Evaluating Barriers to SME Financing in Pakistan

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Key

Abbreviations

CQR	Conditional Quantile Regression Estimator
GDP	Gross Domestic Product
GoP	Government of Pakistan
KIBOR	Karachi Interbank Offered Rate
MCGF	Microcredit Guarantee Facility
ME	Medium Enterprise
PKR	Pakistani Rupees
PLS	Profit-Loss-Sharing
RDFC	Regional Development Finance Corporation
SBFC	Small Business Finance Corporation
SBP	State Bank of Pakistan
SE	Small Enterprise
SME	Small and Medium Enterprise
UQR	Unconditional Quantile Regression Estimator

Words and Phrases

Abrahamic religions	A group comprising of monotheistic beliefs at large that follow worship of the God of Abraham and the most notable religions being Judaism, Christianity, and Islam.
Adverse selection	A case when one party in a particular transaction has more information than the other, in other words, when there an exploitation of asymmetric information. In case of financial institutions, they might end up extending credit facilities to a less creditworthy and riskier client due to lack of adequate information.
Agency costs	An agency cost is an expense arising when there is an agent, acting on behalf of a principal, and this might result in conflicts of interest between principle and agent. This is an expense that comes from an agent acting on behalf of the principal. Here, financial institutions are referred to as principles and SMEs are the agents.
Asset-based lending	Loan secured against a tangible or intangible asset as a collateral, tangible assets might be current such as inventory, accounts receivable or fixed such as plant and

	equipment or land and building. Intangible assets can be goodwill, patents, trademarks.
Bank conservatism	The conventional outlook of banks regarding certain issues. In this case lending to SMEs is not encouraged by many banks following an orthodox view.
Borrower heterogeneity	Many different types of borrowers having diverse loan requirements.
Capital market	The segment of financial system which deals with raising capital through bonds, shares other investments. The most common forms of capital markets are bond markets and stock markets.
Capital structure	The distribution of equity and debt accounts for the funds of a company.
Caustic outlook	Acerbic view or mindset.
Contract enforcement rights	Only parties to a contract may enforce the terms of the contract. Enforcement might take the form of, for instance, claiming for damages arising from a breach of contract.
Control costs	Processes for monitoring the status of a project in order to update the project costs
Conventional wisdom	A generally accepted belief, opinion, judgment, or prediction about a particular subject.
Cost-benefit analysis	The potential rewards expected from a situation or action subtracted by the aggregate cost associated with taking such an action.
Covenants	An agreement or a legal contract.
Credit ceiling	The maximum amount of credit or loan a borrower can take from financial institutions.
Credit market imperfections	Financial market, where the quality of information about borrowers is inferior or enforcement rules or institutions are not well developed.
Credit rating	an estimate of the ability of a person or organization to fulfil their financial commitments, based on previous dealings.

Credit rationing	A limit placed by lenders to the supply of credit to borrowers
Credit scoring	A statistical analysis performed by financial institutions to determine the creditworthiness of an individual or business.
Debt finance	When a company raises money by selling debt instruments to investors such as bonds, bills, or notes.
Delinquent	When a borrower is behind on repayment of his loan.
Economies of scale	A proportionate saving in costs gained by an increased level of production.
Embryonic	A system, idea, or organization in a rudimentary stage with potential for development.
Ethnic minority groups	A group of people who differ in race or colour or in national, religious, or cultural origin from the majority population of the country in which they live.
Financial depth	In this case referred to as financial inclusion (same as financial deepening)
Hard information	*Information* such as numbers or *facts* that can be proved
Inequality of income	Significant disparity in the distribution of income between individuals, groups, populations, social classes, or countries
Inferior information	Information that cannot be verified or not completely authentic.
Informal credit	Loans that rely on personal relationships or social sanctions as means of enforcement for instance loan from family and friends (same as informal loan or informal finance).
Information asymmetries	When one party to a transaction has more or superior *information* compared to another.
information disclosure	Sharing confidential information with the other party.

Information vacuum	A lack of information which may exacerbate and increase the severity of a problem.
Informationally opaque	Borrowers that do not have long credit histories suitable for credit scoring or other model-based lending practiced by commercial banks.
Market imperfections	A market that does not support perfect competition.
Moral hazard	The risk that a party has not entered into a contract in good faith or has provided misleading information about its assets, liabilities, or credit capacity.
Oligopoly	A state of limited competition, in which a market is shared by a small number of producers or sellers
Opportunism	The practice of taking advantage of circumstances, With little regard for principles or with what the consequences are for others.
Private equity funds	Away from the public where funds and investors directly invest in companies or engage in buyouts of such companies
Residual loss	Occurs whenever the actions that would promote the self-interest of the principal differ from those that would promote the self-interest of the agent, despite monitoring and bonding activities.
Risk averse	Disinclined or reluctant to take risks.
Screening error	Mistake in assessment.
Social capital	Concept in social science that involves the potential of individuals to secure benefits and invent solutions to problems through membership in social networks.
Soft information	Knowledge gathered within a bank relationship, is qualitative and non-verifiable and results in more precise estimation of the debtor's quality.
Transformative entities	A business strategy for change management intended to move your organization from where it currently is to a desired future state.

Usuary	The action or practice of lending money at unreasonably high rates of interest
Venture capital	Investment in a project in which there is a substantial element of risk, typically a new or expanding business.
Working capital finance	Short-term credit extended to firms in fulfilling their daily operational requirements

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Abstract

This thesis examines the two most detrimental, but obscured obstacles faced by Small and Medium Enterprise (SME) in Pakistan in obtaining finance from the formal financial sector despite a strong policy support from the State Bank of Pakistan (SBP) and the government. The reason for their obscurity is that both are demand-side issues, difficult to identify as gathering information from SMEs in Pakistan is extremely challenging. In study is extremely important as SMEs comprise of 90% of the estimated 3.2 million business entities in Pakistan employing more than 80% of non-agricultural workforce, contributing towards 30% of the country's GDP and generating 25% of export earnings (SBP Annual Report 2018-2019). As per SBP Annual Performance Review Fiscal Year 19, banks/ financial institutions have achieved outstanding SME finance of Rs 464.85 billion at end June 30, 2019, showing year-over-year growth of 12.8 percent in total SME credit outstanding portfolio. Despite the above improvements, a significant number of SMEs continue to remain financially excluded by mainstream commercial banks (SBP Policy 2017). According to SBP Quarterly SME Finance Review, (2021) loans issued by banks and financial institutions to SMEs only accounted for 6.51% of the entire loan portfolio. This indicated a massive financing gap for only 164,756 entities succeeded in procuring access to finance out of a total of 2.88 million SMEs prevalent in Pakistan. Not much research has been conducted on the problems faced by this sector in Pakistan and whatever efforts made have only covered the generic issues instead of finding the root cause so that it may be addressed. This is empirical research where the responses of 416 SMEs have been collected and using the mixed-method approach identifies several impediments faced by SMEs, such as high interest rate, banks are unapproachable, but two findings stood out, first one is the silent but deep-rooted influence of extrinsic religiosity and the impact it has on the mindset and growth of SMEs in the country. This was identified when 50% of our total sample pointed out that they have never made any efforts in approaching banks for credit. This issue is interesting as it is unique to this sector and effectively keeps the SMEs from approaching banks for finance, thus introducing the concept of self-induced credit rationing. The second impediment is the caustic outlook of the SME sector towards formal finance, which is the result of discouragement faced by them in approaching financial sector for credit. The findings of these two issues highlight a dominant presence of borrower

discouragement chiefly created by the acute communication gap between SMEs and financial institutions. This gap, generally referred to as the Macmillan gap, is usually created due to the presence of asymmetric information between borrowers and lenders coupled with small loan amount, high credit frequency where cost outweighs the benefits and lenders avoid such portfolio and instead concentrate on large companies (Yu and Fu 2021). Finally, this research proposes strategies which policymakers can implement to facilitate SME financing and enhance the performance of this much neglected sector.

Keywords: SME Financing, SBP, Banks, Financial Sector, Networks, Extrinsic Religiosity, Discouragement, Credit Rationing, Caustic Outlook

1. INTRODUCTION

1.1 Background to SME Finance

SMEs are key drivers to economic development, innovation and employment generation (Ayyagari et al., 2011, Nguyen et al., 2022). However, SMEs suffered from greater financial constraints owing to different types of market failure (Beck, 2013), resulting in adverse repercussions on their business activities and development. SMEs also suffer from greater informational opacity compared to large companies (Beck, 2013, Beck et al., 2018). Therefore there is a wide consensus of opinion that finance has significant consequences on economic development (Demirgüç-Kunt and Maksimovic, 1998, Levine, 2005, Nguyen et al 2022), income inequality, and poverty alleviation (Beck et al., 2005). Recent studies highlight the importance of access to formal finance in different areas of business operations and it stimulates performance (Fowowe, 2017), growth, (Beck et al., 2005), and innovation (Ayyagari et al., 2011 Nguyen et al., 2022). Most importantly many large enterprises generally begin as small firms which makes it vital for economies to invest in their development. (De la Torre et al. 2010). Formal finance is defined as funding capital procured from financial institutions (Elston et al., 2016, Mpofu and Sibindi, 2022).

SMEs contribution to a country's economic development cannot be underestimated. They are responsible for creating a strong foundation for employment, harnessing business opportunities, providing impetus for innovation as well as a broader distribution of socio-economic wealth and growth opportunities (Beck, 2013). Previous studies have shown a positive relationship between access to external finance and the performance of businesses (Beck and Demirguc-Kunt, 2006, Beck et al., 2008, Mushtaq et al., 2022). Availability of finance has been discernible by a rise in the proportion of start-up SMEs as well as opportunities for SMEs to grow into vibrant and transformative entities (Beck, 2013). SMEs also lead to increase in job creation and growth, thereby leading to a positive relationship between SME growth and economic development. Availability to external finance improves investment opportunities for SMEs and lead to investment in projects yielding significantly higher returns, whilst promoting economic growth, employment and sowing the seeds for innovation (Beck, 2013).

SMEs are widely known to rely on external source of finance to funds their potentially viable ventures (Gelos and Werner, 2002, Love, 2003, Laeven, 2003) at times when funds obtained from internal sources become inadequate to cater to their investment needs (Vanacker and Manigart, 2010) and formal credit obtained from financial institutions is the most common source for procuring external finance (Bettignies and Brander, 2007, Colombo and Grilli, 2007).

According to Pissarides (1999), surveys conducted throughout the world point out to one major constraint faced by SMEs, which is lack of finance for business growth. This problem is emerged from economies under transition usually characterised by underdeveloped capital markets where access to finance is based on historic data and networks which link banks and financial institutions with other companies (La Rocca et al., 2011).

The issue of credit constraint is more prominent in case of SMEs as they are more informationally opaque and have greater dependence on bank credit. De la Torre (2010) mention the term opaqueness to be one of the chief features restricting SMEs from obtaining bank finance. The meaning of the word "opaqueness" in literature means that it is challenging to determine a firm's repayment capability whether it has any feasible projects to invest in or if a firm has the willingness to repay its loan also referred to as moral hazard. Opaqueness poses an issue for SMEs when approaching for finance to financial institutions that prefer concrete and transparent information. The issues concerning asymmetric information are more pronounced in case of SMEs as these firms are more informationally opaque hence enhancing the role of bank credit. Another credit constraint faced by SMEs is competition among financial institutions where commercial lenders may perceive less incentive in relationship building. Relationship lending is ideally suited for informationally opaque SMEs whereas transactions lending is more appropriate for large corporations. (Carbo-Valverde et al. 2009). Information opacity of SMEs is considered as the most crucial obstacle in obtaining financial access, forcing them to function in shadow markets (Hannig and Jansen, 2010, Triki and Gajigo, 2012, Motta, 2018, Mushtaq et al., 2022) and also raises their fixed costs as information gathering pertaining to SMEs becomes challenging and hence lending to such forms becomes unattractive for mainstream financial suppliers (Mushtaq et al., 2022).

SMEs are usually penalised as banks consider their credit risk to be high as they are usually unable to provide a suitable collateral to secure their loan. (Pissarides, 1999). SMEs suffer from lack of adequate assets against collateral finance which is a significant issue amongst small businesses (Cowling, 1999, Coco, 2000), and this coupled with asymmetric information problems which leads to the presence of a probable moral hazard and adverse selection issue within the market which in turn results in uncertainty thus adding risk to the banks' lending decision (Cowling et al., 2016). Another significant obstacle faced by SMEs regarding access to bank credit is the tedious procedure involved such as collateral requirements, bank paperwork, interest rate payments, need for special connections (Beck et al., 2006).

Large organisations are equipped with hard information which gives them a comparative advantage over SMEs on transaction lending as SMEs are more prone to relationship lending (Berger and Udell 2006). On the other hand, the bank's incentive to support its older clients may serve as an obstacle to exploring potential industry entrants or emerging SMEs (Cetorelli and Strahan, 2006). Irwin, and Scott (2010) state that SMEs suffer from lending constraints due to lack of track record regarding their performance on which their credit rating may be assessed along with lack of adequate collateral. Moreover, SMEs do not require long term loan (as compared to large enterprises. SMEs generally require short-term working capital finance).

Pissarides (1999) states that the high level of nominal interest rates has also posed as a barrier against SMEs. The interest rate level is frequently cited as being the major constraint in obtaining financing from financial institutions and thus expanding production. Serrasqueiro et al., 2021 have identified interest rate as a factor contributing to restriction in SME growth.

The risk of default is also a high component on the list of SME financing. When compared to large companies SMEs are not likely to be able to provide suitable collateral, often do not have audited financial accounts which increases the risk of default. SMEs grow disproportionately faster than large firms with well-developed financial system and therefore have a positive effect on the growth of SMEs (Beck et al., 2008). Kersten et al., (2017) argue that SMEs face higher financing constraints than large organizations for fear of default risk associated with the age and size of SMEs. Moreover, the cost of monitoring and appraisal of credit to SMEs and liquidation of assets in the event of default is higher compared to large corporations. The lending constraints are further intensified due to lack of information about credit risks associated with SMEs, unfavourable legal frameworks required for collateralisation of assets for SMEs and lack of competition between financial institutions reduce the willingness of banks to take the necessary risks associated with SME lending.

The age and size of the firm also determines the ease in access to finance from banks as smaller and younger firms experience more obstacles in accessing finance than larger and older corporations. The reason emphasised is that there are greater information asymmetries attached with newer, smaller firms as they do not possess a history of long-term relationships. (Kersten at al., 2017).

Demirgüç-Kunt and Maksimovic (1998) highlight the fact that countries with a strong legal system experience a lower level of credit constraints. Beck et al., (2006) reaffirm this argument suggesting that the development of institutions is an important characteristic of a country which greatly affects the reason for financing obstacles within a country. Love (2003) further identifies the significance of developing financial markets within a country which improves a firm’s ability to obtain external credit through their results which prove that countries with less developed financial institutions face higher credit constraints. Financial and institutional development of a country mitigates the financing constraints that is otherwise experienced by firms (Chakravarty and Xiang, 2013).

1.2 Pakistan as a representative Study

1.2.1 Definition of SMEs in Pakistan

There is no specific definition of the term ‘SME’ for it not only differs from one country to another (Galadanchi and Abubakar, 2022) but also within the country as well. The main focus of this research concerns SME finance therefore the most authentic definition of SME firms in this case would be the one provided by the State Bank of Pakistan (SBP) which is the country's central bank. SBP introduced a separate document Prudential Regulations for SMEs Financing in May 2016 which was later updated in December 2017 and finally in April 2021.

According to this latest update definition of Small Enterprise (SE) is a business entity with employees up to 50 including those on contract and annual sales turnover of up to Rs.150 million. The definition of Medium Enterprise (ME) is a business entity ideally not a public limited company with number of employees 51 to 250 in case of manufacturing and services concern and 51 to 100 employees in case of trading concern with sales turnover of above Rs.150 million and up to 800 million and this includes all types of MEs. In our research we have not bifurcated SMEs into SEs and MEs as the aim of our study is identify the core issues faced by SMEs in Pakistan as a whole before digging further into the problems specific to SEs and MEs separately.

1.2.2 SME Financing Problems in Pakistan – A Comparative Analysis

The issue of Extrinsic Religiosity within the SME Networks

The topic of extrinsic religiosity and how it affects entrepreneurial activity and in turn influences economic development has not been studied in detail. Very few, if any, published works may be found specifically focusing on the difference between intrinsic and extrinsic religiosity and how it influences entrepreneurial outlook (Galbraith and Galbraith, 2007).

Extrinsic religiosity can be present in any religious faction as the core idea of extrinsic religiosity remains unchanged which is that extrinsic orientation is mainly used to enhance social standing, consolation, protection and support towards one's chosen lifestyle (Allport, 1966). When following extrinsic religiosity, the value of unity and brotherhood diminishes compared to an individual's personal views and ideals (Galbraith and Galbraith, 2007). Extrinsic religiosity may be referred to as religious orientation where people use religion in order to achieve their personal objectives and those supporting extrinsic religiosity treat religion as a means to accomplish certain ambitions (Allport, 1966).

Borrower Discouragement

The issue of borrower discouragement which pertains to the demand side of formal finance was first identified by Kon and Storey (2003). This was a major contribution to financial literature as the aspect of demand for formal credit has not been studied before mainly because of the obscurity of this dimension of SME mindset. However, borrower discouragement is very acute in case of SMEs all over the world and which makes it vital to contribute to this literature to assist policy makers in finding an apt resolution for this issue. Pakistan can be made a representative case for it identifies the toxicity that results if borrower discouragement is not timely addressed, thus further widening and cementing the gap between SMEs and the country's financial institutions. Some of the examples of issues pertaining to borrower discouragement are given below that are similar to the ones experienced by SMEs in Pakistan.

Recent research recognises borrower discouragement as the main demand-side barrier to the growth of entrepreneurship thus preventing business growth, economic development, and poverty alleviation. Present studies on borrower discouragement identify two shortcomings, one is that it typically concentrates on developed countries (Cole and Sokolyk, 2016, Naegels and D'Espallier, 2022).and second there is only a handful of literature found on emerging economies (Brown et al., 2011, Chakravarty and Xiang, 2013, Gama et al., 2017, Naegels and D'Espallier, 2022). This is the most prominent issue pertaining to Pakistan where literature on specific problems faced by SMEs is practically non-existent.

Constraints in accessing bank credit for SMEs acts as a severe impediment to economic growth according to the opinion of most academics and policymakers (Levine 2005, Beck et al., (2008), Brown et al., 2011). Brown et al., (2011) in his paper focused on SME discouragement by employing a survey data of 5,040 firms across 15 Eastern Europe and 3,347 firms in 5 Western European nations. His analysis confirms that the propensity for smaller and financially more opaque firms to approach banks for credit is far less than the exporting firms that have a greater need for financial assistance and are thus more likely to apply for a loan and this feature is similar in both Eastern as well as Western Europe.

Chakravarty and Xiang (2013) study ten countries across four continents namely Brazil, India, China, Pakistan, Eritrea, Uganda, Ethiopia, Kenya, Tanzania and Honduras and identify the relationship between financial institutions and SME firms to be one of the major causes of borrower discouragement. According to their research SME firms would not experience discouragement if they had business relationships with more than one bank.

Brown et al., (2018) identify theta 9.3% of the SMEs in the UK fall under discouraged borrowers which amounts to around half a million SME firms and most of them are situated in London which is about 15.7% in 2015. The most dominant factor of borrower discouragement is the unwillingness of SME entrepreneurs to avoid risky ventures as well as fear of refusal of loan application.

Qi and Nguyen (2021) use the sample from 30 countries across Central Asia and Eastern Europe to study discouraged borrowers. The found that the SME borrowers in these countries suffered from discouragement due to the lack of trust in their countries' financial system which was weak due to the presence of corruption and as a result turned to informal sources of finance.

Omar and Hussin (2016) studied SMEs in Malaysia and found out that based on the Economic Census in 2011, 57.6% of them finance their business activities through funds generated internally. The age, size and legal status of the borrower prove to be a reliable feature in gauging borrower discouragement experienced by SMEs in Malaysia. They too found that the underlying cause for SME borrowers to resort to self-rationing was the fear of not being able to fulfil the requirements of financial institutions which would result in loan rejection.

Wasiuzzaman and Nurdin (2018) focused their study on the 456 SME manufacturing concerns situated in the two states of Malaysia, namely Selangor and Kuala Lumpur. Their research revealed that SME concerns which are private limited companies are more liable to apply for formal credit than sole proprietorship or partnership concerns. This is generally the result of the presence of information asymmetries which result in adverse selection keeping the creditworthy SME firms from applying for formal loans owing to lack of credit history or collateral which is a requirement of banks when extending credit to a borrower.

The above studies confirm that the issue of extrinsic religiosity and borrower discouragement is prevalent not only in Pakistan but all over the world.

1.3. Financial Inclusion of SMEs in Pakistan

1.3.1 Definition of Financial Inclusion

To understand the problems faced by SMEs in accessing bank credit we first need to identify their share in the bank's portfolio with regards to financial inclusion.

What is Financial Inclusion? There are many possible ways in which financial inclusion has been defined, each of which touches to some degree on one of several aspects: access of the population to financial services, the degree of use of these services, and their quality and cost. When searching for a workable definition that can be measured relatively consistently in a broad group of countries, the World Bank's 2014 Global Financial Development Report opted for the following: the proportion of individuals and firms that use financial services (Barajas et al 2020). Financial inclusion is defined as extension of formal financial services to individuals and businesses enabling them to meet their financial needs (SBP Financial Inclusion)

Financial development comprises of two dimensions, financial inclusion and banking market structure. Here we focus on financial inclusion also referred to as financial depth is the volume of credit distributed within the market and how is it allocated across firms within the financial market (it refers to the share of firms which have access to formal credit) (Chauvet and Jacolin, 2017). The advent of globalisation has highlighted the significance of financial inclusion focusing on the importance of access to financial products and services to households. Studies are also found the influence of financial inclusion on growth depend upon the accessibility of credit to firms (Beck et al., 2012), which greatly closes the financing gap experienced by SMEs and also diminishes liquidity restraints and supports investment (Chauvet and Jacolin, 2017).

