping finance that involves funds invested by owner, payment deferments, sweat equity, minimized short term liabilities, subsidized finance, trade discounts, joint resources employability and personal loans (Winborg and Landström, 2001).

So, bootstrap financing asserts optimal application of current sources where inadequate supply of financial resources exists. Rajan (2009) also identified that SMEs are depending upon owner's savings and preference towards borrowing through 3F-connections in financing their capital structure. Moreover, informal financing provides alternative sources to managers-owners and supports in decision making for their SMEs' capital structure (Ayyagari *et al.*, 2010).

4.3. Social Capital

Carey and Flynn (2005) pointed out various alternate sources of finance in the form of social networks. Financial benefits which may be acquired from social and community networks explain the enterprises' social capital sources. In context of SMEs financing, it becomes more essential due to inter & intra-social connection of SMEs which can deliver mutual consideration to the concerned parties. Capital acquired through social networks is also called intangible social asset and this may positively affect the firm's investment decisions and growth. Kumar *et al.* (2001). Therefore, social networking supports in providing information access and other sources to a challenging and competitive environment of business.

Small firms need to upsurge their relationship networking to cope with critical conditions of business environment through innovative sources of information provided by social networks (Pinho, 2011). From the bank's point of view, Uzzi (1999) investigated the fact that social attachments affect the cost of capital charge by middle market banking sectors. Through statistical examination, he further argued that small firms through mixed of bank ties, embedded ties and arm's length principle ties are most often acquire loans at lower interest rate from the banks.

Carey and Flynn (2005) pointed out the fact that SMEs can fulfill their additional financial and non-financial requirements through social infrastructure. This could be further justified as social funding develops predominant trust level between borrower and lender that enhances the opportunities for SME financing. Similarly, Zingales (2000), stated that level of trust in social capital is an important factor, influencing funds procurement process, specifically, for SMEs with higher level of constraints as compared to corporations.

4.4. Network Financing

Knowledge and information of social capital can be measured as direct advantage because social networking helps in structuring competitive advantage for small firms (Han and Lee, 2006). Further, indirect advantage of social capital can be considered as financing gain for SMEs. When funds from formal sources such as banks and financial institutions are not easily available, then firms can approach some other informal financial sources to support new ventures. These funds can be generated through electronic platforms by the firms where different investors participating with their funds to specific projects. Such new types of venture financings recognized as crowd funding that are very beneficial at start up level (Belleflamme *et al.*, 2014). Another financing option for fresh venture is identified as negative period of invoice that is online connected with buying and selling through e-commerce channels. Thus, through various combinations and transformation of such formal and informal resources, younger and mature SMEs are managing their financial requirements.

Based on the ideas of different scholarly articles, the above studies examine the effect of formal and informal sources on SMEs financing. From the discussion, one can easily infer that formal financing is less dominant as compared to informal financing among small firms. Though, literature suggests that government and financial institutions need to develop accessible and approachable financing infrastructure to enhance SMEs' growth as well as performance of the formal financial intermediaries i.e. banks. However, there are certain gaps impeding the SMEs progress and their ultimate impact on banks profitability. This question whether available funding sources of finance are lucrative for firm-bank association is yet to be answered. Consequently, this study has made an attempt to address the above question by identifying firm's capital structure and bank's performance.

4.5. Equity Financing & Venture Capitalists

Though, financing from banks is the key source of formal financial inclusion in SMEs sector (Cosh and Hughes, 2003); equity and venture capitalist financing in emerging economies are less prevalent due to institutional requirements and developing financial market. Hence, equity financing is one of the most appropriate funding options available to small and medium firms (Berger and Udell, 1998). Due to lack of corporate governance, small

firms are not being able to secure investors' rights and do not approached by attractive investment opportunists and financial institutions. This typical situation leads to generate financing gap for small firms and consequently, firms struggle more to avail equity financing options (Gualandri *et al.*, 2009). Nevertheless, equity finance is comparatively an expensive choice for small firms because venture capitalists normally invest higher amount of capital rather than financing to the small entities.

So, SMEs have limited ability to approach those venture capitalists specifically, in emerging economies. Subsequently, small firms turn toward informal financial sources to fulfill their financing requirements. These arguments support the ideas of Penrose (1952) in his theory of life cycle for the firms. Moreover, life cycle theory explains the components of other financial theories such as Kraus and Litzenberger (1973) proposed trade off theory, Jensen and Meckling (1976) suggested agency cost theory and the base theory of our study, pecking order theory developed by Myers & Majluf (1985). According to pecking order theory, SMEs at their start up and nascent stage face more difficulties in borrowing finance through formal sources and ultimately acquire funds through informal capital options (Mac and Bhaird & Lucey, 2011). Thus, it can be concluded that formal lending structure is still under developed in growing economies and banks have more potential to fill this financing gap to enhance their profitability as well as contribute to the firms' growth.

5. Conclusion

A depth analysis of both side financing reveals the current priorities of small firms to finance their projects i.e. firm's internal funds are preferable over debts and debts are preferred to equities. Moreover, due to lack of proper knowledge and managerial skills, SMEs and new ventures are exclusively relying on owner's equity and retained earnings (quasi-equities) as a part of internal funds. So, the preferences of high risk oriented firms are quasi-equity instead of debts. Hence, small firms are expected to adopt the revised pattern of Pecking Order Theory, quasi equities > firms' retained earning > debts > external equities. Earlier discussions showed the firm specific aspects of SMEs and explained the determinants affecting financial structure decisions of medium enterprises. Though, SME lending is not limited up to these characteristics because variables effecting capital structure of the firms clarify a share of demand side financing. Other qualitative variables such as owner/managers' decisions on financing and supply side factors as banks and financial intermediaries' performance are yet to be measured. Therefore, the most significant gap that needs to be addressed is how SME financing decisions based on various quantitative variables interact with bank specific variables to examine the profitability of banks. This study predominantly examines, whether firm specific variables (demand side financing) and bank-specific factors (supply side financing) predict the same performance or which determinant override other. However, firms' financial preferences may not be accurately justified based on theoretical analysis only. The empirical analysis in future researches will further decide the most preferable lending option for banks and financial source for small firms.

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