Financial inclusion plays a significant role in the developing world where there is a lower financial inclusion, and the advantages of financial inclusion and reform are tremendous. The benefit attained from the development of the banking system in less developed countries diminishes due to the presence of lower financial inclusion, information asymmetries and feeble governance and institutions. (Chauvet and Jacolin, 2017). Countries with a developed financial intermediary encounter a rapid decline in the inequality of income (Beck et al., 2007), which confirms the theories predicting that financial development diminishes poverty by speeding up growth and cutting down income inequality. (Beck et al., 2012)

According to SBP, Financial inclusion provides increased access to bank deposits which assists individuals to secure their savings. Financial inclusion also improves access to formal credit which on the whole helps in the overall poverty reduction. Economic growth is also achieved through financial inclusion as it helps facilitate financial transactions, creates investment opportunities, mobilises savings and facilitates the inflow of foreign capital (remittances). Financial inclusion provides stability by strengthening the country's financial institutions and broadening their markets, efficient allocation of capital, improved risk management.

Before we investigate the actual share of SME finance in the portfolio of financial institutions, let us first look into the efforts made by SBP and GoP (Government of Pakistan) in promoting SME finance within the country.

1.3.2 Role of SBP

SMEs in Pakistan were given attention during 2004-2006. The economic slowdown between 2007-2008 turned SMEs into a less profitable and extremely risky venture for banks. The SBP provided support to SMEs and from 2013 onwards SME financing rose from Rs.284 billion in December 2013 to over Rs.400 billion by December 2016, a 9% credit of the overall private sector lending (SBP Policy 2017).

SBP's support includes the following measures:

1. Introduction of Prudential Regulations specific to SME Finance in order to improve regulatory framework.
2. SME Asaan (Easy) Finance (SAAF) Scheme.
3. Refinance Facility for Modernisation of SMEs.
4. Refinance Scheme for Working Capital Financing of Small Enterprises and Low-End Medium Enterprises.
5. Financing Facility for Storage of Agriculture Produce.
6. Creating awareness of the potential of this segment among banks (SBP Policy 2017).

SBP's share of support in the growth of SME financing in Pakistan is evident from the year over year increase of 9.08 percent in the SME outstanding portfolio reported by banks and DFIs to PKR 438 billion by the end of June 2021 and the aggregate number of SME borrowers amounted to 172,893 by the end of June 2021 (SBP Annual Performance Review 2020-21).

In April 2021, SBP also published a five-year strategic plan focusing on the Islamic banking sector in which 30% share of growth is to be achieved by them by 2025 in both the overall assets and well as deposits out of which 10% comprises of the SME share (SBP Annual Performance Review 2020-21). According to the Annual Report 2018-2019 published by the SBP the economy has witnessed a stagnancy in the growth of SME sector owing to factors including poor management practices, lack of human capital development and dysfunctional institutional set-up.

1.3.3 Role of Government of Pakistan (GoP)

The GoP in 1998 established SMEs Development Authority (SMEDA) with an aim to encourage and promote SMEs in Pakistan. SMEDA's role in development business services offered to SMEs include identification of projects to assistance in raising external finance.

In last two decades the government took substantial steps to promote the SME sector of Pakistan. The SME Bank was launched in Pakistan associated with the financial sector restructuring program of GoP in which Regional Development Finance Corporation (RDFC) and Small Business Finance Corporation (SBFC) were amalgamated into SME Bank Limited effective from January 1, 2002. The establishment of SME Bank Limited was to focus on the financial requirements of SMEs by delivering them tailor-made financial products and services to boost their performance.

Moreover, in August 2020 the Prime Minister of Pakistan established a National Coordination Committee (NCC) focusing on the development and promotion of SMEs in Pakistan (SBP Annual Performance Review 2020-21).

Annual Report 2018-2019 published by the SBP states that in order to encourage promotion of SME sector in Pakistan, the government and SBP have joined hands to undertake several steps, the most significant of these are:

(i) Annual goals are to be set up for SME credit with commercial banks given the task to frame a strategy targeting finance to this sector.
(ii) Providing SMEs and rural enterprise with subsidised credit guarantee schemes for market development.
(iii) Refinance facility to be introduced for innovation of SMEs.
(iv) Prime Minister's Youth Business Loan Scheme for specifically designed for start-up businesses to be continued.
(v) SECP advised to facilitate SMEs in raising venture capital and private equity funds.
(vi) Facilitation counters to be set up at numerous ministries and the Chamber of Commerce and Industry.

1.3.4 Financial Inclusion of Pakistani SMEs

SME Finance Position	**FY15**	**FY21**	**% Change**
Outstanding SME financing (in PKR billion)	260.7	437.6	68%
Outstanding SME borrowers	152,495	172,893	13%

(SBP Annual Performance Review 2020-21)

The above statistics paint a rather dismal picture of the SME financial position in Pakistan. Out of the 2.9 million SME businesses functioning in Pakistan only 172,893 business are financially included which is minuscule. Moreover, we notice that although there has only been a 13% increase in the number of SME borrowers from 2051 to 2021 yet there is a 68% increase in the amount of loans extended to them. This means that the financial institutions are only increasing their SME lending portfolio through the same clients and not making much effort on extending their SME customer base. This also recognises an abysmal gap between SMEs that are financially excluded and financial institutions operating in the country. The Annual Report 2018-2019 published by the SBP reveals that the majority of SMEs in Pakistan lack productivity not only because of improper management but also due to their use of obsolete products, blatantly pointing out towards the inability of SME entrepreneurs in raising required finance. This provides us with adequate incentive in carrying out this research to find out the actual reasons for this disparity despite strong policy support.

Inaccessibility to finance has been identified as the chief constraint encountered by SMEs and has been widely investigated by academia. However, such research has largely been ignored on developing countries, particularly Asian subcontinent countries, like Pakistan. The information available on Pakistani SMEs are ad hoc study reports carried out either by the SBP or by international development organisations which largely focus on the general issues faced by SMEs and fail to address financing constraints specific to SMEs in Pakistan. To the best of researcher's knowledge, this is the first academic study investigating Pakistani SMEs' inaccessibility to financing. Therefore, this study is built on the understanding that SMEs in Pakistan are credit constrained and there is an SME financing gap in Pakistan.

1.4 Research Aims and Objectives

SME financing comprises of the following key constituent: SMEs require financing and the factors that pose as an obstacle in acquiring this finance.

De la Torre et al., (2010) state that according to the perception of policymakers and academics SMEs require more attention as they suffer from financing constraints, and this includes programmes initiated by government to improve lending and a number of studies have supported this viewpoint. They argue that the conventional point of view suggests that these SME financing constraints are mainly caused by factors pertaining to the supply-side of finance. According to De la Torre et al., (2010) there is a supply-side problem created by banks which generally are not interested in catering to the SME financial requirements as these firms are unable to overcome their opaqueness. As a result, financial institutions have created a biased outlook in extending credit to SMEs. This research reveals that there is a gap between this view and what is actually going on within the SME sector. This acerbic attitude towards financial institutions is so deep-rooted that merely introducing incentives for SME financing would not solve the problem instead, before attracting SMEs towards these given incentives, policymakers need to first address these core issues to help change the outlook of SME entrepreneurs against bank finance.

In the case of Pakistan, there is a disparity between SMEs' financing requirements and the availability of finance for SMEs by financial institutions, leading to a SME financing gap, which is more prevalent in developing countries like Pakistan. Much of the literature on SME financing constraints has been carried out in the context of industrialised economies, which are fundamentally dissimilar to the economy and financing environment of developing countries like Pakistan.

The main objectives of the study are to:

• Analyse the nature and causes of financing constraints faced by SMEs in Pakistan via economic theories, namely, Theory of Information Asymmetry, Agency Theory, Theory of Credit Rationing, Theory of Discouraged Borrowers, the Pecking Order Theory, Network Theory and Transaction Cost Theory.

• Identify factors impeding SMEs access to finance in Pakistan despite strong policy support from both the country's Government and Central Bank.

• Recommend solutions which would aid policy makers in improving the growth and development of SMEs in Pakistan.

The core aim of this study is to examine the causes of SME financing gap from the perspectives of SMEs in Pakistan. The study proposes to identify factors preventing SME's access to credit and reciprocal relationship between SMEs and banks from the point of view of SMEs in Pakistan. This research will provide empirical evidence on the impact of these factors on SMEs' accessibility to debt financing from the banks in Pakistan. The research foundation is built on the theoretical concepts of Theory of Information Asymmetry, Agency Theory, Theory of Credit Rationing, Theory of Discouraged Borrowers, the Pecking Order Theory, Network Theory and Transaction Cost Theory through the development of conceptual framework of the study. To better understand SME financing constraints in Pakistan, this research will be undertaken within the context of Pakistan's unique economic, financial and social system to effectively capture factors hindering SMEs access to finance. Through the findings, this research will provide recommendations for SMEs, banks and policy makers in order to alleviate the SME financing gap in Pakistan.

1.5 Research Questions

To achieve the research objectives, the following broad research questions have been formulated to direct the course of the study:

1. What are the major problems faced by SMEs in Pakistan in obtaining credit from financial institutions?

2. What are the reasons for the existence of these obstacles that continue to cause SME financing constraints despite the presence of strong policy support by SBP and GoP?

Specifically, the study aims to address the research questions through identification of the key variables affecting SME financing constraints. The above research questions will be used to investigate the effect of the major factors hindering SME's ability to access bank loans.

1.6 Research Design and Methodology

The study employs the use of questionnaires to gather SME's perspective on identification of factors preventing access to bank finance (phase 1 – qualitative analysis and descriptive study), followed by quantitative analysis of SMEs performance (facing obstacles to bank finance) via multiple regression (phase 2).

1.7 Contribution and Significance of the Study

The study is expected to make a significant theoretical contribution to SME financing literature in Pakistan. To date, only a handful of research in the area of SMEs and SME financing focusses on developing economies like Pakistan, thereby creating a gap in knowledge. To the best of my knowledge, this is the first academic study to be conducted on Pakistani SMEs that examines the issue of SME financing constraints in terms of its accessibility to bank finance specially from the viewpoint of SMEs. The literature published on SMEs in Pakistan is extremely limited and therefore profound attention is essential in analysing this sector (Kureshi et al., 2010).

1.7.1 Obstacles to obtaining finance by SMEs in Pakistan

SMEs in Pakistan face a number of shortcomings, the most prominent one being the presence of information asymmetries resulting chiefly from the fact that a majority of SMEs are either sole proprietorship or partnership concerns and therefore lack an organised structure (SBP Policy for Promotion of SME Finance). The issue of information asymmetry alone is a product of a number of concerns some of which are identified by Dar and Mishra (2020) which include absence of information infrastructure related to businesses, lack of financial knowledge and deficiency of skill in human resource.

The research conducted so far on the problems faced by SMEs in Pakistan have only succeeded in capturing a birds-eye view on the various issues surrounding these firms, one of them being inaccessibility to formal finance. However, to the best of our knowledge, no research to date has delved into finding the root cause of the barriers faced by Pakistani SMEs in obtaining bank credit. This chapter discusses the active roles played by the State Bank of Pakistan (SBP) and the Government of Pakistan (GoP) in helping SMEs obtain credit from financial institutions and yet to date majority of the SMEs remain financially excluded.

In order to investigate this issue a survey was conducted in the winter of 2018-2019 in which 416 responses we collected from SMEs based in the two most industrially advanced provinces of Pakistan namely Sindh and Punjab. During this survey the question as to why previous research regarding Pakistani SMEs has failed to dig deeper into the actual cause pertaining to unavailability of formal credit is linked to the absence of empirical research involving these firms. Most research found on SMEs in Pakistan revolves around secondary data as procuring primary data from SMEs is extremely challenging. In Pakistan SMEs prevail in groups of very close-knit communities that are extremely vary of anyone belonging from outside their network thus making collection of information very tough.

This study includes two chapters focusing on the actual cause resulting in a gap between the demand and supply of credit to the SME sector in Pakistan. Our survey has identified that the prevalence of asymmetric information within most SMEs has widened the communication gap between SMEs and financial institutions in Pakistan which rely mostly on hard information when developing a lending relationship and therefore refuse to approach this sector. As a result, majority of SMEs in Pakistan to this day are financially excluded and these firms being relatively smaller in size lack sufficient financial resources to support themselves and their require additional funds for their business operations. The absence of financial assistance from banks forces them to turn to the other alternative which is the help and support of their respective networks and in case of SMEs their social and business networks are usually one and the same. These networks provide their members with the necessary information related to their businesses as well as financial support.

This issue is the focus of Chapter Four of this study which highlights the problem that arises when, in order to maintain a monopoly over their members the network leaders misconstrue information and in case of Pakistan they exploit religion to restrain their members, which has an unfavourable impact on their entrepreneurial activities. Generally, leaders of a network use some form of technique to control their members and in Pakistan they use extrinsic religiosity to their advantage in gaining power and authority by promoting formal credit as 'haram' (prohibited) in Islam. The very conception of Pakistan is based on religious ideology which coupled with a wide communication gap between the financial institutions prevalent in the country and the SMEs makes it easier for network leaders to control their members.

The second problem is elaborated in Chapter Five which focuses on the outcome of borrower discouragement which over a period of time has gone unchecked due to its obscure nature and has created a caustic environment among SME entrepreneurs regarding formal credit. Majority of the 416 responses received during our survey have clearly suggested that they do require external funding for future growth and their perpetual inability to procure adequate funds to date has created a corrosive atmosphere within the SME communities who refuse to approach banks for credit for fear of being rejected. This basis of this issue also arises from the communication gap between SMEs and financial institutions and the SMEs although being creditworthy still fear the unknown that therefore do not approach banks for financial assistance.

The confluence of these two problems has presented a unique opportunity to examine how the prevalence of extrinsic religiosity within the SME networks and borrower discouragement are intertwined and what sort of acerbic environment they have created which has further intensified the barriers to formal finance. The study of these two singular issues that have emerged from Pakistan would provide impetus for further studies in other regions that are facing similar credit constraints and where these problems have been overlooked.

1.7.2 Significance of this study

The main significance of this study to this emerging literature is focused on the two major problems faced by SMEs in Pakistan in obtaining bank finance. The information has been extracted from SMEs, highlighting their opinion regarding formal credit by using structured questionnaires which provides a direct measure of the SMEs opinion with respect to bank finance. This helps us in identifying the general perception of SMEs regarding bank credit which in turn also brings to light the hidden causes keeping SMEs from applying for credit.

The study’s contribution is also important in terms of research methodology. The study has adopted questionnaires to scrutinise the issue of SME financing constraints from the perspectives of both SMEs which is the first detailed study focusing on SMEs in Pakistan. This method will be a substantial contribution to extant literature, which is currently led by a conventional examination of the general factors affecting SME performance, whilst overlooking factors specific to financial constraints faced by SMEs in Pakistan. This study’s methodological approach will provide a balanced, cohesive and holistic view on SME financing constraints. Thus, the wide-ranging results of this research will incorporate a precise depiction of the financing constraints and financing gap encountered by SMEs in Pakistan and the attitude of banks towards lending to SMEs.

Prior studies have primarily focused on general issues faced by SMEs without digging deeper in trying to find the actual causes which have been keeping the SMEs from accessing bank loans. From Pakistan's perspective, these firms form a majority in terms of the total sample of SMEs. Therefore, by investigating them in SME sample population, the study will make a significant contribution to filling a gap in literature. Therefore, the results of the study will be applicable in the context of developing countries' SME sector, in this case, Pakistan.

The findings of this research will hold practical importance for key stakeholders, especially SMEs, banks, central bank and the government. The study will aim to offer valuable insights to SMEs to aid them to understand the causes of finance inaccessibility and to evaluate their situation to improve finance accessibility. This will also allow SMEs to undertake necessary steps to mitigate information asymmetry with financial institutions, thereby contributing to the enhancement of the sector's financial credibility. From the perspective of financial institutions, regardless of the high risk and cost associated with SME financing, SME sector offers a substantial and lucrative market due to the number of SMEs. Therefore, it will be beneficial for financial institutions to adapt and create various SME financing mechanisms in order to gain from the large and profitable SME market.

SME financing constraint is a key issue faced by countries, like Pakistan, and a study like this, which examines the problem of SMEs' inaccessibility to bank finance, is significant in terms of policy development in Pakistan. This research will provide meaningful insights to aid policy makers to understand the financial needs of SMEs and the dilemma faced by banks, to create a sound financing environment for both SMEs and the financial institutions. The findings of this study will aim to be of practical significance in order to aid development of well-examined and defined measures at the policy level to address SME financing constraints and stimulate the sector's growth.

The SMEs in developing countries face similar challenges and constraints. Therefore, the findings of this research will be equally applicable to other developing countries as well as countries with strong religious ideologies. The findings from this research will serve as a reference in drafting policies and measures to address SMEs' financial inaccessibility.

The rest of the thesis is structured as follows. Chapter 2 provides a review of concurrent literature in the area of SME financing as well as examines classical theoretical literature via an evaluation of models and frameworks that have extensively influenced research in this area. It then appraises key empirical literature covering developed and developing countries. This part of the literature review helps determine the gap and limitations of the existing literature, thereby, informing the contribution of the thesis.

Chapter 3 commences with a discussion of the epistemological and ontological alignment of the thesis. It follows with the methodological reflections and informs the chosen methods. The chapter then delves deeper into the research design and provides a justification for the chosen methods, underlining the validity and reliability of the same. It elucidates the research design; the data collection approaches and the choice of empirical models.

Chapter 4 conducts an empirical examination of extrinsic religiosity, covering the data analysis and results for the chapter. Chapter 5 performs an empirical appraisal of discouraged borrowers, covering the data analysis and results for the chapter; whilst the final chapter, Chapter 6, concludes with how the findings of the thesis may support to their application in policy and practice. It also provides recommendations for future research and categorises limitations of the research.

2. LITERATURE REVIEW

2.1 Introduction

This chapter states the concept related to obstacles to SME finance in developing countries. This review of extant literature will form the basis on which the research's conceptual framework will be developed. The conceptual framework will further aid in the development of the research hypotheses and empirical models. For this research, the SME financing gap is examined from the viewpoint of SMEs operating in Pakistan. The research will also incorporate the role of government (GoP) and central bank (SBP) in promoting SMEs. The section will finally conclude by discussing the gap in literature and reiterate the contribution of the research.

2.2 Theoretical Contexts

The gap in finance refers to SMEs suffering from lack of financial assistance most likely caused by the presence of the information asymmetry issue (Ang, 1992, Avery et al., 1998, Berger and Udell, 1998, Gregory et al., 2005, Łasak, 2022). When financial assessment of SMEs is undertaken it is generally presumed that there would be growth (Berger and Udell, 1998, Gregory et al., 2005), but variables such as market failure (Stiglitz and Weiss, 1981, Chiappini et al., 2022) or credit rationing cause constrictions in growth (Nguyen, 2022).

Credit extended to SMEs emphasises certain assumptions that fortify research study and these include information asymmetry, agency costs, considerable risk when extending credit to SMEs, expensive monitoring, competition among banks, the characteristics of SME entrepreneurs with respect to their capability, integrity and inspiration (Vos et al 2007, Fang et al., 2017).

To better understand SME financing and issues encountered by SME's in accessing finance, the following economic theories are examined: Theory of Information Asymmetry, Theory of Credit Rationing, Network Theory, Theory of Discouraged Borrowers, Agency Theory, the Pecking Order Theory and Transaction Cost Theory. These theories have been extensively examined to ascertain SME's behaviour from the context of resource management to growth. It is understood that SME's ability to raise finance is subject to information asymmetry which is the starting point of the gap between SMEs and financial institutions, as this leads to credit rationing, which eventually impacts the SME's capital structure. The two theories that are closely associated with the problems faced by SMEs in Pakistan as identified in Chapter Four and Five are Network Theory and Theory of Discouraged Borrowers.

We will begin with the Theory of Information Asymmetry followed by Theory of Credit Rationing as these are the two most prominent concerns faced by SMEs globally and the situation in Pakistan is no different. These issues form the basis for the creation of all the other problems faced by SMEs all over the world including those discussed in this study.

2.2.1 The Theory of Information Asymmetry

Information asymmetry, as coined by Stiglitz and Weiss's (1981), refers to a phenomenon where one group of market agents have better access to information than the other groups. This creates biasedness of information and therefore an information disequilibrium. Information is disproportionately used by group with access in order to gain economic and competitive advantage at the expense of others. From a firm's perspective, information asymmetry exists when the firm's internal management and shareholders are better informed about the firm's current and future performance than external agents and investors (López-Gracia and Sogorb-Mira 2008). From the perspective of SMEs, owners have better access to information pertaining to firm's future performance, especially its economic prospects, whereas external agents do not, thereby create an information vacuum between SMEs and external investors, lenders (banks) in particular (Cassar and Holmes et al., 2003, Liu et al., 2022).

Heide (2003) describe the occurrence of asymmetric information when one participant holds more knowledge about a transaction than the other. Tong and Crosno (2016) explain how this situation is manipulated by either the buyer or the supplier. A supplier, on one hand, might falsely promote the quality of their expertise or product and the buyer on the other might provide a wrong impression of the market conditions to justify their evasion of previously consented terms, thus opening the door to opportunism. The possibility of opportunism, in turn, amplifies transaction costs which leads to a decline in performance.

Tong and Crosno (2016) declare information being the 'life-blood' of business-to-business associations. Distributors within an industry count on the information provided by their suppliers regarding products and services which are supplied as well as the overall market intelligence with respect to competition and regulations. Suppliers, likewise, depend upon the information extended by their distributors regarding market conditions in their area and clients. Such type of correspondence between distributors and suppliers is extremely essential for the business without which the likelihood of achieving efficiency and efficacy in business operations would be nominal. Here information could be pertaining to consumer requirements and preferences, market operations, strategies employed by related parties and unforeseen issues.

Asymmetric information is more pronounced during early phases of business associations (Cowling and Dvouletý, 2022) owing to the fact that communication lines between the two parties are also in their infancy, which means that the concept of information sharing has not yet completely established. Therefore, during this period the likelihood of opportunism (moral hazard) creeping in is very high which has an adverse effect on the conviction, obligation, fulfilment and performance of both parties. (Tong and Crosno 2016, Liu et al., 2022)

Information Asymmetries and SMEs

Research has revealed that information asymmetry is the primary cause of SMEs finding it challenging and expensive to procure credit (Berger and Udell, 2006, Baas and Schrooten 2006, Lu et al., 2020, Liu et al., 2020, Romdhane and Jebali, 2021, Liu et al., 2022). The hard information available on SMEs is usually not easy to quantify mainly owing to improper financial records, small asset base, and elevated uncertainty (Lu et al., 2020, Yin et al., 2020). Financing constraints concerning SMEs caused by asymmetric information is often associated with monitoring and screening costs coupled with underdeveloped financial structures especially in emerging markets Brei et al., 2020). Baas and Schrooten (2006) stated that although the ideal resolution is possession of complete knowledge regarding SMEs, yet this is not the case, thus resulting in gaining of such information to be expensive for financial institutions. Inability to obtain complete information may lead to adverse selection or agency costs. (Mac an Bhaird et al., 2016). Mac an Bhaird et al., (2016) provide the various lending strategies adopted by financial institutions as a safety measure against probable setbacks such as asset-based lending, financial statement lending, relationship lending and credit scoring. Informational opacity is one of the principal inherent characteristics of SMEs and the primary obstacle in access to formal credit (Liu et al., 2022) which, accompanied by credit rationing results in a 'finance gap', which, in turn leads to an arrested growth within SMEs (Vos et al., 2007)

Previous quantitative studies on SME performance and financial structure examined the impact of firm-specific factors on access to external finance (debt). These studies posited a negative relationship between firm characteristics (size and age) and firm's assets and credit history (Dennis and Sharpe 2005, Hull and Pinches 1994). Generally, information asymmetry is prevalent in younger and relatively smaller SMEs owing to their lack of reputation, insufficient credit history and inadequate tangible assets. As a result, SME's faced reluctance from financial institutions to lend to them, whom financial institutions considered as high-risk SMEs (Colombo, 2021). Irwin and Scott (2010) noted that the behaviour of financial institutions changed over time, when these SMEs grew in size, reputation, which aided their credit history. These financial institutions considered such firms as low-risk clients, which reduced their cost of lending. As a firm developed and grew over time, its information disclosure improved, which boosted its financial credibility and access to finance (Mac an Bhaird and Lucey 2011, Mateev and Anastasov 2010).

Myers and Majluf (1984) argue that information asymmetry serves to increase the cost of external financing and may therefore force firms to forgo potentially profitable projects. As a result, they posit that in the presence of information asymmetry, a firm's growth will be constrained to its internal resources. The high levels of information asymmetry encountered by SMEs, due to poor accounting records and insufficient financial information, leads to financial institutions classifying them as high-risk clients (Allee and Yohn 2009, Colombo, 2021). Therefore, inadequate financial management mechanisms by SMEs further highlight the gravity of information asymmetry between financial institutions and SMEs. Zambaldi et al., (2011) reported that firm financial records managed by SMEs were generally inaccurate, unreliable and incomplete with little value addition to the SME. Moreover, lack of informational transparency by SMEs has also been attributed to SMEs being relatively new participants to the marketplace, lacking any credit history and inadequate financial records (Okura 2008). As a result, financial lenders consider SMEs as high-risk borrowers owing to their information obscurity and lack of reliable financial records (Berger et al 2005, Palliam 2005, Romdhane and Jebali, 2021). SMEs' high risk hinders their capacity to obtain debt from financial institutions, thereby contributing to their financial distress. Financial Statement lending is non-existent in case of SMEs (Kautonen et al., 2020).

Publicly listed companies are required by regulation to conduct financial reporting and financial disclosures as per the accounting standards, in order to make their financial information relevant, reliable and accessible to all stakeholders of the market (Brent and Addo, 2012). However, SME financial management and reporting, especially in developing countries, is not controlled by regulatory bodies and as a result, there is scant evidence of their financial reporting mechanisms, which exacerbates information asymmetry, particularly with financial institutions (Healy and Palepu, 2001). Financial statements are generally prepared for the purpose of taxation and borrowing in case of SMEs (Huang et al., 2022)

Drever et al. (2007) argued that the superior quality financial reporting did not promise SME with successful acquisition of bank financing but instead it facilitated banks and financial institutions to make well informed decisions on their credit applications. The financial institutions were also shown to charge lower loan interest rates to companies following accrual based accounting than those with limited financial reporting (Allee and Yohn 2009). These studies recognised the significance of information, especially financial information in ascertaining SMEs' ability to access debt finance.

Previous studies showed a significantly positive relationship between financial leverage and the level of voluntary information disclosure. Jensen and Meckling (1976) were the first to report that financial statements enabled market agents to make informed economic decisions as well as reduced information asymmetry for lenders when assessing firm risk. Kira and He

(2012) reported that larger corporations with better information quality and reliable financial statements found it easier to access debt finance than SMEs. Financial statements is the chief source of a company's financial information which forms that basis of third party decisions such as suppliers, investors and financial institutions (lenders) (Calabrò et al., 2022)

Another reason for asymmetric information being more pronounced in SMEs is the fact that unlisted firms are not required to disclose personal information regarding their businesses to the public including prospective stakeholders such as clients, stockholders, lenders or regulators. This results in the absence of transparency which diminishes the credibility of SMEs in the eyes of their stakeholders, including creditors, thus limiting their access to formal credit which affects their growth. (Vos et al., 2007). This further leads to agency problems, in particular, issues with principal-agent relationship (Liu et al., 2022)

The theory of information asymmetry is crucial in understanding financial constraints faced by SMEs in relation to financial institutions. The acute deterrent of SMEs in relation to credit is high levels of information obscurity as compared to large enterprises, as well as lack of publicly available information on which market agents can base their decisions. SMEs face information asymmetry due to existence of relaxed financial structures, which results into restricted view on financial operations and firm performance. This acts as a limiting factor for financial institutions when reviewing credit and borrowing requests by SMEs (Berger and Udell, 2006, Drever et al., 2007, Liu, Margaritis and Tourani-Rad 2011). As a result, SMEs are categorised by relatively low levels of credit accountability, inadequate accounting records and poor information disclosure. This raises the issue of adverse selection, as financial institutions might not be equipped with proper techniques to measure the either the capabilities of SME entrepreneurs or the quality of their ventures (Motta and Sharma, 2020).

The existence of information asymmetries within SMEs made it difficult and costly for financial institutions to gauge the creditworthiness of these firms, which led to credit rationing where the banks omit SME firms from their credit portfolio.

2.2.2 Theory of Credit Rationing

The study of credit rationing was introduced by Jaffee and Modigliani (1969), Jaffee and Russell (1976) and followed by Stiglitz and Weiss (1981), in which they had identified information asymmetry as the root cause of creating a probability for adverse selection between borrower and lender. As a result, lenders ration credit which leads to certain firms unable to access external finance at any cost (Levenson and Willard, 2000, Ndjeck and Anita, 2022). This forces them to search for informal funding alternatives usually short-term business needs (Ndjeck and Anita, 2022).

Jaffee and Modigliani (1969) define credit rationing as an occurrence when the demand for commercial finance exceeds the supply of this type of credit at the interest rate cited by financial institutions. Therefore, credit rationing is the excess demand for commercial credit at the commercial interest rate that is prevalent at that point in time. In their paper they identify two types of credit rationing the first one is equilibrium rationing which is described as credit rationing which emerges when interest rate is set for a long-term basis. The second type is dynamic rationing which occurs in the short-run when interest rate is not completely set at a long-run optimum stage.

Baltensperger (1978) provide similar definition of credit rationing where demand for credit exceeds its supply at the prevalent interest rate and that credit rationing be a temporary (i.e. disequilibrium) or permanent (i.e. equilibrium) form of rationing. The current literature pertaining to credit rationing primarily pertains to equilibrium rationing where price of credit constantly remains at a given level which suggests that surplus demand over supply can be in accordance with the lender’s rational attitude. He also points out a widely studied branch of literature pertaining to credit rationing that defines it as an occurrence where potential borrowers are ‘rationed out’ of the credit market by raising the ‘non-interest’ cost of credit, that is, factors other than the cited interest rate. He further states that the older literature on credit rationing have either provided an ambiguous definition on the subject or have given a broader definition as the one mentioned above, and this is clearly the type of credit rationing that is supported by a more recent study provided by Jaffee and Modigliani (1969).

Credit rationing for more than half a century has been the topic of theoretical debate as its presence is possibly the result of either the imperfections prevailing in the credit market or information asymmetries which has been examined in detail by researchers in financial economics (Cenni et al., 2015). The theory of credit rationing has been the focus of a substantial amount of research for a long period which studies the conundrum in a competitive market where banks downright refuse to add certain firms in their credit portfolio rather than appreciate the cost of credit, which is the rate of interest, even though there is a substantial demand for formal credit (Fairlie and Robb 2007, Fraser 2009, Levenson and Willard 2000). Credit rationing can be distinguished between two types, borrower and loan-size rationing. In the first type which is borrower rationing certain firms although being creditworthy, may end up being financially excluded but cannot be distinguished from those who do receive finance. The second type which is loan-size rationing, the borrower may receive a loan on the prevailing rate of interest but the loan amount finally received may not be as big as requested (Galema, 2020)

Stiglitz and Weiss (1981) created a credit rationing model in which among certain borrowers belonging to the same category some are able to access bank credit and others are not. These borrowers are unable to obtain credit even if they show their willingness as well as their ability to receive funds at a higher cost (interest rate) than that prevalent in the market or provide more collateral to secure the required finance. Appreciation in rate of interest of collateral requirement in turn makes banks more vulnerable to credit risk as this discourages borrowers who are risk averse and encourages borrowers to undertake risker ventures which in turn deteriorates the profitability of the financial institutions. Therefore, such instruments cannot be used to tally the supply of credit with the demand for credit.

Freel (2007) has identified two types of credit rationing, 'Type I' credit rationing in which the amount of loan received by firms is far less than their actual requirements at a certain rate of interest. The other is the 'Type II' credit rationing follows the classical definition in which certain firms are denied external finance even though they are willing to pay more interest to banks or lacking any distinguishable quality when compared with those who succeed in obtaining credit.

Much of the literature pertaining to credit rationing is based upon the role played by information in bank and firm relationship (Berger and Udell 1998, Petersen and Rajan 1994, Galema, 2020). Asymmetric information within SME firms results in adverse selection and moral hazard which results in banks curbing the supply of capital below the social optimum (Meza and Southey 1996, Stiglitz and Weiss 1981, Freel et al 2012, Molina-García et al., 2022).

Credit Rationing and SMEs

Nguyen et al., (2022) identify credit rationing to be the most severe type of financial restraints, which occurs owing to asymmetric information, financial institutions refuse to include SMEs in their lending portfolio even though they are willing to pay the additional interest rate. Harrison et al., (2022), further the state that SMEs suffer from higher information asymmetries as compared to large companies leading to greater uncertainty in assessing the creditworthiness of SME firms. The creation and development of SMEs depends largely upon their ability to gain access to external resources specifically finance. To address the issue of financial constraints faced by SMEs worldwide, governments take certain initiatives to improve the supply of funds such as loan guarantee schemes and seed capital funds (Levenson and Willard 2000). When considering bank credit as it is the most familiar means of procuring external finance for SMEs the primary concern is the extent to which SMEs suffer from credit constrained or in specific terms credit rationed. In simple terms a firm may be credit retrained even if they are deemed creditworthy are still unable to obtain bank credit at any available cost (Stiglitz and Weiss 1981). SMEs are referred to as informationally opaque which in their case makes the issue of credit rationing even more acute. Usually, SMEs approach banks with ventures that are difficult to assess and supervise and are often owned by entrepreneurs with no credit history and insufficient collateral. To overcome this situation, banks control the issues arising from adverse selection and moral hazard by excluding these borrowers from its loan portfolio at all costs. (Freel et al., 2012, Galema, 2020).

Information is a vital component of the financial infrastructure as it supports in alleviating to key challenges present in the financial markets which are adverse selection and moral hazard (Pagano and Jappelli 1993, Padilla and Pagano 2000, Molina-García et al., 2022). Knowledge concerning the creditworthiness of the borrowing firm is very important and incorrect or restricted information here can pose as a hurdle for firms against access to bank finance (Petersen and Rajan 1994, Mason and Stark 2004, Berger and Frame 2007). In order to improve access to bank loans among SMEs it is vital that they improve their credit information channel to eliminate information asymmetries (Fraser et al., 2015), Love which would in turn reduce credit rationing for borrowers as sharing of information sharing makes lending more secure for financial institutions (Mc Namara et al., 2020).

Firms approaching banks for finance are generally in their infancy or are taking up ventures that are hard for banks to assess and screen or provide insufficient collateral to cover the loan. To avoid the problems arisen from adverse selection and moral hazard lenders end up rationing credit (Levenson and Willard, 2000, Cowling and Dvoulety, 2022). The amount of funds generated by a firm internally to fund its projects depends upon its size as the availability of this capital would be restricted in case of smaller firms as compared to larger businesses (Canepa and Stoneman, 2002). When faced with the availability of such restricted funds firms either approach outside sources for finance or end up abandoning their projects. (Freel, 2007). Yu and Fu (2021) further examined that credit rationing hinders productivity of firms.

At any given point in time SMEs generally have a lower credit ceiling all other factors remining the same and this outcome supports the general dispute that asymmetric information with possible lenders may is likely to affect SMEs comparatively strongly than large companies. (Diamond and Verrecchia, 1991, Ozkan and Ozkan, 2004, Bigelli and Sanchez-Vidal, 2012, Yu and Fu, 2021). Another point of view is that there is a positive association between the size of the firm and their risk of default as SMEs face a greater risk of default than large companies. SMEs' demand for credit from financial institutions is dependent upon the rate of interest charged on that finance along with their specific credit requirements, that is, is they require long-term finance to cater to ventures concerning capital finance or do they require short term loans to fulfil their working capital needs SMEs have a comparatively higher requirement of bank finance than large firms and therefore they have a greater reliance on external finance than large companies which goes in line with the fact that higher availability of internally generated cashflows reduces the demand for bank credit. Thus, in case of SME finance the pecking order theory cannot be ignored (Kremp and Sevestre, 2013).

Mc Namara et al., (2020) in their study have used a sample comprising of 13,957 SMEs situated in eleven countries in Europe, have identified that the probability of SME's being credit rationed is lesser for those located in countries enjoying competent judicial systems, more sympathetic bankruptcy systems and promoting trust. They also support the literature which states that credit rationing is generally the outcome of imperfections prevalent in the credit market along with the presence of asymmetric information. However, they add that such type of rationing is found amongst SMEs as they are by and large informationally opaque (Berger and Udell 2006). SMEs based in European particularly experienced a crisis when they underwent a reduction of 35% in fresh bank loans between 2008 and 2013 and this situation was further deteriorated by their strong reliance on bank credit (Freel et al., 2012, Popov and Udell 2012, Kelly, O'Brien, and Stuart 2015).

There are different forms of credit rationing such as weak rationing in which the borrower receives only part of the credit that has been requested (Cieply and Dejardin 2010; Drakos and Giannakopoulos 2018) and other form is strong rationing, where borrower is refused loan altogether (Cenni et al. 2015, Demoussis et al., 2017). A borrower can also be credit rationed if the terms of finance are unfavourable after being approved credit, such as high interest rate charged on the approved finance (Kysucky, 2015, Mc Namara et al., 2020).

A strong infrastructure supporting financial transactions has an impact on the availability of finance, particularly for SMEs (Beck and Demirgüc-Kunt, 2006). Berger and Udell (2006) found that there is a link between government structure, policies and their infrastructure relating to finance which in turn affects the availability of loans to SMEs. The constitution of financial institutions with respect to their size, ownership and market influence affects the type of lending technologies that they choose to employ namely asset-based lending, capital finance, relationship lending, lease finance and trade credit (Mc Namara et al., 2020). Firms whether large or young face a lesser chance of being credit rationed if they improve transfer of credit information among one another (Mc Namara et al., 2020).

Simply put, the basic method of credit rationing the firms may be when despite their creditworthiness they fail to procure credit at any given price (Stiglitz and Weiss 1981). Freel et al., (2012) supported the theory which states that firms suffer from the presence of asymmetric information which makes rationing of commercial credit a dire issue for SME firms. They explained that frequently, SME firms undertake ventures which are difficult for financial institutions to screen and access and are often led by small businessmen with limited credit histories and inadequate collateral, which gives rise to the problems pertaining to adverse selection and moral hazard making financial institutions resort to credit rationing on grounds other than price. They further stated that in conventional terms the idea of credit rationing has been limited to those to approach financial institutions for credit and specifically those who are then refused finance. However, they added that that if the works of Levenson and Willard (2000) and Kon and Storey (2003) are followed another set of borrowers can be identified who are referred to as 'discouraged borrowers' under the theory of discouraged borrowers and they are basically creditworthy firms who refuse to approach financial institutions by choice for fear of being rejected (self-induced credit rationing).

The Theory of Information Asymmetry and The Theory of Credit Rationing are extremely important, particularly within the SME structure became an impetus to a number to studies and some of them are discussed in this chapter, the first one is the Network Theory which has a direct link to one of the most pressing problems faced by SMEs in Pakistan with regards to accessing bank credit which is discussed at length in Chapter 4.

2.2.3 Network Theory

When firms suffer from credit rationing posed by financial institutions to avoid the issues of adverse selection and moral hazard, thus forcing them to use their internal financial channels for investment (Yu and Fu, 2021). One of the main channels generally utilised by SMEs are their social and business networks and a number of researchers have confirmed networking to be a beneficial field in entrepreneurial studies. (Birely, 1985, Zimmer, 1986, Starr and MacMillian, 1990, Aldrich and Dubini, 1991, Larson, 1992, Johannisson, 1987, Johannisson and Senneseth, 1993, Havnes and Senneseth, 2001, Goxe et al 2022). The focal point of these studies has been to explain, label and categorise network characteristics for instance network types and their forte and structure (Havnes and Senneseth, 2001). The network offering finance facilities to SMEs assist them from the supply side of accessing necessary funds thus lowering transaction costs which is why the importance of these networks is more in the informal credit sector than the formal side.

Vu and Le (2022) define the structure of network as a set of ties which have emerged from either immediate or extended relationships among parties and research suggests that SMEs with more active networks have greater reliance on informal credit. Hoang and Antoncic (2003) have identified components of network which are critical to research: 1) The manner of information traded between its members 2) Administrative procedures exercised among such ties 3) Networks formed by crosscutting ties between its members. The above three constituents are the key factors used in describing the procedures involved in network progression and the consequences of networks on business performance. Network ties benefit entrepreneurs in accessing knowledge, advice and emotional support.

Entrepreneurs rely on networks not just during their start-up stage but continue to do so later on as a means of receiving news about business, guidance, finding solution to challenges through more than one source (Johannisson et al., 1994, Hoang and Antoncic, 2003). Relationship among suppliers, competitors, distributors and customers can result in exchange of information (Hoang and Antoncic, 2003, Klyver and Arenius, 2022).

Trust is identified as a critical element benefiting network governance which stands on the belief concerning the reliability of its members on one another regarding satisfaction of commitment and such conviction grants the members involved in the exchange to believe in the assumption that the outcome would be foreseeable and mutually acceptable (Uzzi, 1997, Das and Teng, 1998). Such properties in network administration can generate cost effectiveness as opposed to market coordination, confirmed by various scholars (Thorelli, 1986, Jarillo, 1988, Starr and Macmillan, 1990, Lipparini and Lorenzoni, 1993, Jones et al., 1997, Klyver and Arenius, 2022). This helps in minimizing transaction costs such as monitoring and renegotiating expenses incurred specifically in projects involving strict limitation in time. (Jones et al., 1997, Hoang and Antoncic. 2003).

Kheyrkhah et al., (2016) discuss networks in financial markets are believed to be intricate owing to the relationship between investors, organisations and other prominent stakeholders such as banks and financial institutions. Naude et al., (2014) support the definition of network structure provided by Burt (1995) and Wang and Fang (2012) as an establishment involving several facets consisting of 'structural holes and centrality'. Here our focus is on a structural hole which according to Naude et al., (2014) and Zhang (2022) is explained as a gap in the connection between links both of whom are associated with a player. In a network a structural hole between two groups of players does not imply that these two groups are oblivious of one another but that their attention is more on their own operations. This results in each group of players gaining access to similar information which may lead to redundancy, more importantly the businessman acting as a broker of information wields immense power enough to control and exploit other players (Naude et al., 2014). Structural holes exist in a network when the key actor is attached to those who are personally not connected to that network which creates the need for brokerage a prime feature of network structure making available efficient and useful information and resources (Zaheer and Soda, 2009, Zhang, 2022).

Structural holes have gained substantial attention for they are considered as a kind of social capital (Adler and Kwon, 2002, Zhang, 2022) and therefore provides a precursor regarding the consequences of a social structure to individuals, groups and establishments. Two basic reasons can be derived for the creation of such social structures, one is the availability of opportunities in previous networks which may influence the actor to form such structures in future and second are the restrictions imposed by previous networks (Sewell, 1992, White, 1992, Zhang, 2022). Zaheer and Soda (2009) discuss network opportunities and restraints by describing concept of the duality of network structure. In other words, the actors may tend to exploit the opportunities made available by networks in some future time period such as actors who are goal oriented may establish or dissolve network ties according to their strategic choice. Moreover, focal actors may use opportunities presented by previous networks to form future ties leading the focal actors to receive a disproportionate share of future network links and this network evolution is referred to as accumulative advantage. For instance, the evolution of network ties in future may strengthen the brokerage position of leading actors over time. Furthermore, instead of exploiting opportunities, the actors involved in a network may follow a certain set of network interactions which might over time establish social structures through customs, regulations and social pressures.

Zaheer and Soda (2009) argue that the actor involved in bridging the gap created by structural holes previously may end up exploiting prospects of gaining brokerage and control advantages through maintenance of asymmetric information associated with the position. Even though the holes related to a particular structure may disappear over time, yet the core members of the network may recreate the holes in the network's present social structure.

Networks and SMEs

Many researchers have recognised the significance of networks within SMEs as it provides grounds to obtain access to external reserves (Cova et al., 1994, Tikkanen, 1998, Waluszewski, 2006, Partanen et al., 2008, Naude et al., 2014, Van Burg et al., 2022). Partanen et al., 2008 stress upon the importance of networks which play a crucial role regarding the survival of SMEs for they require the resources essential for developing new knowledge without which they might otherwise suffer. Therefore, several studies suggest that SMEs can transform and prosper through the maintenance of a network. (Westerlund and Svahn, 2008, Cantù et al., 2010, Naude et al., 2014, Hilmersson and Hilmersson, 2021). Networking system in clusters plays a vital role for exchange of information, gathering knowledge and resources or having a competitive edge (Khan et al., 2022)

Vos et al (2007) later supported by Van Burg et al., (2022) declare that social ties as confirmed by previous research is essential for SMEs to expand their existing fund source. They explain that creditors usually extend financial support to SMEs if they have history of previous transactions with them. During infancy most SMEs depend upon their internal funds source and then receive network support in obtaining informal loans at a relatively lower interest rate which provide a motivation for SME owners to share private and public information such as market price or information related to credit. They further confirm that social networks improve the competitive advantage of SMEs by providing the required knowledge and overall becoming principal incentive in the creation of capital markets.

Sullivan and Marvel (2011) emphasised the importance of knowledge especially during a firm's period of infancy when it plays a crucial role in its establishment. They further explained that attainment of substantial knowledge during this period helps in overcoming the challenges in operations faced during start-up stage thus enhancing the firm's resource acquisition and project development. They believe that network ties within firms reap favourable results such as attaining advantages pertaining to knowledge and technology, tapping exiting prospects and enjoying rewards related to accomplishments.

Lin and Lin (2016) identify five characteristics of network ties which are 'sharing knowledge, accelerating innovation, reducing transaction costs, gaining a better reputation, and creating new market opportunities.' SMEs have a limited capacity concerning their understanding and gaining information and skills which is immensely improved through the presence of a network. Network relationships enhance the ability of SME entrepreneurs in obtaining knowledge and proficiencies through 'sharing knowledge', which otherwise the SMEs would lack, thus improving the growth and performance of SMEs. Network ties 'accelerate innovation' within SMEs by providing access to outside sources thus hastening the process of innovation. Network associations lead to mutual trust among collaborating firms which in turn results in 'reduced transaction costs.'

Accelerating innovation: Networks in the field of research and development has shown a favourable effect on the performance of SMEs with respect to innovation. (Zeng et al., 2010, Teirlinck and Spithoven 2013, Lin and Lin, 2016). Although SMEs lack of ability to access resources available externally is overcome by their efficient utilisation of their networks and generally it is not possible for SMEs, with their existing resources, to manage the entire innovation procedure on their own and this where the collaboration of networks come in (Lin and Lin, 2016). Research in this field reveal that the partnership with networks does increase the process of innovation. (Lin and Lin, 2016, Van Burg et al., 2022).

Reducing transaction costs: Research in the area of SME networks show that SMEs benefit collaborating with their networks in terms of diminished transaction costs due to improved efficiency in their supply-chain (Teirlinck and Spithoven, 2013, Lin and Lin 2016). Trust plays an important role in SME-network relationships which help reduce transaction costs and both parties work to the promote each other (Lin and Lin 2016, Van Burg et al., 2022).

Gaining a better reputation: Networks assist SMEs in building a favourable reputation as their cooperation results in meeting the demands of their clients such as the trust on suppliers able to fulfil a large volume of orders (Lin and Lin 2016).

Creating new market opportunities: SME-network relationship also helps in identifying new opportunities within the market both local as well as internationally (Narula, 2004, Lin and Lin 2016). Networks play an important role in market selection and entry mode for SMEs (Lin and Lin 2016) by enabling them to face the challenges and risks associated with them. Networks participate towards the success of SMEs by supporting them in recognising new opportunities in the market and providing knowledge pertaining to the market (Lin and Lin 2016, Van Burg et al., 2022).

Developing and maintaining a strong network association is vital in improving the performance of SMEs who continue to seek methods to survive, expand, and compete. In the era of globalisation, it is critical for SMEs to have network ties who facilitate in procuring information and technology (Lin and Lin 2016). Valkokari and Helander (2007) confirm this argument by adding that knowledge is focussed among a few significant influencers that makes the network more explicit for in most cases the managing director, owner and shareholder of SMEs is the same person.

SMEs greatly benefit from network relationships has they are able to gain access to knowledge and resources necessary, which they otherwise lack, in order to keep pace with the rapid environmental change (this includes technological advancement and innovation) and remain competitive. In other words, SMEs are able to take advantage of the economies of scale without being a large-scaled (Watson, 2007, Schoonjans et al., 2013).

2.2.4 Theory of Discouraged Borrowers

Discouragement among prospective borrowers regarding bank credit is substantially prevalent in the financial markets (Levenson and Willard, 2000, Cavalluzzo et al., 2002, Kon and Storey, 2003, Chakravarty and Yilmazer, 2009, Freel et al., 2012, Chakravarty and

Xiang, 2013, Rostamkalaei et al., 2020, Anastasiou et al, 2022). Older studies on financially constrained firms and credit rationing have overlooked discouraged borrowers (Stiglitz and Weiss, 1981, Cox and Jappelli, 1993, Duca and Rosenthal, 1993), however, in recent times, the subject on borrower discouragement is given considerable focus for the number of discouraged borrowers is significantly greater than those who are denied credit. (Levenson and Willard, 2000, Brown et al., 2011, Popov and Udell, 2012, Beck et al., 2018, Wernli and Dietrich, 2022).

Kon and Storey (2003) based on the theory of credit rationing developed a theory which explicitly explained the presence of discouraged borrowers. The basis of this theory is similar to the theory of credit rationing which is information opacity. Building upon the basic adverse selection model, the theory of discouraged borrowers advocates that a firm would only apply for credit if the retune on the venture invested, despite its quality, would supersede the cost of borrowing. The two prominent costs associated with formal borrowing are the cost of application, in monetary terms, and the cost of screening error where banks may mistake a good firm as being bad or vice versa and both these costs are the result of the existence of asymmetric information. Transparency in the distribution of information helps alleviate screening error and is further enhanced by either the use of formal credit (Cole and Sokolyk 2016, Han et al., 2009, Petersen and Rajan 2002) or establishment of an improved bank and firm relationships (Berger and Udell 1998, Petersen and Rajan 1994). Both techniques can help expand the accessibility of information which in turn would reduce the cost of application. (Cowling et al., 2016).

The theory of discouraged borrowers was first introduced by Kon and Storey (2003) who identified a group of borrowers who although being creditworthy refuse to approach financial institutions for a loan owing to fear of being rejected. Chakravarty and Xiang (2013) following the definitions of both Chakravarty and Yilmazer (2009) and Han et al., (2009), define discouraged borrowers as business owners who even though require finance and yet choose not to apply for formal credit as the procedure for procuring bank finance if too complicated, the price of obtaining a loan is too steep (interest rate) and there is corruption involved in the process pf loan procurement.

Ferrando and Mulier (2022) state the examples of studies conducted by Levenson and Willard (2000) and Freel et al., (2012) which reveal that borrowers who feel discouraged are twice as many as those that are denied credit by financial institutions in the US and the UK, respectively. They further state that similar is the case with the euro zone as identified by the European Central Bank in 2016 where the firms that applied for a loan 2.5% were refused whereas 6% did not apply due to discouragement. They have also measured that around 40% of discouraged borrowers hold a reasonable chance of securing a loan approval and 40% have a substantial probability of obtaining credit approval, which is quite significant. The estimates of discouraged borrower, quantified as a portion of the total small business share, range from 8.1 % in the UK (Freel et al., 2012), 22.3 % in France (Cieply and Dejardin 2010), 8.75–14.04 % in the USA (Cole and Sokolyk, 2016, Han et al. 2009), to 44.36 % in Pakistan (Chakravarty and Xiang 2013, Cowling et al., 2016).

Discouraged Borrowers and SMEs

Kon and Storey (2003) discovered that the number of small firms that were discouraged was twice as many as those that were rejected by financial institutions confirming that discouragement plays a more significant role amongst small firms than credit restrictions.

This is a widely known fact that the contribution of SMEs is disproportionate towards economic success specifically through the performance of new ventures and for that external finance is crucial for this development (Beck and Demirguc-Kunt 2006, Shane 2009, Wiklund and Shepherd 2003, Anastasiou et al., 2022) as when the internal sources of funds are used up then the SMEs usually turn towards banks for credit (Cosh et al 2009; Robb and Robinson 2014). Although it is relatively easy to obtain the approval of banks for most credit applications (Vos et al., 2007, Freel et al., 2012, Cole and Sokolyk, 2016), yet for SMEs access to external financial funds is often difficult especially when dealing with young ventures (Berger and Frame 2007, Cosh et al., 2009, Petersen and Rajan 1994, Robb and Robinson, 2014). In case of SME entrepreneurs, the decision to borrow formal credit involves some uncertainty regarding the outcome of their loan applications which can be either be financial or psychological (Kon and Storey 2003). This cost-benefit analysis for some SME entrepreneurs may result in the idea of approaching banks for credit rather unreasonable. Such entrepreneurs are referred to as "discouraged borrowers", who are businessmen in need of external finance but who do not approach banks for credit for fear of refusal mainly based on their self-analysis and these owners face similar outcome as those with credit rationing, thus compromising the viability and growth potential of their firms (Rostamkalaei et al., 2020).

Han et al (2009) have provided three reasons why the topic of discouraged borrowers holds significance in present research. First, the number of small firms which are discouraged is far greater than those that have been refused credit. Second, discouragement is likely to vary demographically for instance in the US, discouragement may be witnessed amongst ethnic minority groups. Third, the level of discouragement measures the efficacy of financial institutions regarding application expense and assessing oversights.

The presence of discouraged borrowers might be a global phenomenon, yet the problem is more acute in developing world which faces corruption and feeble contract enforcement rights, thus resulting in firm owners not having much confidence over their country's financial system as they believe that the price incurred on undertaking a corrupted loan application procedure would overshadow the advantages of procuring one (Qi and Nguyen, 2021). SMEs in the developing economies suffer from inaccessibility of formal credit due to the difficulties in conveying their creditworthiness to lending institutions. This situation is further deteriorated by the presence of corruption due to which SMEs refuse to approach financial institutions for credit to counter fear of refusal (Qi and Nguyen, 2021).

Han et al., (2009) and Naegels et al., (2022) confirm information asymmetry to be one of the chief causes of discouragement amongst small borrowers. They include the prediction of Kon and Storey (2003) regarding credit application charges, oversights incurred during screening process due to asymmetric information and rate of interest being the most likely reasons for to existence of discouraged borrowers. They stressed upon the problems arising due to presence of imperfect information to be the root cause of financing SMEs as compared with large firms because small businesses are generally informationally opaque which makes information gathering more expensive. Moreover, they argue that because banks, although they support good borrowers and dissuade bad ones, are usually unaware of the borrower type which means whether or not an applicant is creditworthy, the presence of imperfect information cultivates discouragement amongst good borrowers. Lack of transparency arising from informationally opaque SMEs is a substantial cause of concern for lenders. This situation is further deteriorated by the fact that discouraged borrowers generally go unobserved. Firms that are informally opaque are more firms are more liable to face discouragement due to their apprehension regarding possible screening errors that may incur by financial institutions (Qi and Nguyen, 2021).

The propensity to approach banks for credit for SME firms is similar in Eastern and Western Europe for most SMEs there too are financially opaque which makes them less likely to apply for a loan while firms such as exporting firms with a greater need for finance would most likely approach banks for finance. (Brown et al., 2011).

Chakravarty and Xiang (2013) investigate in detail the reason why borrowers are discouraged. They believe that a borrower’s decision to apply for finance is mainly influenced by two factors, the value of their credit limit and its variability. Generally discouraged borrowers refuse to pursue seeking formal credit for fear of facing either a high price of procuring finance or they expect to receive considerably lower credit limits. Although these firms are in need of finance, yet they opt out of approaching banks for credit.

Age and size of the firm are two distinct characteristics of the firm, age being the number of years a firm has been established for and size being amount of human resource employed in that firm. Usually, the relationship between banks and small firms is shorter than those with older and larger firms and therefore their channels for obtaining credit are also very few. (Chakravarty and Xiang, 2013). Chakravarty and Xiang (2008) also identify that discouraged borrowers situated in in less developed countries have fewer bank relationships.

Discouraged borrowers are also included when investigating the influence of the link between the decision of the borrower to apply for finance, whether or not the financial institution would approve the loan and what would be the rate of interest on which the borrower would receive the loan. It has been reported that ties between business owners and banks raise the chances of firms in obtaining formal credit. This analysis is based on SMEs in the United States. (Chakravarty and Yilmazer, 2009, Chakravarty and Xiang, 2013).

Kon and Storey (2003) have specified that although being credit worthy there are firms that choose not to apply for a loan due to the steep price of the cost of application. The cost of application here is referred to the amount incurred on preparation of financial statements, financial forecasting, and establishing business plans, which specially for firms in their infancy is not a trivial investment (Cowling et al., 2016).

Owing to the presence of information asymmetries it is very difficult for banks to accurately assess the probable returns in ventures undertaken by SMEs who have more knowledge regarding the success of the venture (Berger and Udell, 1998, Hall and Lerner, 2010). This information opacity is a defining feature when establishing borrower discouragement (Kon and Storey, 2003) and SMEs owning intangible assets suffer more acutely due to the presence of information asymmetries (Mina et al., 2013). As a result, many firms resort to venture capitalists and business angels to fund their projects as they address the issue of information opacity thorough acquiring soft information before extending finance and monitoring the performance after extending credit. (Liberti and Petersen, 2019, Brown et al., 2022).

In numerical terms discouragement faced by SME borrowers lies between 1 and 45%, in comparison with most developed countries, where borrower discouragement among SMEs varies between 10 and 20% (Cowling et al., 2016, Freel et al., 2012, Mac an Bhaird et al., 2016). For instance, 6.5% of SMEs from various countries in the EU comprise of discouraged borrowers and the occurrence of borrower discouragement is more acute in the developing economies (Chakravarty and Xiang, 2013) and Freel et al., (2012) have identified that in UK circa 8% of SMEs constitute discouraged borrowers, whereas Cowling et al., (2016) recognise the prevalence of discouraged borrowers to be 2.7% and 2.1%, respectively (Brown et al., 2022).

Various studies in this field have recognised that in general the probability of SMEs being discouraged is greater if they are either comparatively small or are in their infancy (Han et al., 2009; Freel et al., 2012; Chakravarty and Xiang 2013; Cowling et al., 2016; Mac an Bhaird et al., 2016; Brown et al., 2022). This is because firms who are in their infancy lack experience in the loan market which may induce them to self-ration (Calabrese et al., 2020). Thus, it can be theoretically established that the discouragement faced by smallest and most informationally asymmetric SMEs is far more acute (Berger and Udell, 1998; Cowling et al., 2016, Brown et al., 2022).

The study of agency theory explains how the issue of information asymmetry between SME borrowers and banks impacts SMEs' financing options.

2.2.5 Agency Theory

Agency theory as defined by Jensen and Meckling (1976) is a relationship between principal and agent where the principal appoints the agent to carry out certain activities on their behalf by assigning the authority to the agent to make several decisions. To ensure that the agent makes optimal decisions from the point of view of the principal and are not detrimental to him in any way, the principal would have to incur bonding costs to the agent. However, even after involvement of positive monitoring and bonding costs paid by the principal there would still be some deviation between the decisions taken by the agent and those that provide ideal benefit to the principal. In financial terms, the cost borne by agency relationship with respect to the loss incurred by the principal due to this discrepancy is called 'residual loss'. Agency costs are defined as the sum of monitoring expenses borne by the principal, bonding costs paid by the agent and residual loss.

The origins of this theory can be traced back to the 1960s and early 1970s when the economists explored sharing of risk among individuals and groups and identified a problem arising from risk-sharing which is the disparity in the mindset of the involved parties towards risk. Building upon this risk-sharing literature, agency theory discusses the problem that arises when the involves parties bear dissimilar objectives and specialisation of labour (Jensen and Meckling, 1976). Agency theory basically revolves around agency relationship, where one party referred to as 'the principal' assigns a task to the other called 'the agent' who carries out the work (Eisenhardt, 1989, Ma et al., 2022). The basis of agency theory as identified by Eisenhardt (1989) in her three papers is to resolve the two prominent issues that arise from agency relationships, the first one is the conflict between principal and agent regarding due to varying objectives and second is that it is hard as well as costly to monitor the activities of the agent, to ensure that the agent is behaving properly and this problem generally occurs due to the disparity among principal and agent regarding risk preferences.

Agency theory is based on the assumption that the shareholdings of the owners of the firm are diversified which makes them neutral with respect to their preferences towards risk as opposed to the managers of the firm who are generally risk averse due to their personal stake in the firm such as their income and employment security (Donaldson 1961). The disparity in the attitude towards risk is the root cause of the conflict of interests between managers and owners of the firm and the study focusing on principal-agent relationships is basically concerned about this theory being applied on agency relationships such as employer and employee, buyer and supplier (Eisenhardt 1989, Shukla et al., 2022).

The central idea of the agency theory is based on the hypothesis that a discrepancy does develop between the views of principals and their agents (Shukla et al., 2022). This deviation, which might result in opportunistic behaviour by the agent, is restricted by the principal by providing certain inducements to the agent and also employing resources to monitor them. Moreover, the agent would incur bonding costs which would ensure the principal that the agent would not behave in a manner that might be damaging to the principal. (Hill and Jones, 1992)

Agency theory is used to identify the optimal way in organising relationships where one party which is the principal determines the task and the other party which is the agent carries out the task at hand (Eisenhardt, 1989, Shane, 1998). Owing to the presence of information opacity and uncertainty which is a feature of most business establishments, this gives rise to three agency issues which are moral hazard, adverse selection and holdup (Liu et al., 2022). The problem of moral hazard occurs when there is an uncertainty between the principal and the agent as to whether or not the agent is putting in his optimal effort in carrying out the task at hand. The issue of adverse selection arises in instances when the principal is unable to verify the qualifications of the agent involved. A holdup is an occurrence when one party tries to renegotiate a contract after other parties have already invested in that particular relationship (Mole 2002, Shukla et al., 2022).

The theory states that a breakdown in agency relationship between principal and agent stems from a conflict of interest in regard to the company's financial operation (Healy and Palepu, 2001, Sogorb-Mira, 2005). This conflict of interest escalates when the agent (manager) of the firm, who has been tasked to maximize the value of the firm on behalf of the shareholders, accepts risky projects which jeopardises the financial health of the firm and therefore risks shareholder wealth. Therefore, the agency cost is borne out of the conflict of interest between managers and shareholders pertaining to the business strategies that would increase the value of the firm whilst increasing the firm's exposure to risk. One of the chief assumptions of agency theory people are generally rational and that the information distributed within an establishment is usually asymmetric (Eisenhardt, 1989).

Agency theory examines the relationship between the owners of the firm (principal) and managers of the firm, responsible for the day-to-day running of the business (agent) (Jensen and Meckling, 1976). The theory states that principal and agents have different interests and motivations pertaining to the firm's current and future performance. The traditional principal-agent struggle between shareholders and managers is usually less severe in SMEs since in most instance the principal and the agent are the same person (Cassar, 2004, Hutchinson, 1999).

Agency Theory and SMEs

The corporate governance tenants of agency cost and associated issues created by the concept of separation of ownership and control are typically not attributable to SMEs, however, given the exclusive firm structure of SME's exacerbated by the existence of information asymmetry gives rise to a unique form of agency cost between SME's and bank lenders (Binks and Ennew 1996, Caneghem and Campenhout, 2012). Caneghem and Campenhout (2012) examined this by demonstrating that SME's have access to relevant firm-specific information, which is not publicly shared, and as a result is not accessible to financial institutions. This deprivation of information gives rise to conflict of interest between the two. In this principal-agent relationship, which arises due to information asymmetry between SME and banks, the banks are deemed to be principals, while the SMEs are the agents (Lean and Tucker 2001, Liu et al., 2022).

Eisenhardt (1989) has identified two problems that occur in agency associations. The first one is caused by the dispute occurring from the disparity in the interests of the principal and agent and the complications faced by the principal when monitoring the actual activities of the agent. The second being the difference of opinion regarding risk preference which would result in a conflict between the principal and the agent regarding how to counter the risk.

The exceptional principal-agent problem in SMEs is stretched to the complications of adverse selection, moral hazard and credit rationing (Irwin and Scott, 2010, Galema, 2020). In this scenario, the agency theory examines the conflict of interest between financial institutions, SMEs and the associated agency cost. This agency cost comprises of monitoring costs suffered by the principal and the transaction cost borne by the agent. The case of credit rationing and adverse selection from the perspective of financial institutions is due to the SMEs' concealed information, while the cost of SME's concealed action is related to the problem of moral hazard (Boyce and Ville 2002, Takagi 2002, Uchida 2011). Healy and Palepu (2001) reported that smaller firms, categorised by low cash flows, low tangible assets and low growth rate, were more susceptible to adverse selection and credit rationing than larger firms across the same sector and industry.

The agency theory treats information as a commodity that holds a price and can be purchased. This implied that establishments could invest in information systems in order to limit agent opportunism. Moreover, the business world is marred by uncertainty where the future can partially be controlled against risks such as competition, environmental change or technological advancement. The agency theory views uncertainty as a trade-off between risk and reward instead of the organisation's failure to plan in advance. Uncertainty along with the difference of opinion on how to deal with risk should have an impact on agreement negotiated between the principal and agent (Eisenhardt, 1989).

The presence of information asymmetry creates uncertainty between principal and agent relationships raising two detrimental issues namely adverse selection and moral hazard. In order to minimise the occurrence of these issues the theory of credit rationing is employed which is discussed below.

Owing to the presence of information asymmetries SMEs are either credit rationed, face agency issues or refuse to approach financial institutions for credit. All these instances increase the SME's reliance on their own internally generated funds which includes another theory very closely associated with the SME mindset which is the Pecking Order Theory.

2.2.6 The Pecking Order Theory

Pecking Order theory is described as the preference of the firms to utilise internal sources of funds over external sources of finance due to the existence of adverse selection. (Myers, 1984, Frank and Goyal, 2003). According to Pecking Order theory external credit comprises of only a small portion of a company's capital with debt being the major portion of external finance. (Myers 2001, Frank and Goyal, 2003, Nguyen et al., 2022). The theory is based on the assumption that managers of the firm know more about the firm's activities than the market and in order to reduce the costs incurred on adverse selection firms use a hierarchical financing order by first utilising funds generated internally followed by debt and in the end, equity (Myers 1984, Fosu et al., 2016, Galadanchi and Abubakar, 2022).

Pecking Order theory assumes that a firm has three sources of funds which are retained earnings, debt, and equity. Retained earnings do not suffer from any adverse selection issue as compared to debt and equity where equity faces a grave adverse selection problem. In this case an investor would expect a greater rate of return on equity than debt. Therefore, a firm would initially try to finance all its operations through retained earnings and if not then it would turn towards debt financing and would try its best not to use equity finance (Frank and Goyal, 2003, De Jong et al., 2011).

Pecking Order and SMEs

Frank and Goyal (2003) argue that Pecking Order theory believes that firms with a high growth and hefty credit requirements would end up with a lofty proportion of debt due to the management's hesitancy to use equity finance. On the other hand, they also include Smith and Watts (1992) and Barclay et al. (2001) who provide an opposing argument believing that the ratio of debt in high-growth firms is relatively low. For SME's, pecking order theory posits that a firm should prefer internal finance (earnings) over external sources (debt financing) owing to ease of availability and access (Beck et al 2013, Berger and Udell 2006). Berger and Udell (2006) report that based on this, SME's capital structure is defined by this financing hierarchy, which is dominated by internal sources of funds. These internal sources of finance for SMEs primarily comprise of owner's personal finance, as well as finance from family/friends, whereas external financing sources usually comprise of short-term and long-term debt from financial institutions. Previous studies have found that SME's have lower financial leverage (determined as percentage of debt in a company's capital structure) due to increased use and access to internal funds before relying on alternative sources of funds, like debt (Cassar, 2004, Hall et al., 2004). In the context of pecking order theory, due to the existence of information asymmetry, SMEs encounter greater issues in accessing external sources of funds, thereby relying more on internally available funds (Beck 2013, Gregory et al., 2005, López-Gracia and Sogorb-Mira 2008, Nguyen, 2022).

The pecking order theory posits that the cost of financing increases with information asymmetry (Cosh and Hughes, 1993, López-Gracia and Sogorb-Mira, 2008, Galadanchi and Abubakar, 2022). Financing is raised through three key sources: internal funds, raising new equity and raising debt. In recent years, pecking order theory (POT) has been extensively employed to examine the financing behaviour of SMEs (Cosh and Hughes, 1994, López-Gracia and Sogorb-Mira, 2008). As noted previously, SMEs attitude to external finance is governed by existence of information asymmetry and associated agency costs related to financing sources. The pecking order theory is a by-product of Modigliani and Miller's (1958) seminal work on capital structure. Modigliani and Miller's (1958) work defines capital structure as a combination of sources of financing employed by companies, usually in the form of equity and debt. Donaldson (1962) and later Sunder and Myers (1999) used pecking order theory and Modigliani and Miller's (1958) theory on capital structure to provide academic evidence on SME's financing preferences, including access to external finance (Healy and Palepu, 2001, Nguyen, 2022). The pecking order theory highlights the following financing sourcing hierarchy owing to their ease of access and availability: firms should first prefer to use retained earnings, followed by debt financing, and finally raising new equity. However, Petersen and Rajan (2002) posited that SME's, due to their size, cannot comply with the pecking order theory financing hierarchy as they are not in a position to issue equity, thereby constricting their financing sources to external debt and earning.

Sánchez-Vidal and Martín-Ugedo (2005) state Pecking Order theory from the point of view of SMEs where sources of funds are limited to retained earnings and bank credit. This situation is aggravated by a restricted access to capital markets particularly in non-Anglo-Saxon countries resulting in a gap in finance. This gap in finance may be the result of two issues, one is the supply gap where SME firms face restricted access to credit and second is knowledge gap which refers to lack of awareness regarding different credit opportunities available in the market or how to utilise debt as a financing tool, leaving SMEs with only two possible options of generating additional funds that is retained earnings and bank credit. In conclusion SMEs follow the hierarchy similar to the one defined by Myers and Majluf (1984) in which they first utilise their retained earnings followed by debt which in this case is a bank loan and finally equity finance.

Molina-García (2022) and Xiang et al., (2014) noted that pecking order theory was established to manage the disruption caused by information asymmetry between SMEs and financial institutions. Similarly, Howorth (2001) suggested that SMEs do not rely on external financing, thereby creating an extreme form of pecking order theory, coined as a “constrained and limiting pecking order theory”. This SME financing preference has also been connected to restricted financing choices accessible to SMEs as opposed to large firms (Ebiringa, 2011, Petersen and Rajan, 2002). Acknowledging the existence of limiting pecking order theory, Ebiringa (2011) found that Australian SMEs in the manufacturing sector had only access to internal finance due to difficulty in availability of alternative external finance, especially debt. In similar vein, Okura (2008) noted that, notwithstanding China’s swift economic growth, SMEs tend to rely more on internal financing sources due to lack of access to external finance and relatively high intermediation costs.

Most SMEs are not inclined to approach for external capital owing to their motivation to maintain control over their firm (Curran, 1986, Jarvis, 2000, Vos et al., 2007). SMEs prefer internal debt over external finance which is the chief source of funds generation (Vos et al., 2007, Kwak, 2021). For SMEs internal funds refer to owner’s start-up capital, owner’s personal loans, and retained earnings and external funds are loans extended by financial institutions to finance their business activities (Vos et al., 2007).

As per Sunder and Myers (1999)'s examination of the pecking order theory, a company's debt is a component of its financing requirements, that is, its financial shortfall at any given time. Therefore, SMEs, due to the existence of information asymmetries, are faced with a relatively higher cost of adverse selection and credit rationing as opposed to large enterprises, which is why it is harder for SMEs to access debt finance (Leary and Roberts 2010). On the opposing end of the spectrum, internal source of finance is not impacted by information asymmetry and agency cost, as it is available to a firm internally. Mac an Bhaird and Lucey (2011) argue that SMEs rely on internal sources of finance owing to hardships in availability of external debt along with the associated high borrowing cost. As a result, internal source of finance is the foremost and most common choice of funds for SMEs. López-Gracia and Sogorb-Mira (2008) reported that high transaction and information costs prohibited Spanish SMEs from having availability of external debt. Therefore, these SMEs only relied on debt as a financing of last resort. Owing to extra costs and constraints related to debt financing, SMEs are highly reliant on internal sources. Keeping into consideration the significant costs attributed to external financing and relatively little cost attributed to internal finance, SME's exhibit a pecking order behaviour (Healy and Palepu, 2001, Singh, 2021).

The SME financing pyramid is also prevalent owing to SME owners' antipathy towards erosion of ownership in the firm (Healy and Palepu, 2001). Some studies in the area of SME argue that SME's preferred financing hierarchy is down to reducing external intervention to a minimum, in order to preserve ownership of the firm (Ang, 1991, 1992, Gebru 2009, Paul et al., 2007). Healy and Palepu (2001) and Leary and Roberts (2010) also stated that SME owners intentionally did not seek external sources of financing so as to maintain control and ownership of their business, whilst minimising external intrusion. These studies also endorse the view that SME owners are uncomfortable with the notion of external interference in firm operations, which further outlines their strong penchant for internal sources of finance over external sources. A number of studies (Hall et al., 2000, Kwak, 2021, Molina-García, 2022) maintain that the use of pecking order theory is explained by the existence of agency issues and information asymmetry between SMEs and financial institutions. Therefore, pecking order theory is extremely relevant in elucidating SME's financial structure and access to external sources of finance, in particular debt.

Numerous empirical studies have been carried out regarding the pecking order theory some of which are mentioned as follows. Watson and Wilson (2002) have used a model of a British market and confirm the companies where ownership is extremely concentrated and where the manager and the owner of the company are the same do follow the pecking order theory. Kwak (2021) applied the theory to study the financing decisions of high-tech SME firms in Korea as these firms face greater financing problems than other companies in the country. Shyam-Sunder and Myers (1999) along with Frank and Goyal (2003) concentrate on how companies fund their cashflow deficits in which the former identify the presence of pecking order theory and the latter identify a target debt ratio. Mato (2011) study the Spanish market finding evidence that companies instead of using equity issues prefer to finance their funds primarily through debt. Lopez-Gracia and Aybar-Arias (2000) also study the Spanish market and find that the importance of internal finance varies according to the size of the company. Finally, Holmes and Kent (1991) and Ang and Jung (1992) found through conducting mail surveys that managers of the companies follow similar hierarchy of finance choices as that explained in the pecking order theory. Holmes and Kent (1991) identify a more rigorous pecking order which is in place among SMEs rather than large companies.

SMEs being informationally opaque suffer from bearing the burden of high transaction costs as financial institutions need to employ more resources in screening and monitoring them to minimise the issues of adverse selection and moral hazard. Therefore, we have included the transaction cost theory as the problem of elevated transaction costs is acute in case of SMEs.

2.2.7 Transaction Cost Theory

Ronald Coase is known as the father of transaction cost theory (Williamson 1985, Rindfleisch, 2020) as the theory was first introduced in Coase's (1937) outstanding paper, The Nature of the Firm in which he argued that the distinction between hierarchies and market arose from variances in transaction costs. The main idea of Coase's article was that there is a certain price attached to market transactions and these costs may be reduced if these transactions take place in the firm internally. (Rindfleisch, 2020). However, the article did not provide tools for measuring transaction cost which is why although the paper is much cited but not used that much. This problem of transaction cost theory was settled by Williamson (1975) in his book Markets and Hierarchies and till now the theory continues to grow and expand (Geyskens et al., 2006). Carrying forward the pivotal work of Coase and Williamson, the two Nobel laureates, transaction cost theory also known as transaction cost economics has come to be one of the most significant theories in the field of management (Cuypers et al., 2021).

A problem faced by transaction theory recently is its depth for over the last three decades there has been a plethora of studies regarding the subject. The theory has grown so enormous both with respect to the sum of disciplines as well as the amount of studies undertaken within the fields where Boerner and Macher (2002) distinguished around 600 papers that involve research on some feature of transaction cost theory. Thus, more emphasis should be placed on the quantitative aspect of the theory to make it more focused. (Geyskens et al., 2006).

One of the main reasons for the massive expansion of this theory has been the fact that even a simple everyday market activity involves a transaction. This has given rise to the study the strategies used by the firms to facilitate transactions for their clients and how to these clients react to these approaches. (Kohli and Jaworski 1990, Chaudhuri and Holbrook 2001, Rindfleisch, 2020).

Jones and Hill (1988) descried transaction costs which comprise of negotiating, monitoring, and enforcement expenses which require to be borne in order to permit an exchange between two parties. They have identified six causes which result in transaction costs namely bounded rationality where personal conduct is limited by the aptitude to process information, opportunism, characteristic prone to act deviously influenced by self-interest, uncertainty, limited players as those found in an oligopoly, information asymmetry, resulting in one person having greater knowledge about a certain transaction than the other and asset specificity related to a specific exchange of goods or service.

Transaction costs consist of both direct costs of handling dealings and opportunity costs if a decision does not give the desired results. (Rindfleisch and Heide 1997). Transaction cost theory proposes that asset specificity and behavioural and environmental uncertainties lead to the creation of two distinct costs which are market transaction costs and control costs (Williamson and Ouchi, 1981, Williamson, 1985, Brouthers and Nakos, 2004). The cost incurred when a firm produces a product or service within the firm that is called production cost whereas if a firm buys a product or service from outside sources that is referred to as a transaction cost. (Thouin et al., 2009). The transaction costs related to credit may influence financing options for transaction cost being a function of scale would mean the smaller the scale of credit the higher the transaction costs (Cassar and Holmes, 2003).

Behavioural Assumptions of the Theory

Bounded Rationality: This is the first assumption of the transaction cost theory which states that there is a process involved in gathering and analysing information and that different players have access to a different collection of information (Holmstrom and Milgrom, 1991, Puriwat and Tripopsakul, 2021). The theory identifies that the respective agents have a limited capacity in analysing and processing information even when adequate information is available. The existence of bounded rationality gives rise to the creation of transaction cost because if this rationality was not bounded and that the actors involved would be able to complete contracts covering all probable outcomes and were able to predict all future contingencies then there would be no transaction cost associated with any contract (Williamson, 1981).

Opportunism: The second assumption associated with the theory is opportunism (de Goeij, 2021) which occurs when actors taking care of their self-interests take certain measures to maximise their monetary benefits (Williamson, 1975). This can be done by not disclosing complete information or not fully cooperating during the execution of an economic transaction (Holmstrom and Milgrom, 1991). This is a universal influence on the economic establishment as without the existence of opportunism the actors would always agree to solve everything and there would be no need for governance as everyone involved in the transaction would honour their commitments. However, in the real world where opportunism is present this is not the case, and such transactions are surrounded by peril. The assumption of opportunism which states that people in general succumb to cheating, lying and stealing is damaging for businesses as the managers either always think the worst of the exchange party or indulge in opportunistic behaviour themselves (Cuypers et al., 2021). More realistically the assumption should be that only a small portion of managers resort to opportunistic behaviour and because it is difficult to gauge who they might be a certain measure of precaution is necessary when conducting all transactions and this is referred to as 'bounded reliability' (Cuypers et al., 2021).

Transaction Costs and SMEs

Sartor and Beamish (2020) state that transaction cost theory defines certain forms of uncertainty and costs such as environmental uncertainty often created by government policies and practices this causing unpredictability for entrepreneurs. Environmental uncertainty in turn might give rise to information uncertainty limiting the capacity of entrepreneurs to gather enough information about the external environment therefore hindering their vision to forecast the consequences of their decisions. Another type of uncertainty is behavioural uncertainty which forecasts how other people might behave. This form of uncertainty may result in the risk of opportunism which may be defined as using an opportunity to deceive or mislead others. Roberts and Greenwood (1997) demonstrate that transaction cost theory suggests that bounded rationality and opportunism gives rise to steep negotiating and monitoring costs. Williamson (1981) defines transaction as expenses which arise when parties involved in the exchange of goods or services do not function harmoniously and there are frictions such as misunderstandings, conflicts and breakdowns.

SMEs are usually reliant on market support such as services including accountancy, legal, marketing and transport due to weak institutional advancement (Cook and Nixson, 2000). Information asymmetry between the external financing sources and SME entrepreneurs also surges the expense of handling the financial operations. Transaction costs increase due to measure taken to reduce information asymmetry such as organising and monitoring costs. (Winborg and Landström, 2001). Williamson (1975, 1985) stated that transaction costs appreciate due to certain circumstances such as uncertainty, asset specificity and transaction frequency.

<u>Asset Specificity</u>: Assets that are termed transaction specific are in fact designed for a specific transaction and cannot be utilised outside the relationship of the individuals concerned with the transaction. These transactions have a distinctive nature which is why they suffer from safeguarding problem due to the presence of opportunism in the market. (Geyskens et al., 2006, Puriwat and Tripopsakul, 2021). Asset specificity implies to both physical and human assets that may not be as valuable when used in a transaction other than what they have been specified for. (Williamson, 1985, Williamson and Ouchi, 1981, Brouthers and Nakos, 2004).

If the value of an asset is optimal in a particular transaction and reduces in a different transaction that means that asset is specific to that particular transaction. The more appreciation in the difference in value of the two transactions the more specific is that asset to the transaction at hand. Asset specificity is of tremendous significance as without its presence the transacting parties would simply terminate the exchange in instances when it goes sideways or change partners for that transaction (Cuypers et al., 2021).

<u>Uncertainty</u>: The problem of uncertainty occurs when the contingencies associated with the transaction are unpredictable such as environmental uncertainty or behaviour uncertainty (Geyskens et al., 2006, de Goeij, 2021). Various studies have characterised uncertainty in transaction cost theory as two types, namely environmental uncertainty or behaviour uncertainty (Williamson, 1985, Brouthers and Nakos, 2004). Behavioural uncertainty arises when difficulties transpire in the transaction verification process, when one party in a transaction is unable to predict the behaviour of the other party. (Brouthers and Nakos, 2004, Geyskens et al., 2006). In other words, this might result in an opportunistic attitude such as misrepresenting information, cheating and using various methods of deceit (Williamson, 1985, Brouthers and Nakos, 2004). In case of SMEs behavioural uncertainties may have a strong impact for these firms rely on the managerial capabilities of one or two owners and their management teams are not completely developed (Brouthers and Nakos, 2004). Cuypers et al., (2021) refer to Williamson's (1981) introduction to behavioural uncertainty which he proposed after studying Koopmans's (1957) differentiation between uncertainty caused as a result of absence of knowledge about primary issues and uncertainty owing to

absence of knowledge regarding the actions to others. Behavioural uncertainty is defined as the failure to foresee opportunistic activities of other people.

Transaction Frequency: Transaction frequency states the level of repetition in transactions. This area of transaction cost theory has not been given adequate attention in empirical research as comped with uncertainty and asset specificity. (Geyskens et al., 2006). According to the various studies, transactions are supposed to be continuous and therefore do not require the need for a separate frequency measure (Brouthers and Nakos, 2004). Transactions involving a high frequency of occurrence generally carry reduced transaction costs (Thouin et al., 2009, Puriwat and Tripopsakul, 2021). Frequency refers to the number of transactions that have occurred, for instance, Williamson (1985) mentioned the effect of overhead cost which would be recovered more comfortably if occurred more frequently (Cuypers et al., 2021).

2.3 Background and Literature Review

The first insight provided by the analysis of these theories is the prevalence of information asymmetries within the SMEs in Pakistan. We discuss in the theory of information asymmetry that the absence of proper audited financial records is one of the main causes of lack of transparency between SMEs and financial institutions. Banks require information concerning the business to measure their creditworthiness and the most effective way to measure that is by analysing the firm's financial books. During our survey, 50% of the sample did not maintain audited financial statements and the other 50% had only switched to audited accounts to fulfil the requirement of financial institutions to procure finance *(refer to Table 3 (5b) in Chapter 3).* Whether or not the SMEs maintain audited financial statements, they all regard maintenance of audited financial accounts as a hassle and an unnecessary expense.

The prevalence of asymmetric information raises the problems of adverse selection and moral hazard which brings us to the theory of credit rationing for banks hesitate to include firms which are unable to provide reliable company information or if procurement of such information is either tedious or costly. Therefore, it is easier to financially exclude such entities rather than get into the hassle of trying to obtain relevant information on them.

However, when investigating our sample, we found out that 50% of the respondents had approached financial institutions for a loan out of which 73% has succeeded in getting credit *(refer to Table 6 (13) in Chapter 3)*.

This brings us to the remaining 50% of the respondents *(refer to Table 5 (8) in Chapter 3)* who attracted our attention for they did not even bother to approach banks for finance. However, the limited size of SMEs does not allow them the opportunity to grow and develop which is why they turn to their respective networks for support. The network theory is also a very important theory in our study as we find out its significance within the SME sector in Pakistan. The respondents that refused to approach banks for credit out of them 65% stated that acquisition of loan is forbidden in Islamic Shariah (law) *(refer to Table 6(9) in Chapter 3)* and therefore use their networks comprising of family and friends to support them financially. Around 86% of the businesses in our sample are either sole proprietorship or partnership concerns *(refer to Table 1(3a) in Chapter 3)* where the owner and the business are the same. Here, the presence of networks plays a vital role in providing their firms with relevant information about their businesses as well as the necessary funds for their activities. However, overdependence on networks results in network leaders taking advantage of their member firms in gaining power and control over their network activities, in this case, forcing them to employ self-induced credit rationing, by proclaiming that bank loans are prohibited in Islamic Shariah (law). This unique aspect is exclusively discussed in our study as one of the main SME financing problems in Chapter Four.

Borrower discouragement which is the result of a number of factors identified in our study in Chapter Five, is one of the main determinants of a widening gap between SMEs and financial institutions. The continuous prevalence of discouragement among SME firms regarding bank credit and the growing frustration owing to the inability to grow and expand the business creates an acerbic environment among SMEs directed towards formal finance.

The existence of information opacity aggravates principal and agent relationship and in case of SMEs, the banks are referred to as the principal as they provide the finance necessary for the growth and development of SMEs who being the agents utilise the funds for conducting operational activities and business ventures. In our survey it was revealed at 27% of the sample *(refer to Table 6 (13) in Chapter 3)* that had applied for formal loans had been refused credit and that 64% of them were refused for they were deemed as risky ventures and 49% due to lack of availability of credit history *(refer to Table 6 (14b) in Chapter 3).*

The fact that SME borrowers do not apply for bank loans means that they then rely on their own internally generated funds for conducting operational and business activities. Here we mention the pecking order theory in which the firm prefers to utilise funds that are generated through internal sources rather than external credit. In our survey the respondents were asked about their chief sources of procuring external funds where 35% named banks whereas 65% mentioned family and friends *(refer to Table 6(10) in Chapter 3).* Most SMEs are unable to generated sufficient internal funds to cover their business operations and therefore rely on their networks which generally comprises of family and friends.

Lastly, the role of transactions is vital for all business activities which is why the transaction cost theory is included in our chapter as one of the major causes of borrower discouragement in our sample is due to high transaction costs of applying for formal credit. SMEs who were approved credit in our sample 28% were charged interest rate of 3 moths' KIBOR (Karachi Interbank Offered Rate) plus 3% spread and 15% were charged 3 months' KIBOR plus 4% spread *(refer to Table 7 (15e) in Chapter 3)* which at present comes to around 17% and 21% respectively which is exorbitant. The rest of the borrowers were either exporters or importers and therefore were given incentives by the country's central bank. Similarly, out of the approved SME borrowers in the sample 31% had to provide collateral valuing double the amount of loan extended and 54% had to provide greater than twice the amount of their credit facilities *(refer to Table 7(15g) in Chapter 3).* This confirms the opinion that SMEs pay a high price to procure bank finance.

According to the pecking order theory, even though SMEs have preference towards internal sources of financing, it is well known that SMEs cannot grow and expand solely and wholly on internal financing. They require additional external finance, like debt, to grow and achieve competitive advantage. The literature review also established that the financial institutions are reluctant to offer finance to SMEs owing to the considerable risk attributed with SME's information asymmetry. As a result, there is a substantial gap in financing for SME, which is generated by a disparity between the financial requirements of SMEs and the inadequate financing endowments for SME's from financial institution. The literature specifies that SMEs' overreliance on internal sources of financing is not wholly governed by SME's preference, but also due to problems in accessing external credit from banks. The funding attitude of SMEs is determined by the unwillingness from financial institutions to offer loan products to SMEs and embryonic capital markets in developing countries like Pakistan.

Through the study of the above theories, we identify two crucial problems faced by SMEs in Pakistan, the first one being self-induced credit rationing by majority of SMEs in our sample resulting in pessimism and hence stagnated growth and the second is the examination of the effects of the prevailing borrower discouragement on SME firms. Hence, this research aims to provide a holistic examination of the SME financing gap from the viewpoint of a critical agent – SMEs. The examination of the mindset of this vital agent is crucial in order to address the critical problem of the financing gap for SMEs.

Numerous studies have been conducted on how access to credit functions as a growth constraint (Beck et al 2008, Mascia, 2018). The studies on financial constraints faced by SMEs in an industrialised and established economies are fundamentally different from those involving developing countries. Moreover, the conceptual and practical underpinnings of studies conducted on developed and mature economies will not be applicable to underdeveloped countries exhibiting lower socio-economic and financial growth. This study focuses on a new and different dimension pertaining to the problems faced by SMEs in developing economies such as Pakistan.

2.3.1 Barriers to Credit Common Amongst SMEs

The impediments to obtaining SME finance in Pakistan can be found all around the world and some of the research studying similar issues faced by SMEs in various periods are identified below.

SME faces obstacles in most developing counties as Bangladesh, Nepal and the Philippines discussed by Cook (2001) where he states that although lending programs aimed to cater to specific SME financing needs have been introduced yet a paltry 12% - 33% of the sample taken confirmed having access to formal credit and those too were the firms towards the higher end of the sector. He further stated that here too, factors involving expensive loan processing, high collateral requirement and lengthy procedures were the main causes of deterring access to loan for SMEs. Comparable evidence pertaining to absence of regard given to SMEs is found in Southern Africa, Niger, Botswana, Swaziland, Lesotho, Malawi, and Zimbabwe. The biggest concern pertaining to the sample surveyed in these areas was the inability to procure working capital, credit, and finance. Ridiculously high interest rates of 30 per cent or higher, expensive transactions costs and unfriendly environment faced by SMEs were the main factors to the issue. Cook (2001) included several case studies in his research which included a study of Ghana undertaken by Osei (1993) which provided similar evidence as 95 percent of the respondents relied solely on personal sources of funds including credit from friends and family. Similarly, Dawson's (1993) research on Ghana and Tanzania also gave the same outcome that out of the 672 small scale enterprises included in the study, merely two firms had succeeded in acquiring formal credit as in Tanzania, the formal banking system was found to be unapproachable for almost all SMEs.

Sanga and Aziakpono, (2022) analysed the panel data of 43 African countries in conclusion of which they identified two prominent issues faced by SMEs in Africa namely information asymmetries and lack of relationship lending.

Thampy (2010) states that according to the census of micro, SMEs (MSME) in India between 2006–2007 there are around 26 million and one of the major constraints to the growth of SMEs in India is obtaining bank loans. He further elaborates that information which is the prime factor in influencing credit decision of banks becomes quite challenging in case of SMEs which suffer from information asymmetry leading to failure in obtaining credit. This information asymmetry becomes more pronounced as SMEs are considered comparatively more opaque. Therefore, lack of transparency associated with the financial conditions of SMEs is a main cause for hesitation for banks to extend credit.

Singh and Kaur (2021) study the internal as well as the external factors affecting SME financial constraints focusing on manufacturing firms in India. They identified size of the firm, type of ownership, entrepreneur's level of education, and maintenance of financial accounts as the most prominent determinants affecting access to formal credit

The study conducted by Brown et al (2011) is based on data gathered through the survey of 8,387 firms across 20 countries from Eastern to Western European countries to compared accessibility of formal loans for SME firms. Their analysis confirms that the propensity for smaller and financially more opaque firms to approach banks for credit is far less than the exporting firms that have a greater need for financial assistance and are thus more likely to apply for a loan and this feature is similar in both Eastern as well as Western Europe.

Santos and Cincera (2022) conducted their research on 27,546 firms situated in EU28 to identify determinants of SME financial constraints. They recognize inadequate collateral, tedious bank process and extremely high rate of interest to be the most crucial factors adversely affecting access to finance.

Nizaeva and Coskun (2021) studied 16,600 SME firms in 32 countries across Central Asia and found high interest rate to be the most common factor to financial constraint.

Hence, we can confirm through the above studies considerable similarities in problems associated with SMEs in Pakistan in obtaining formal finance with that faced by other countries internationally.

2.4 Summary

The literature review for this research has examined the theory of information asymmetry, theory of credit rationing, network theory, theory of discouraged borrowers, agency theory, the pecking order theory, and transaction cost theory in order to provide crucial underpinnings for SME financial constraints from the viewpoint of banks and SMEs. The literature review, through a critical appraisal of extant academic research, provides a gap between the SME's finance requirements and their willingness to approach financial institutions for credit. The review states that the main cause of financing gap for SMEs is due to the existence of information asymmetry. The lack of information disclosure and poor quality of firm information makes SMEs a high-risk investment for financial institutions further increasing credit risk and transaction cost. It is established that the credit risk faced by SMEs is down to their poor quality of financial reporting and lack of credit history.

The problem is further exacerbated into the issues of adverse selection, credit rationing and principal-agent relationship (agency costs). There is considerable risk for SMEs directing debt from financial institutions to riskier ventures, thereby leading to the issue of moral hazard and snowballing the cost and associated risk for the banks. Hence, to prevent financial loss, and avert credit risk, financial institutions adopt strict lending policies, which include exorbitant interest rates, the need for collateral and approving only short-term loans.

Financial institutions, to mitigate financial loss and default tend to screen out SMEs by imposing credit restrictions on loan amounts provided to SMEs. Therefore, SMEs' availability to funds (internal and external) is dictated by their financing preference, as stated by the pecking order theory, as well as the risk averse attitude of banks as posited by the agency theory. Finally, the characteristics of SME owners have a big effect on the financing preference of firms. SME owners tend to rely on internal finance, in order to preserve their ownership of the SME. They also increase their dependability on their social and business networks which leads to another set of problems which also leads to an increase in SME financing gap. Network leaders having their own agenda to strengthen their authority over their networks tend to exploit the vulnerability of their member firms through various methods and in case of Pakistani firms where religion plays a dominant role over the mindset of the entrepreneurs, they employ 'extrinsic religiosity' to gain effective control over their network. The term 'extrinsic religiosity' and how it affects the firms in a network is one of the main problems discussed in our study. The second issue highlighted in our research is the discouragement experienced by SME firms in approaching financial institutions for credit. Here we introduce a new aspect of borrower discouragement which is the caustic outlook of SME firms caused by their refusal to apply for formal credit coupled with lack of interest of banks to include SMEs in their financial portfolio.

In the next chapter we discuss the data collection techniques that have been applied in this research and analyse the data that has been gathered.

3. DATA AND METHODOLOGY

This chapter discusses the research philosophy, epistemology, design and methodology. By conducting the literature review, this research has employed mixed methods approach to data evaluation and analysis. This chapter aims to explain the data collection technique and analysis for the qualitative and quantitative aspects of the research in order to attain the key objectives of the thesis.

3.1 Research Paradigm

A research paradigm is defined as a structured set of principles and methods employed to conduct a research study. According to Creswell (2009), the foundations of research paradigms are based on:

- Ontology
- Epistemology
- Methodology

Ontology relates to the research problem, whereas epistemology is the route a researcher undertakes to understand and examine the underlying research problem (Veal, 2005). For the purpose of this research, we will examine to main paradigms, positivist and interpretivist (Creswell, 2009, Veal, 2005).

A positivist paradigm is the basis of quantitative research and is therefore deductive and objective in nature (Bryman and Bell, 2011). Therefore, econometric and mathematical approaches form a core part of the positivist research approach (Bryman and Bell, 2011). Creswell (2009) explains that using quantitative analysis entails experimenting a theory by creating and empirically examining research hypothesis employing numerical data to address each research question.

However, an interpretivist paradigm usually forms the basis of qualitative research and is thus based on subjective ruminations of knowledge borne out of the researcher’s interaction with participants (Zikmund et al., 2012). Qualitative research employs observations via surveys (questionnaires) and interviews to capture information from participants (Veal, 2005).

Therefore, the qualitative approach relies on inductive reasoning on the study undertaken by the researcher. Bryman and Bell (2011) posit that descriptive elements of the data are captured by qualitative research, whereas the mathematical evaluation of data is conducted through quantitative research.

The choice of methodological design for research is determined by the nature and scope of the research problem instead of desired research paradigms and methods (Creswell, 2009). Given the nature and scope of this thesis, the use of one quantitative approach on their own will be insufficient to adequately address the research questions and therefore, the underlying research problem. Therefore, to better examine the SME financing gap from the perspectives of SMEs and Financial Institutions, the mixed methods approach was deemed to be most appropriate for this research.

A mixed method approach entails two forms of data examination comprising of inferential quantitative data analysis and thematic qualitative data analysis (Creswell, 2009). A number of studies in the social science discipline have made use of mixed methods approach to give weight and credence to their findings. Creswell (2009) strongly endorsed the use of mixed method as a potent research approach owing to the blended power of qualitative and quantitative approaches tackling the complex nature of the research problem. Bryman and Bell (2011) argue that application of mixed method generates comprehensive and complete data, leading to more reliable results with fewer biasness issues.

Therefore, this thesis uses mixed methods to analyse the reasons of financing constraints faced by SMEs in Pakistan involving various economic theories and identifying factors hindering SMEs access to bank credit which involves the use of primary data collected through a questionnaire survey followed by the use of regression analysis. The outcome of this analysis along with the related theories will help identify possible solutions to these perennial issues impeding the growth of SMEs in the country.

3.1.1 Research Strategy

The foremost step for selecting a research strategy is a real-life problem that requires examination, instead of the theoretical viewpoint (Crotty, 1998). For this research, I was deeply entrenched in examining the obstacles to SME financing from Pakistan's perspective and ways in which these obstacles can be overcome. The aim for a mixed methods approach was twofold. Firstly, qualitative research, by its very nature has the facility to divulge procedures in social interaction that could impact individual or institutional decision making. Given that qualitative research design is usually undertaken when research requires access to comprehensive and rich information of a particular phenomenon, such an approach was deemed useful (Miller and Salkind, 2002). Therefore, qualitative research design would allow exhaustive examination of problems that are intrinsic to Pakistan SMEs and as such, not available on public domain, thereby allowing the researcher to gain an in-depth understanding of barriers to SME Finance.

Secondly, quantitative research would complement qualitative research design by creating knowledge and understanding about the social world. Quantitative research would allow the researcher to investigate singularities or incidences affecting individuals, in the case of this research, individuals representing SMEs on the one hand and Banks or Lenders or Financial Institutions on the other. Quantitative research would allow the researcher to learn about the behaviours and characteristics of the specific group – i.e., individuals representing SMEs or the sample population. Using appropriate econometric packages, quantitative research would enable the researcher to observe questions about the sample population.

The findings of quantitative research stipulate an elucidation into what is and is not vital or impacting the sample population. Quantitative research also delivers responses to inquiries about the occurrence of a phenomenon, or the extent to which the phenomenon affects the sample population.

3.2 Research Design and Framework

Primary data collection means assembling first-hand data by the researcher from the original source for a specific research purpose. Analysis of this data can be categorised in two segments namely qualitative research and quantitative research methods.

3.2.1 Types of Methodological Techniques

Online Surveys

Online surveys also known as internet surveys are one of the most common sources of collecting data where a set of questions are communicated to the target audience through the world wide web, which can be through emails, social media or online survey websites. Online surveys are faster than traditional methods of research one doesn't need to wait for the questionnaires to come back and the time of response is instant. They are also relatively cheaper as there is no cost of postage involved nor any additional resource is required to input data in the system. There is less chance of an error as it eliminates the possibility of human error, and they are comparatively faster to analyse

Interviews

Data can be collected by interviewing the participants of a given sample which can either be done online or face-to-face. Interviews enhance the flexibility of the interviewers, and they get a relatively positive response than if the questions are mailed and the people who are unable to read or write cannot take part. The interviewer can judge the behaviour of the participants.

Questionnaires

A questionnaire comprises of a group of questions that aim to collect information from the target audience. The questions may be a mix of close-ended questions and open-ended questions. A substantial amount of information is collected covering a large population in a relatively shorter time-period. It is very fast and easy to quantify the results of questionnaires by using a software package. Questionnaires maintain more objectivity during analysis than any other research tool. However, there are instances when questionnaires may not yield the desired results for instance changes in moods or behaviour or how truthful the respondent might be.

As discussed above, given the nature and scope of the research problem, questionnaires were deemed to be the most appropriate mode of data collection. Whilst interviews and focus groups were also considered, the lack of reliability and access to meaningful information rendered their use invalid.

3.2.2 SME Financing in Pakistan versus Middle East and Africa

In recent times, COVID-19 pandemic has considerably upset the ecosystem of SMEs (Dornel et al., 2020, Bakhouche, 2022) which has made it even more important to investigate the impediments encountered by SMEs keeping in view the rapid evolution of the influencers of environmental structure, which affect firm-level performance (Bakhouche, 2022).

An adequate amount of research can be found on the impact of culture on globalisation, but the aspect of religion still remains to be empirically investigated (Richardson and Rammal, 2018; Kwok et al., 2020, Younis et al., 2022). The effect of Islamic identity is immense upon the opinions and actions of Muslims (Eid and El-Gohary, 2015, Younis et al., 2022). Present studies only provide limited proof regarding the way Muslim entrepreneurs link their faith with business decisions (Kwok et al., 2020, Younis et al., 2022) and more empirical research can be found on Western religions in spite of the global importance of religion in the Eastern countries including Arab states (Younis et al., 2022).

Khan et al. (2021) state that the advent of COVID-19 has become extremely challenging for the businesses all the world including the Gulf Corporation Council Countries (GCC) where SMEs are being looked upon as a means of recovering the economy after this impediment. Therefore, several support packages are being introduced to overcome the shock of COVID-19. They further add that as per the "Saudi Vision 2030", Saudi Arabia has planned to raise the contribution rate of SMEs by 15% (from 20% GDP to 35%) as a means of encouraging SMEs to procure finance and facilitating banks to by facilitating SMEs to assign 20% of their loan portfolio to SMEs.

There has not been any encouraging contribution of SMEs towards economic development either in Saudi Arabia or most MENA countries. According to Saudi Arabia Report 2016, the country experienced a mere 20% contribution of SMEs toward economic development which is very low when compared with economies such as Germany, Japan and China that recorded an average of 50% contribution of SMEs towards growth (Alharbi et al 2021). While looking at the demographics of SMEs in the GCC states, about 90% are found in the Kingdom of Saudi Arabia (KSA), 5% are situated in the United Arab Emirates (UAE) whereas the remaining are located in the rest of the GCC countries. In the GCC states only 11% of the total SMEs have access to formal credit and their contribution to employment is only 25% compared to the global average of 40%. An estimated 40% of the SMEs identify inability to procure finance facilities as the foremost constraint to growth and development. Banks in GCC states consider lending to SMEs as being extremely risky and thus either concentrate on large borrowers or extend finance at a higher interest rate or larger collateral base (EAST, M., REGION, N.A. and UNIT, G.C., 2016).

SMEs are reliant on innovation for growth, competition, trade and survival, however, owing to lack of availability of sufficient external funds, their capacity to transform is often significantly constrained. The studies on bank risk appetite and stability (Brei et al., 2020, Bakhouche, 2022), support the view that innovative enterprises experience substantial information opacity and absence of appropriate collateral that which views that innovative firms are exposed to significant information asymmetries and absence of suitable collateral, which enhances their vulnerability when facing financial institutions (Bakhouche, 2022). SMEs suffer from elevated interest rates and rigorous borrowing stipulations as a response from banks, (Bakhouche, 2022), which is aggravated in economies with a less established financial system offering limited financing options (Fowowe, 2017, Wellalage and Fernandez, 2019, Bakhouche, 2022).

There is a substantial impact of formal credit on the innovation of SMEs as they are generally not preferred by financial institutions making it challenging for them to obtain credit. The cost of funds amplifies, thus augmenting information asymmetries resulting in exclusion of SMEs from the ambit of credible borrowers. SMEs in some non-GCC countries of the MENA region experience stagnated growth owing to absence of adequate external funds. However, these studies do not focus on the major concern affecting the performance of SMEs which is lack of formal credit (Bakhouche, 2022).

The MENA region is no exception where SMEs form a vital part especially in Jordan, Egypt, Tunisia, Morocco and Lebanon economies. These countries unlike other Middle Eastern countries are not dependent on revenues generated from the export of oil and share various fundamental features. SMEs dominate the private sector in these regions particularly the informal sector and most SMEs are import oriented although there has been a recent growth in export activities Morocco, Tunisia and Egypt (Bakhouche, 2022).

The relationship between the fundamental values and religious convictions of the entrepreneurs has direct impact on their activities (Younis et al 2022). Which is why it is essential to take into account the religious perspective of entrepreneurs and how it affects the utilisation of business opportunities in accordance with the Islamic ideology. Religion for most people is a source of For many people, religion provides them with a set moral values and guidance to the right path including actions concerning their business activities (Kwok et al., 2020, Younis et al., 2022).

The issue of borrower discouragement which pertains to the demand side of formal finance was first identified by Kon and Storey (2003). This was a major contribution to financial literature as the aspect of demand for formal credit has not been studied before mainly because of the obscurity of this dimension of SME mindset. However, borrower discouragement is very acute in case of SMEs all over the world and which makes it vital to contribute to this literature to assist policy makers in finding an apt resolution for this issue. Homogeneity of faith acts as a potent variable in strengthening network connections among Muslims which provides them strong grounds for mutual understanding and emotional propinquity. Behaviour of networks among Muslims is driven by trust and unity which is greatly emphasised in their beliefs (Fadel, 2020, Younis et al., 2022).

Through these studies we identify several issues faced by SMEs in GCC and MENA region which are similar to those experienced by SMEs in Pakistan. We recognise that SMEs in these regions like Pakistan suffer from asymmetric information, lack of adequate collateral, high interest rates, not preferred by banks. Some of the studies of issues pertaining to borrower discouragement have been discussed in this section which are similar to the ones experienced by SMEs in Pakistan. Therefore, Pakistan can be made a representative case for GCC, MENA and other Asian countries sharing the same culture or beliefs and where SMEs are facing similar issues concerning procurement of bank credit.

3.2.3 Data Collection

During the winter of 2018-19, an extensive survey was conducted through distribution of questionnaires to 416 SMEs spread over the two major provinces of Sindh and Punjab. The aim was to collect primary data regarding major constraints which are still being faced by the SMEs in Pakistan and to identify which constraints are most severe and the reasons why they continue to exist so that measures might be taken to address the prevailing issues. The main body of the questionnaire focused on the size of the SMEs and problems being faced by them regarding access to finance. Questionnaire analysis was the best method for this research as the SMEs in Pakistan are not very sophisticated therefore the best way to make them participate in the survey is through questionnaires, which is designed on a simple format, easy for them to understand. Moreover, through questionnaire survey it was easier to reach a large group of SMEs spread over two diversified provinces of Pakistan. Most importantly, the required information was collected while maintaining the anonymity of the participants who were reluctant to disclose their identities. Considering the general mindset of the SME entrepreneur I designed the questionnaire using simple English, using easy to understand words and largely used multiple choice of Likert scale to collect the responses. English is a second language in Pakistan which is why it was better to keep the responses as succinct as possible. I read articles on how to develop questionnaires along with my own prior knowledge of SMEs as a banker which enable me to develop this questionnaire. In order to collect the information necessary for my research I divided my questionnaire into three parts covering information pertaining to demographic, financial, credit situation, future growth and obstacles to growth.

3.3 Ethical Considerations

An ethics approval was required as part of the research degree regulation, which I submitted to my University Ethics Committee. The ethical approval form included a comprehensive list of questions around participants, use of surveys and safeguarding. I received ethical approval for use of my questionnaire from the ethics committee before I distributed my questionnaire to my participants. While conducting the survey, certain ethical aspects were considered most important of which was the anonymity of the participants. Most SMEs refused to provide the name of their firms for they initially felt suspicious about the reason of this survey. Therefore, in order to get maximum responses from the participants their names and firm addresses were kept anonymous. Majority of the participants felt reluctant in showing their financial accounts as most of them did not maintain any formal financial statements.

3.4 Sample selection

A survey was carried out on 416 SMEs spread over two major industrially developed provinces of Pakistan namely Sindh and Punjab. The sample comprised of small and medium sized trading, manufacturing and service firms which are the three major sectors of the Pakistan's industry. The sample not only covered importers, exporters and retailers but also the region-wise requirement of SMEs pertaining to the type of finance. The type of loan requirement in Punjab is different from that of Sindh, the regions covered in the Punjab provide a picture of the type of credit needed. Similarly, the problems faced by the SMEs are also different region-wise. Karachi is the largest metropolitan city of Pakistan housing communities from diverse cultures and background which also has an impact on the type of loan needed by the entrepreneur.

Our sample comprises of 412 male and 4 female SME entrepreneurs. According to Diagnostic Survey Report 2021 issued by the World Bank the share of SME female entrepreneurs in obtaining bank finance in Pakistan is around 2% of the total SME portfolio which is minuscule.

3.5 Sampling method

The survey was conducted through distribution of harmonised questionnaires to a sizeable random sample of the SME population situated in two different geographically located provinces of Sindh and Punjab. The main purpose of using questionnaires for survey was to collect first-hand data from SMEs, as in the case of Pakistan not much actual information is available concerning problems faced by SMEs in obtaining formal credit. The lack of secondary data in the context of Pakistan creates a gap in literature thus making it mandatory to use primary data collection methods.

3.6 Issue of Bias

The issue of biasedness in this research was avoided by selecting participants who were not known to the researcher thus eliminating biases such as acquiescence, social desirability, sponsor, gender and the halo effect. Moreover, the questions were worded and arranged in such a way that it removed habituation, confirmation, culture, question-order, leading questions and wording biases.

3.7 Validity and Reliability of Data

The reliability and validity of the empirical data was tested using Cronbach's Alpha. The survey was conducted on 416 SMEs, using open-ended and close-ended questions along with a 5-point Likert-scale survey consisting of 28 items. Chapter Four of this research focuses on the influence of networks on SMEs and the impact it has on their overall mindset. Here the variable 'Owner's Mindset' has been used which consists of responses received in the section of the questionnaire using Likert scale: i) Banks are responsive to SME financing needs, ii) SMEs cannot provide reliable financial information to prove their creditworthiness, iii) Guarantee Schemes for SME borrowings available, iv) Special financial institutions to promote SMEs. The Cronbach's Alpha test gave a score of 0.778, representing a high reliability of the items included in the variable. Chapter Five investigates the effect of continuous discouragement among SME borrowers on their outlook towards bank credit. This section focuses on the reason why SMEs did not approach banks for credit covered in question 9 and the most limiting factors in procuring formal credit for future growth covered in question 21 of the questionnaire. The five major responses received in these questions form the variable 'Caustic Outlook' comprising of i) Tedious and lengthy process of banks, ii) Banks are unapproachable, iii) High Interest Rate, iv) Insufficient Collateral, v) Bank loans are forbidden in Islam. Here the Cronbach's Alpha score was 0.708. The above scores suggest that the items used in the variables are closely related to one another, which proves the reliability and hence the validity of the data.

3.8 Survey process and findings

The questionnaire consisted of a combination of multiple-choice and closed ended questions using Likert scale, covering the following areas of a firm:

- Demographic
- Financial information
- State of external financing
- Future growth
- Obstacles to growth

3.9 Questionnaire Responses

This section provides a descriptive evaluation of the questionnaire responses of the following characteristics of a SME, demographic, financial information, state of external financing, future growth, obstacles to growth. In the first column we have included the question number from the questionnaire (refer to Appendix A) to link the responses with the survey conducted.

Table 1 Responses based on demographics of firms in units where n = 416

Demographic

Question #	Characteristics	Options	Response %
1(i)	**Gender**	Male	99%
		Female	1%
1(ii)	**Age**	18-25	5%
		26-35	24%
		36-45	33%
		46-55	28%
		over 55	10%
1(iii)	**Qualifications**	High School	45%
		Bachelors' degree	51%
		Others	3%

2	**Location of Business**	Punjab	14%
		Sindh	86%
3(a)	**Type of Ownership**	Sole Proprietorship	60%
		Partnership	26%
		Limited Company	14%
3(b)	**Type of Business Sector**	Retail	61%
		Manufacturing	24%
		Service	15%
3(c)	**Firm Category**	Small	74%
		Medium	26%
3(d)	**Firm Stage**	Young (1-5 years)	9%
		Established (more than 5 years)	91%
3(e)	**Number of Employees (Full Time)**	1-25	74%
		26-50	11%
		51-75	7%
		75-100	6%
		over 100	2%

Source: Developed by the researcher

Table 1 discusses the demographics of the SMEs included in the survey. Here majority of the owners fall under the age between 26-55 years which identifies a certain level of maturity within the SME structure of Pakistan. The sample has been taken from the two most industrialized provinces of Pakistan namely Sindh and Punjab, the proportion of Sindh being larger than that of the Punjab region as Sindh includes Karachi which houses the most diversified SME population of the country. The level of education of SME owners is relatively high as 51% hold graduate degrees and 45% have completed high school. The SMEs are mostly unstructured firms which is revealed in Table 1 for 60% falls under the category of sole proprietorship and 26% under partnership although 91% of them are established which means they fall under the business cycle of over 5 years. The sample reveals that SME owners are mostly retailers or traders, their share being 61% as compared to the remaining 39% which falls under manufacturing and service. The sample size consists largely of firms which fall under the category of small firms namely 74% the remaining 26% comprise of medium enterprises. This can also be identified by looking the number of employees where 85% of the firms have up to 50 employees which as per the recent SBP Prudential Regulations for SMEs fall under the ambit of Small Enterprise.

Financial review of the sample can be divided into two categories:

1. Quantitative
2. Qualitative

i) Quantitative Analysis

Table 2 Responses measuring financial position of firms

Financial Information *Amount (Pak Rupees in millions)

Question #		**up to 1***	**over 1-10***	**over 10-50***	**over 50-100***	**over 100-150***	**over 150***
4(a)	Fixed Assets	6%	16%	48%	8%	4%	18%
4(b)	Current Assets	7%	15%	42%	11%	4%	22%
4(c)	Annual Sales	4%	19%	33%	13%	8%	24%
4(d)	Net Income	33%	27%	35%	5%	0%	0%

Source: Developed by the researcher

The financial figures in Table 2 reveal that most of the small firms have sales between PKR 10 million and PKR 50 million. However, the proportion of net income is very interesting as 33% falls under income up to PKR 1 million while 35% comes under PKR 10 million to PKR 50 million. The percentage share of sales shown in Table 2 coupled with a 48% and 42% share of fixed assets and current assets respectively falling between PKR 10 million – PKR 50 million indicate that most SMEs do have a sufficient asset base which is a rather positive sign that extending formal credit to SMEs may not be such a risky venture for they will be able to provide adequate collateral to cover their credit risk. The above figures identifying the strength of their collateral are contradictory to the general mindset of financiers that SMEs lack adequate collateral and this couples with information opacity makes them a risky venture. Moreover, 19% of these responses represent importers and exporters and their sales and net income figures fall between PKR 10M to over PKR 150 million where 18% comprises of fixed assets, 22% of current assets and 25% of annual sales which are over PKR 150 million. This clearly suggests that the sales and net income of a majority of SMEs other than exporters are under PKR 10 million.

ii) Qualitative Analysis

Table 3 Responses indicating financial sophistication of the firms

Question #	Characteristics	Options	Percentage
5(a)	Type of Financial Statements	Journal Ledger	6%
		Bank Statements only	40%
Recheck		Annual reports	50%
		Financial Forecasting	30%
5(b)	Compilation of Financial Statements	Self	50%
		Professional Accountant	50%
5(c)	Knowledge of Financial Bookkeeping	Yes	56%
		No	44%

Source: Developed by the researcher

Table 3 illustrates the level of financial sophistication achieved by the SMEs in Pakistan. The difference between SMEs maintaining proper accounts made by a professional accountant and rough accounts is insignificant. However, it may be noted that 50% of the SMEs tried to obtain bank finance which is not possible without providing proper financial accounts signed and stamped by an accountant or an auditor as per the regulations of SBP. Therefore, it is obvious that SMEs are not very keen to maintain proper financial accounts which adds to their information asymmetry. The 50% of SMEs who in fact did have their financial statements audited where the ones who had approached banks for credit and one of the mandatory requirements of processing any bank loan is to provide audited financial statements. Moreover, SMEs hardly approach private moneylenders for finance as identified in our survey to the response to question 15(c) of our questionnaire where we received only 2 responses who had approached private moneylenders for a loan. This further aggravates their liquidity position, thus hampering their growth.

Table 4: Internal Funds used to start the Business

Question #	Estimated amount of internal funds *Pak Rupees in millions*					
6	Up to 0.500*	0.501 to 1.500*	1.501 to 3*	3.001 to 5*	5.001 to 10*	Above 10*
	14%	30%	18%	11%	16%	12%

Source: Developed by the researcher

The sample was asked the estimated amount of internal funds used to set up their business. Here we notice that majority of SME entrepreneurs which is around 73% required up to PKR 5 million to start their business operations. The remaining 27% needed capital between PKR 5 million to over PKR 10 million, majority of which are manufacturing firms which require a larger amount of capital to set up their operations.

Table 5: Sources of Internal Funds for SMEs

Question #			
7	Sources of Internal Funds (family and friends)	Yes	52%
		No	48%
8	Effort in obtaining external finance	Yes	50%
		No	50%

Source: Developed by the researcher

SMEs rely primarily on their networks which comprise of family and friends whether they are personal friends or those related to their business. Here SME entrepreneurs were asked how they had financed setting up their initial business operations and we observe that 52% of the responses favour family and friends as the internal sources of funds. The remaining 48% approached financial institutions for formal credit and one of the main reasons being that 19% of our sample consisted of importers and exporters and the importers cannot pursue their business activities without the help of banks for they need to establish Letters of Credit to import the required products which can only be done through banks. Similarly, SBP offers a variety of export related credit products at extremely low spread to provide incentive to exporters which include credit extended to exporters for procuring raw material for their exports. These figures prove the fact that SMEs in general end up using their own sources of funds to set up their businesses instead of formal credit.

Table 6: Credit Information of SMEs

Question #	Characteristics	Options	Percentage
9	Main reason for not obtaining external financing	Difficult Loan Procedure	35%
		High Interest Rate	18%
		Lack of Collateral	12%
		Bank loan is Forbidden	65%
10	Main Sources of External Funds	Bank Loans	35%
		Others (Own sources)	65%
		Family and Friends	
11(a)	Information asked by banks when applied for a loan (choose relevant options)	Business Plan	92%
		Financial Statements	99%
		Business Total Assets	96%
		Owner's Equity	95%
		Security (collateral)	98%
		Others	0%
11(b)	Information given to banks while applying for loan	Business Plan	94%
		Financial Statements	99%
		Business Total Assets	94%
		Owner's Equity	95%
		Security (collateral)	98%
		Others	0%
12	Main purpose of obtaining external finance	Working Capital	73%
		Fixed Cost	13%
		Business Expansion	18%
		Trade Loans	20%

13	Outcome of loan	Approved	73%
		Rejected	27%
14(a)	Reasons why the loan was rejected	No reason given	5%
		Insufficient collateral	40%
		No credit history	49%
		Too risky	64%
		Others (overdue in the past)	4%
14(b)	Impact of loan rejection	Serious Financial Difficulties	24%
		Put plans on hold	40%
		Project was terminated	29%
		No impact	7%

Source: Developed by the researcher

Table 6 comprises of the responses obtained regarding formal credit in which SMEs that did not approach financial institutions for credit gave several reasons which included 63% of them refusing formal finance stating that loan is forbidden in Islam. Other responses included 35% stating that the procedure for obtaining credit through financial institutions is extremely difficult. Steep interest rates and lack of adequate collateral necessary for securing formal credit we also included in most response 18% and 12% respectively.

We had asked our respondents what were the main sources of external funds which they generally utilise and to that 64% of responses favoured own sources which primarily included funds procured through family and friends. The remaining 36% had acquired loan from banks majority of whom are importers and exporters.

Banks when approached for finance generally ask the borrower to provide certain documents and in case of business loans, they ask firms or companies to provide their business plan, audited financial accounts, and what assets are they willing to provide as security against the required loan. Our responses in these queries indicate that almost all of them had provided the required information to banks when applying for finance.

In our survey we asked our respondents the main purpose for applying for a loan and to that 73% responded that they needed to fulfil their working capital requirements, 31% had applied for long term finance either for obtaining fixed capital or for future business expansion and the remaining was for trade finance, which comprises of establishing Letters of Credit.

The respondents who had approached financial institutions for formal credit, 73% were approved while 27% were rejected. Out of the 73% that were approved, 54% were importers and exporters which shows how banks clearly favour importers and exporters over other SMEs.

We had asked our sample what reasons were provided by banks when refusing their loan request and to that 64% responses stated that banks find their ventures too risky while 49% stated that they could not secure a loan approval as they have no credit history and 40% could not provide sufficient collateral as per banks' requirements. It is to be noted that 93% of the respondents that were refused formal finance suffered tremendously with respect to their performance.

Table 7: Loan Characteristics

Question #	Characteristics	Options	Percentage
15(d)	Loan obtained to applied amount	Less than 25%	1%
		25-50%	12%
		50-75%	30%
		75-100%	25%
		100%	31%
15(e)	Interest Rate Charged	3MK + 1%	1%
		3MK + 3%	28%
		3MK + 4%	15%
		1 YK + 3%	3%
		SBP + 1%	13%
		SBP + 1.25%	1%
		SBP + 1.5%	19%

		SBP + 2%	1%
		Bank charges	19%
15(f)	Duration of the bank loan	< one year	81%
		1-2 years	9%
		3-5 years	7%
		> 5 years	3%
15(g)	Collateral size in proportion to loan amount	Half	1%
		Equal	13%
		Double	31%
		> 2 times	54%
15(h)	Type of collateral asked to provide by banks	None	0%
		Business Assets (Land & Machineries)	64%
		Personal Assets	74%
		Others	8%

Source: Developed by the researcher

Table 7 consists of the characteristics of the loan procured by SMEs through financial institutions. We had asked our respondents the amount of finance actually obtained as compared to the amount that was applied for. 12% had received only 25-50% of the loan that they applied for whereas 30% we able to procure between 50-75% of the loan request and 25% between 75-100%. The ones that were able to obtain 100% of their request were 31% and mainly consisted of importers and exporters.

The interest rate which is one of the most deciding factors for SMEs as to whether or not to procure formal credit was our next question and most of the responses that we received indicated that only credit extended to exporters provides a substantial interest relief otherwise other forms of finance beside those extended to exporters by SBP entail a very high interest rate.

Most SMEs where they belong to retail, manufacturing or service generally require short term credit to cater to their immediate liquidity requirements usually in the form of working capital needs. Therefore, our responses included 81% who favoured bank finance for less than one year and the remaining were those who either needed finance to acquire fixed capital or for future business expansion.

We had asked our sample what the requirements of financial institutions with respect to collateral were to secure their extended loan. This response gave us tremendous insight towards the mindset of our banking system for 54% of responses stated collateral value to be more than twice the amount of credit facilities extended by banks. The remaining responses included 31% which indicated that the value of collateral required by banks was double than the loan amount extended to them. As to the type of collateral asked by banks, 74% has provided personal assets and most of the firms are either sole proprietorship and partnership concerns and 64% had provided business assets which includes plant and machinery.

Table 8: External financing position of SMEs

Question #		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
16	**Bank borrowing**					
	Procedure for obtaining bank loan is simple	38%	36%	25%	2%	0%
	Banks are responsive to SME Financing needs	36%	41%	21%	2%	0%
	Bank's general commercial lending policies are favourable to SMEs	31%	35%	31%	4%	0%
	Collateral is pre-requisite for getting the loan	0%	0%	26%	29%	45%
	Banks charge SMEs higher interest than bigger firms	0%	11%	46%	30%	14%
	It is not difficult for good projects to get loans	6%	30%	50%	13%	1%
	Firms with strong financial statements get loans easily	6%	33%	49%	11%	1%
	It is easier to get short term loan than long term	5%	33%	48%	14%	1%
	SMEs face unfair competition from large enterprises in competing for bank loans	0%	0%	39%	53%	8%
	The banks charge drastically higher interest rates on the loan taken	0%	12%	10%	45%	33%
17	**Inaccessibility of bank loans**					
	SMEs lack of required collateral	6%	44%	29%	13%	8%
	SMEs cannot provide reliable financial information to prove their creditworthiness	35%	42%	18%	4%	1%
	SMEs are usually too young to have enough information	32%	54%	8%	5%	0%
	Loan application procedure is complex and time consuming	1%	1%	31%	18%	48%
	SME loan request is too small to be worth considering	9%	44%	40%	6%	1%
	Accounting systems used by SMEs is under standard	18%	42%	32%	7%	0%
	High interest rates charged on SME borrowings	0%	12%	12%	42%	34%
	Small size of owner's equity	11%	32%	41%	15%	0%
18	**Policy support**					

There are clear strategies to promote SMEs	10%	51%	38%	0%	1%
Generally polices are in favour of larger firms	0%	0%	41%	52%	8%
Business associations are helpful in getting loan from banks	6%	26%	66%	2%	0%
Guarantee Schemes for SME borrowings are available	6%	30%	63%	1%	0%
Technical support for SMEs in accessing to bank credit is available	8%	50%	40%	2%	0%
There are special financial institutions to promote SMEs	14%	53%	30%	3%	0%
There are policies that encourage commercial banks to lend to SMEs	22%	54%	21%	3%	0%
There are subsidies in place for interest payment	30%	45%	13%	11%	0%
Business services available are aimed at larger firms	0%	1%	38%	56%	6%
SMEs would like further support in accessing finance	0%	1%	33%	41%	25%

Source: Developed by the researcher

Table 8 adequately measures the discouragement borne by the SME entrepreneurs owing to several factors. SMEs being unstructured entities suffer from information asymmetry making it difficult for them to approach banks for credit. Unlike large companies SMEs do not post large financial figures and as their financial information is not reliable hence, they are termed as a 'risky venture'. This poses a serious hurdle for even importers and exporters who might be able to obtain bank loans but endure a very lengthy and tedious procedure before their loan is finally disbursed. This results in unnecessary delays in business activities and adds to their discouragement. The policy support chartered by the government and the SBP is very useful but according to the above responses of SMEs it seems that it has not been properly extended covering all SMEs throughout the country. If the SMEs of the two most industrially developed provinces of Pakistan face such information gap, then what can be said about the situation of SMEs in the rest of the country. For instance, the country's central bank directly deals with loan products beneficial for exporters alone, but the other credit products are introduced and handled by commercial banks who still feel reluctant in pursuing SMEs.

Table 9: Future Prospects of SMEs

Question #	Characteristics	Options	Response %
19	Expected business growth graph in the next 2 years	Substantial Growth	13%
		Moderate Growth	29%
		No change	51%
		Reduction of business	6%
20	How you expect to finance growth of business	Internal funds only	38%

		External finance only	1%
		Both Internal and External	61%
21	Most important limiting factors to obtain external finance for future growth	No obstacles	1%
		Insufficient collateral	19%
		High Interest Rate	31%
		Lack of information	17%
		Others:	
		Bank loan is Forbidden	32%
		Lack of credibility of SMEs	5%
		Bank's tedious / lengthy process	31%
		Banks Unapproachable	28%
	Network effects / Extrinsic Religiosity	Yes	32%
		No	68%

Source: Developed by the researcher

The above table does not illustrate a very promising future of SMEs in the country for 51% envision no future growth and most of those who do are exporters and can utilize export-related financial products extended directly by SBP at very subsidized rate. Despite facing reluctance or discouragement 61% of the SMEs still feel that they do require funds from external sources to grow their business. The 38% of SMEs who still insist on using internal funds face extrinsic religiosity which is indirectly a product of eschewed information about external sources of funds. The survey has asked the sample regarding their future growth prospects to which 51% expected stagnant growth in the next 2 years and 29% indicated a moderate growth in business. To the question regarding how entrepreneurs plan to finance their business activities to attain future growth 61% favoured both internal and external sources of funds whereas 38% favoured only internal sources. The SMEs have stated several factors responsible for causing impediments in obtaining formal credit. This in turn adversely affects the overall growth and performance of this sector.

The above figures paint a rather interesting picture of the country's SME sector. It is stated that 50% of the SMEs did not even try to obtain external credit from banks out of which 64% believe that being Muslims they cannot acquire formal finance as loan is prohibited in Islam.

There seems to be a significant communication gap between SMEs and banking system where alternative lending such as Islamic finance can be found. Islamic finance which in recent years has gained tremendous popularity not only in the Muslim world but beyond. This gap has given rise to extrinsic religiosity among SMEs who are rigid in their beliefs that bank credit is out of question as it is prohibited and therefore refuse to explore other options. Therefore only 37% of the entire sample size use external sources to finance their business out of which more than 53% comprise of importers and exporters who are assisted directly by the SBP to enhance their trade. As established earlier the SMEs are generally opaque owing to information asymmetry which is why majority of the loans are rejected due to firms either having no credit history credit history or are too risky. SMEs cannot achieve optimal performance without the option of external finance which is evident from the fact that 93% of entities experienced an adverse impact on their growth due to their failure to obtain bank credit.

Generally, a company requires short-term credit to cater to their day-to-day business activities are SMEs in this area are no different. 73% of the SMEs obtained working capital finance, duration of which is less than a year. While examining the collateral requirement of the banks it can noticed that 85% of the collateral taken by banks is either double or twice the amount of loan extended to an SME. The collateral equal to the loan amount is usually in the form of liquid security. Furthermore, the interest rate charged by the banks is extremely high, which further deteriorates the situation.

3.10 Conclusion

This chapter analyses data collected on SME financing based on empirical research highlighting certain characteristics of SME outlook which have been overlooked previously. Firstly, 85% of SME owners in our sample fall under the mature age group which is between 26 and 55 years with 96% of them holding reasonable academic qualifications and 92% of our respondents have reached an established business cycle which shows that they have succeeded in establishing their businesses for more than 5 years and out of which 50% of them have done so without any funded or non-funded assistance from financial institutions. The other 50% that applied for a loan 74% managed to get their loans approved out of which

53% were importers and exporters. This clearly shows that the focus of banks in case of SMEs is limited to firms pursuing trade related activities which cannot be otherwise performed without the presence of a bank. Moreover, 31% of the respondents who were approved credit were asked by their financial institutions to provide collateral equivalent to double the amount of loan extended and 54% of them provided more than 2 times the amount of loan extended to them. The rate of interest charged is also considerably high with 65% of the respondents either charged 3 months' KIBOR plus 3% spread or 3 months' KIBOR plus 4% spread. This brings to light the absence of a business association between banks and SMEs which goes a long way in reducing such heavy collateral requirements and transaction costs.

Secondly, although 56% of the respondents proclaim for having the necessary knowledge pertaining to financial bookkeeping yet none of them show much interest in maintaining proper audited financial accounts. This clearly visible by analysing the responses received on the subject of compiling financial statements where 50% of the respondents disclose maintenance of financial accounts and that too are only kept because these firms are either maintaining credit facilities with financial institutions or are interested in applying for formal loans. One of the mandatory requirements of all financial institutions when receiving a loan request for businesses is a copy of audited financial accounts of the firm along with the loan application form. The remaining 50% of the respondents who did not apply for formal credit refuse to hire an auditor as they treat it as an unnecessary expense. This underlines the extent of information opacity present within the Pakistani SME structure.

Finally, 50% of the respondents did not apply for bank loans out of which 65% stated that loans are forbidden according to Islamic Sharia (law). These firms in turn obtained informal credit from their respective social networks, an act which is in complete contradiction to their beliefs that if loans are forbidden in Islam, then why are these firms taking loans from their family and friends? A loan is a loan whether obtained from financial institutions or via social networks and this paradox emphasises the presence of extrinsic religiosity within SME networks forcing them to believe that formal credit is not allowed as per the teachings of Islam. In actuality Islam only forbids riba ('usuary' or in other terms 'interest') applied on the loans extended and not upon the loan itself and we have provided several Quranic quotations prohibiting riba. The remaining 35% of the respondents who did not approach banks for credit emphasise the existence of borrower discouragement which is a form of self-induced credit rationing prevalent among SME entrepreneurs.

We dedicate our fourth chapter in studying the presence of extrinsic religiosity within SME networks and how it affects the mindset of its network members regarding formal credit.

The next chapter examines how extrinsic religiosity (ER) manifests itself in a Muslim majority country and considers its effects on both the mindset of SME entrepreneurs and the performance of their businesses. We show that the silent but deep-rooted influence of ER within SME networks adversely influences the mindset of SME entrepreneurs, making them more likely to harbour distorted views regarding the overall business environment including the availability and suitability of formal credit. The goal of this study is to add to the existing research regarding SME financing by critically evaluating ER as a core component impeding access to formal credit. On the whole, our findings reveal the origin of ER within the SME network, its detrimental effect on the mindset of SME entrepreneurs, subsequently deteriorating the growth of SMEs and how formal credit can be the answer to solving this enigma.

4. DOES EXTRINSIC RELIGIOSITY AFFECT SME FINANCING DECISIONS AND PERFROMANCE? EVIDENCE FROM PAKISTAN

4.1 Introduction

This is largely accepted, after decades of study in this field, that finance is an essential motivator of economic progress particularly in middle income economies (Ayyagari et al., 2020). SMEs are particularly reliant on external finance as their capital and retained earnings may not be enough to support their growth aspirations. In this context, it is imperative to distinguish financial deepening (i.e., availability) from financial accessibility (Ayyagari_et al., 2020). In emerging markets, SMEs are more reliant on bank credit but are normally avoided by financial institutions. Thus, they are more susceptible to credit constraints and financial exclusion, hampering their progress, innovation and growth (Stiglitz and Weiss, 1981, Beck et al., 2008, Nguyen et al., 2022). To strengthen the SMEs, it is crucial to provide them the means of obtaining additional funds necessary for their growth and expansion as the capital and retained earnings of these firms alone do not support the required advancement.

Mpofu and Sibindi, (2022) recognise that financial exclusion of firms in certain instances can be voluntary and this usually the case in developing countries where the entrepreneurs lack management expertise due to low literacy level and exclude the option of external finance as part of their capital. According to Nguyen and Canh (2020), entrepreneurs falls under four categories with respect to their credit decisions, the first category comprises of businessmen who do not opt for external credit, second are the ones who utilise formal credit, third consist of those who use informal sources of funds and the fourth are entrepreneurs who make use of both informal as well as formal means of credit.

To investigate the problem of credit constraint, we conducted a questionnaire survey in Pakistan as highlighted in Chapter Three. During our survey it was revealed that a substantial portion of the respondents refuse to even approach banks for credit, stating that the leaders of their social group believe it to be forbidden according to Islamic Sharia (law). This is a very interesting finding for it stands in contradiction to the actual Islamic Sharia (law) which has placed restriction only on the interest involved in obtaining formal credit and not upon the credit itself. According to Islamic Sharia (law) "Allah (SWT) has permitted trade and has forbidden interest" (Holy Quran, 2:275), "Allah destroys interest and gives increase for charities." (Holy Quran 2.276). We find several quotations in the Holy Quran forbidding only interest charged on loans but nowhere is it stated that an individual cannot acquire a loan.

We have already established in Chapter Two that according to the existing literature, the main reason for SME's weak access to finance in developing countries is the existence of informational frictions (Beck, 2013), where the financial institutions are not well developed (Nguyen et al., 2022). To overcome informational frictions and other institutional challenges, SMEs in developing countries may turn to their networks. In order to procure the much needed funds these already financially restricted SMEs turn to informal credit as an alternative to formal finance (Biggs and Shah 2006, Nguyen et al., 2022). Although the significance of networks and how they operate has gained considerable attention in recent literature, there remains a degree of ambiguity regarding their definition and explicit functions (Carson et al. 2004, Burt, 2019, Kerr and Coviello, 2020). Networks, therefore, promote social ties and trust among network affiliates (Uzzi, 1997, Le and Nguyen, 2009, Schoonjans et al., 2013). Social ties and trust in turn moderate ambiguity in transactions, dimmish costs, promote confidence and steadfastness, reduce uncertainties, and address specific institutional challenges (Kerr and Coviello, 2020).

This study discovers a rather unique aspect of credit constraint practiced by a majority of SMEs in the sample due to the total absence of communication between banks and SME firms. SME firms are generally unable to generate adequate internal funds necessary to fulfil their working capital requirements which leaves them no option other than to turn to their networks for financial assistance. By providing SMEs with some financial support, network leaders treat this shortcoming as an opportunity to instil power and authority over their financially struggling network members by proclaiming procurement of formal finance as 'haram' (prohibited) in Islam. This is a technique by which SME entrepreneurs are forced to embrace self-induced credit rationing by refusing to approach banks for financial loan even though they need it. Using religion as a tool this way usually instils fear in the hearts of its followers who even though want to approach banks for financial support (majority of them do) yet they do not question the irrationality of their network leaders' proclamation and shun bank finance. Here we consider the role of extrinsic religiosity (ER) within SME networks using a representative sample of Pakistani SMEs and demonstrate how this can lead to sub-optimal behaviours with negative consequences for firm performance and growth. Extrinsic religiosity is when individuals use religion as an instrument to nurture social connections and public approval (Cohen et al., 2005). This can be contrasted with intrinsic religiosity which has to do with following one's religion with earnestness, intentionality, and moral satisfaction (Gul and Ng, 2018). Thus, ER is comparatively less ethical and more utilitarian and is motivated by social gains, status, safety, and validation of a personal approach towards life (Allport, 1966, Lavric and Flere, 2008). In essence, ER uses religion to garner social acknowledgement (Galbraith and Galbraith, 2007) and is mainly embraced as a 'means to an end' (Khan, 2014). Economic agents in developing economies might find a need to form religious networks to support their economic activities and the stability of entrepreneurship in general and in doing so they might promote certain norms not plainly expressed through the stronger (formal) legal structures (Henley, 2017). However, these norms may trap the SME networks into a particular mindset, which may hinder the pursuit of optimal decision making vis-à-vis their entrepreneurial ventures.

In this paper, we pursue three inter-related questions. First, we ascertain the influence of ER within SME networks on SMEs' financing decisions vis-à-vis formal bank credit. Second, we examine the impact of ER on the performance of SMEs. Finally, we show how bank credit impacts on firm performance where we find that a substantial portion of the respondents refuse to approach banks for credit although they need finance, stating that the leaders of their social networks believe it to be "haram" (an act that is prescribed by Islamic Sharia [law] as forbidden). The respondents also provided us with an insight about the immense gap between banks and SMEs when they stated that they had no knowledge about an otherwise major section of banking called 'Islamic Finance'. Interestingly, many commercial banks offer Islamic financial products, that are Sharia-compliant. Moreover, this mindset also stands in conflict with the fact that SME owners themselves tend to secure funds from their family, friends and networks for the establishment and growth of their businesses, which, although informal, is also a loan. Why do these firms, on the one hand, shun *formal* credit and, on the other hand, welcome informal loans from their network members or even from other informal lenders? This paradox brings to light a dominant presence of ER within SME networks as the SMEs are more concerned in conforming with the norms dictated by their social networks to shun formal credit rather than adhering to the actual Islamic Sharia (law) which encourages entrepreneurship and finance (Wiseman and Young, 2014, Kumar et al., 2022).

The uniqueness of this study is two-fold. Firstly, such studies concerning Pakistan generally involve the use of secondary data due to the acute difficulties associated with gathering data from primary sources. Secondly, the subject of ER has been studied at length in the field of psychology but the presence of ER and its direct effects on the psyche of entrepreneurs who follow ER has never been studied before in this context. Most SME businesses in Pakistan are either sole proprietorship or partnership concerns where the owners and the business are one and the same. Therefore, the influence of a set of values on the mindset of the business owner plays a vital role on the day-to-day operational activities of the firm. This is why it is essential to study the presence of ER within the SMEs network of Pakistan and how it impacts the outlook of SME entrepreneurs who are associated with these networks, which further affects the activities of the firm.

This study makes an interesting discovery that the issue of ER has in fact stemmed from the difficulties faced by SMEs in obtaining bank credit and in turn growing into one of the dominant problems faced by SMEs in accessing formal finance in Pakistan. SMEs, owing to the existence of information asymmetry, encounter greater issues when attempting to access external sources of funds, thereby relying more on internally available sources (Gregory et al., 2005, Lopez-Gracia Sogorb-Mira 2008, Beck 2013, Nguyen et al., 2022). Similar is the case with Pakistan where most SMEs are either unable to approach banks for credit or are avoided by banks in financial inclusion, leaving them no option other than to turn to their respective business networks for informal financial support.

Our study makes several contributions to the extant literature. First, it contributes to the growing literature on SME networks concerning the demand-side of bank finance, highlighting the concept of forced self-induced credit rationing as in this case the SMEs are forced by their network leaders to embrace self-induced credit rationing. On one hand these firms require additional capital for maintenance and growth of their business by and on the other they shun formal credit proclaiming it to be ‘haram’ (forbidden). Partanen et. al., (2020) state that previous research reveals the existence of a complex interaction among different alliances, joint proficiencies, and performance and the fact that SMEs depend on relationships and trust when dealing with their business associations. Second, this sort of forced self-induced credit rationing help identify a strong presence of ER among SME networks in Pakistan keeping SME owners, who are forced to follow it, from obtaining formal finance, in turn, immensely hurting the growth of this sector. Third this research reveals the impact ER has on the mind set of SME entrepreneurs who are forced to comply with it, adversely affecting firm performance. Previous studies indicate that ER actively provokes schizotypal traits, resentment, bias, apprehension, and dejection (Salsman and Carlson 2005, Power and McKinney, 2014). Here we provide empirical evidence on how social ties can at times be detrimental to firm growth. Fourth, this study is important for policy makers as it helps them to understand the reason of this continuous widening gap between financial depth and financial inclusion among banks and SMEs, enabling them to draft policies encouraging banks to approach SMEs and forming a relationship that would effectively allow SMEs to borrow funds necessary for their growth and expansion.

This chapter is structured as follows. In the next section, we begin by analysing the Network Theory as it serves as a conduit between networks and the rise of ER within SMEs in emerging economies. We develop hypotheses on how following ER, which forbids network members from obtaining formal credit, augments pessimism among SME owners thus hindering the growth and development of SMEs in Pakistan. Our hypothesis also examines how bank credit can effectively improve firm performance. We then discuss our research methodology and analyse our findings. Finally, we highlight policy implications followed by conclusion.

4.2 Theoretical Background

To identify the presence of ER and its influence on the SME networks in Pakistan, we first discuss the network theory, the role played by networks within the SME structure and the problems caused by the over dependence on their networks by SME firms.

4.2.1 Network Theory, SME Networks and Informal Credit

Networks are gaining prominence for policy makers owing to the function they perform as agents of knowledge in national advancement. It is an acknowledged fact that a country's advancement takes place more rapidly when coupled with implicit information being its vital source (Kokkonen and Tuohino 2007, Klyver et al., 2022). There has been an emergence of a massive theoretical research recognising the potential impact of networks on the success of firms (Granovetter 1973, Hite and Hesterly 2001, Schoonjans et al., 2013). The importance of networks within SMEs has also been highlighted by literature on entrepreneurship specifically concerning access to otherwise hard-to-reach resources (Starr and MacMillan, 1990, Antoldi and Cerrato, 2020). Moreover, empirical evidence with respect to SME-network relationship benefits can also be found in studies (Watson 2007, Schoonjans et al 2013, Brennecke, 2020, Klyver et al., 2022).

Donckels and Lambrecht (1997) and Klyver et al., (2022) state that despite the growing curiosity in the subject there has still been limited empirical research concerning network theory. They further to specify a type of network called communication network which comprises of a group of people engaged in exchange of non-trading information with the small enterprise and such connections include other entrepreneurs exchanging both formal and semi-formal information. A close business association with other SME firms results in access to proficiency, reserves, and information. Moreover, entrepreneurship literature in association with SMEs find networks playing an essential role in encouraging innovation by combining diverse information and through international business research we identify the role of networks in securing business opportunities in international markets. (Johanson and Vahlne, 2003, Elango and Pattnaik, 2007, Antoldi and Cerrato, 2020).

The network relationships of SME firms may either accelerate or hinder their development (Hilmersson and Hilmersson, 2021). Research has demonstrated that firms participating actively in networking are better able to utilise external resources to overcome their internal inadequacies (Jin and Jung, 2016, Hilmersson and Hilmersson, 2021). The information received by entrepreneurs is generally inadequate owing to shortcomings in their knowledge banks which makes it an important feature (Shane, 2000). Lack of knowledge results in bounded rationality which restrains entrepreneurs from utilising their full capacity (Sullivan and Marvel, 2011). Moreover, the issue of bounded rationality also keeps entrepreneurs from using the information that they have about their business, no matter how comprehensive that knowledge might be for the survival and growth of their business. For instance, firms in their infancy face tremendous change, uncertainty, trial-and-error making new entrepreneurs unsure about which information may be apt for a particular decision. This problem is eliminated by the presence of network ties that provide SME businessmen with a focus towards apt decision making (Sullivan and Marvel, 2011, Van Burg et al., 2022).

Kerr and Coviello (2020) argue that business owners are given both power as well as limitations at the same time by the networks with which they belong. They believe that networks in general are stimulated by the needs to entrepreneurs for instance business owners trigger networking to moderate ambiguity, diminish cost of testing and uphold flexibility. Social ties are known to be the most usual type of network among friends, relatives (Granovetter, 1985) and other firm managers (Uzzi, 1997, Le and Nguyen, 2009). Schoonjans et al., (2013) state that a strong level of confidence and understanding among parties is the characteristic of a solid bond for it helps in reducing ambiguity in transactions by becoming an instrument for governance. They explain that trust in turn gives rise to certainty and steadfastness among the behaviours of the network affiliates, thus facilitating exchange of quality information. There is however a downside with such type of ties that is they are at a risk of becoming ‘over embedded’ which means that elevated frequency in flow of information among such relationships raise the probability of the members eventually having similar proficiencies and knowledge at their disposal. (Sosa, 2011, Schoonjans et al., 2013). This could hamper the creativity and mind-set and might adversely affect the firm’s capacity to adapt to change. (Uzzi, 1997, Schoonjans et al., 2013).

Most literature on SME financing has established a fact that there is information asymmetry between banks and firms, making it challenging and costly for SMEs to procure bank loans (Winborg and Landstrom, 2001, Ebben and Johnson, 2006, Mpofu and Sibindi, 2022). This in turn leads to alternative sources of capital including trade loans, credit from family and friends and government support. Such sources of funds are critically important for SMEs in developing economies, where sophisticated financial businesses are generally underdeveloped (Smallbone and Welter, 2001), and where the issues regarding opportunism and information asymmetry are more distinct (Boisot and Child, 1996). Several empirical studies support the argument that such alternative sources of funds, usually gained through networking, are cheaper and more accessible and therefore reduce the need for SMEs to procure bank finance (Le and Nguyen, 2009, Boudreaux et al., 2022). Carson et al., (2004) argue that developing network models in SMEs is complex for they are tied to their individual connections and are deeply inspired by the persona of their prime influencers. This usually transpires as most SMEs face limitations in resource and experience and desire to employ their resources proficiently and productively. They also indicate proof of SMEs employing substantial amount time in developing and maintaining strong network connections.

Burt (2019) defined a closed network where its members are interlinked which happens in situations where all the individuals involved are bound with one another or there is a powerful lead contact with whom all the others are firmly connected. He understands that such networks are a drawback which is apparent from inferior performance.

The overdependence of SMEs on their respective networks for informal sources of funds provide network leaders with greater authority and power. To run the network according to their terms and conditions, network leaders employ certain methods and as Pakistan is an ideological country, the most effective means of dominance is the use of religion to control their networks.

4.2.2 The Practice of ER within SME Networks in Pakistan

To better understand how religion is directed by network chiefs to exude power over their network members, we begin by investigating the term 'religiosity', its types and its association with the entrepreneurial mindset.

There is limited research on the role of religion in entrepreneurship and management and more questions pertaining to its influence on businesses (Balog et al., 2014, Henley, 2017). Dana (2009) observed that generally, a religion does not directly conflict with entrepreneurial activities, rather the value system influences entrepreneurial behaviour. It has been found that there seems to be a sound relationship between religion and seeking counsel from co-ethnics, for instance, practising Muslims often count on the guidance from their Muslim brothers. Bellu and Fiume (2004) discuss the 'conceptualisation of religiosity' in which they identify two approaches namely substantive and functional. Substantive conceptualization of religiosity lays emphasis on spiritual practice and explores what one has faith in instead of why he has that faith. In other words, substantive approach stresses upon the significance of faith and religious law. Functional conceptualisation of religiosity on the other hand concentrates on why one is religious, thus focusing on the motivational aspects of faith. The functional aspect of religiosity has given rise to religious orientation namely 'intrinsic' and 'extrinsic'. Gul and NG (2018) explain that intrinsic religiosity is generally followed to gain moral satisfaction and is comparatively more ethical than ER which is the result of the environment that nourishes a certain set of religious beliefs and values influenced by social and cultural norms, which in turn shape the behaviour of an individual. Lavric and Flere (2008) confirm that one of the conspicuous components of ER is achievement of social gains which in turn has a positive psychological impact on a person's anxiety.

Therefore, intrinsic religiosity pertains to the true essence of a religion whereas extrinsic religiosity is where religion is manipulated for achievement of specific worldly goals. So, we focus on extrinsic religiosity to investigate how it is being employed by SME network leaders and what impact it has on the mindset of SME network members

During our survey, it was revealed that 50% of the 416 entities included in the sample had not even tried to approach banks *(refer to Table 5(8) in Chapter 3)* out of which 65% responses strongly suggested that bank loans are forbidden as per the teachings of *(refer to Table 6(9) in Chapter 3)* and therefore this option of obtaining funds from external sources was out of question. In order to identify whether the religiosity being practised within the SME networks in Pakistan is in fact 'extrinsic', it is important to first understand the teachings of the actual Islamic Sharia (law) as stated in the Holy Quran. Islamic Sharia (law) clearly states[1]: "O you

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[1] The Quran is the principal source of Islamic law, known as the "Sharia". We follow Tlaiss (2015) and rely on the following translation of the Quran: *Saheeh International (Eds): 2004, The Qur'an (Al-Muntada al-Islami)* as a source. In the referencing, we use the standard practice of chapter number followed by the verse number. The

who have believed, fear Allah and give up what remains [due to you] of interest, if you should be believers" (Holy Quran 2:278), "O you who have believed, do not consume usury, doubled and multiplied, but fear Allah that you may be successful" (Holy Quran 3:130), "And [for] their taking of usury while they had been forbidden from it, and their consuming of the people's wealth unjustly" (Holy Quran 4:161), "Whatever you give for interest to increase within the wealth of people will not increase with Allah. But what you give in Zakah [almsgiving], desiring the countenance of Allah - those are the multipliers" (Holy Quran 30:39).

Above are several quotations from the Holy Quran which clearly state that interest is in fact forbidden in Islam. However, there also remains no doubt that the constraint is on interest alone and not on the loan. The Islamic doctrine does not place any restrictions on the procurement of credit whether formal or informal for the purpose of either business sustenance or growth. Abedifar et al., (2016) state that similar to other Abrahamic religions like Judaism and Christianity, Islam too supports credit which does not involve interest in order to prevent the poor from further financial oppression, in turn, mitigating income. They further explain that arguments forming the basis of prohibition of interest is promotion of social impartiality, income equality and entitlement of property. On one hand, Islam encourages profits earned through trade but on the other, forbids charging of interest, for profit is referred to as ex post which represents a fruitful entrepreneurship and enhancement of capital whereas interest, defined as ex ante is a cost payable irrespective of the consequence of business activities and in the event of a loss may not create any wealth. Social justice requires that assimilation and dissemination of wealth should represent the true productivity in the economy by encouraging borrowers and creditors to shares both rewards as well as losses equally (Iqbal and Mirakhor, 2011). The Islamic doctrine which is very clear about interest and loan where the two are treated separately, while the former is totally forbidden, the latter allowed unconditionally.

The information solicited from the SMEs during our survey clearly reveals that these entities are in fact not adhering to the true Islamic Sharia (law) which only forbids payment of interest and not the actual procurement of external funds which includes formal credit. This reinforces

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Saheeh International Quran text is available via: https://alrashidmosque.ca/wp-content/uploads/2019/05/The-Quran-Saheeh-International.pdf our approach regarding the presence of ER within the SME network in Pakistan, where actual Islamic Sharia pertaining to formal credit is not being followed. This contributes to extant literature, the mind-set of a substantially large group of the SME sample which is grouped under the ambit of ER. Therefore, the findings of this study add a new dimension around the relationship between bank financing, networking, credit rationing and firm performance.

4.3 Hypothesis

4.3.1 ER and SME Entrepreneur's Mind set

De Noble et al., (2007) highlight that the influence of religion on the progress of humankind is a topic that has fascinated social scientists for a long time also identifying the complexities associated with examining correlations between religious orientation and human psychology while exploring the relationship between religiosity and entrepreneurial mind set. This ambiguity is the result of lack of empirical research in this area and the complexity of the equation that binds religion orientation to entrepreneurial pursuit and economic success. Balog et al., (2014) further endorsed the complexities associated with distinguishing a relationship among religiosity, entrepreneurial mind set and economic progress resulting due to the absence of empirical research on the subject. Scholars have encouraged research focusing on the incentive and mind set of entrepreneurs along with their individual beliefs and customs. (Krueger, 2007, Bird and Schjoedt, 2009). Researchers whose study was originally focused on economic development discovered that financial achievement is not the principal focus of entrepreneurs in starting or sustaining their business (Balog et al., 2014). Zulkifli and Rosli (2013) state that although there is ample literature that reveals a significant influence of religiosity on people and the effect those beliefs have on their attitudes and decisions, yet this perspective is overlooked while exploring the various characteristics of an entrepreneur. Dodd and Seaman (1998) discovered that religious motivation of small firm owners keenly influenced their business decisions. The study supports that, owners abiding by religious beliefs, tend to guide their business decisions accordingly (Zulkifli and Rosli 2013). Researchers have learnt that intrinsic religiosity promotes a promising relationship with emotional intelligence as opposed to ER which stimulates an adverse correlation with emotional intelligence (Zulkifli and Rosli 2013). According to the study conducted by Genia

(1996) ER amplifies psychological depression and distress. Watson et al. (1986) stated a concern regarding social desirability which involves a constant awareness of one's public appearance, which, whether genuine, should remain positive at all times, thus promoting anxiety and stress for fear of being consistently evaluated by others. The responses received by SMEs during our survey clearly revealed that these SMEs were trapped within their networks, on one hand, indulging in self-induced credit rationing pertaining to formal credit and on the other hand, unable to grow their businesses with the meagre financial assistance available through their networks, leading to pessimism. Therefore, based on the above arguments, the first hypothesis of this paper is as follows:

H1: SMEs follow ER which leads to a pessimistic mindset; H0: SMEs follow ER which does not result in a pessimistic mindset

4.3.2 ER and SME growth

H1 suggests ER nurtures pessimism in the minds of SME entrepreneurs. Pessimism usually gives rise to discontentment and gloom, so we examine what impact this has on SME growth. Growth is a measure of the performance of in a firm's efforts and is usually measured by the amount of revenue realized as the result of these activities. There is an absence of literature due to the lack of empirical research pertaining to ER and firm performance. According to Allport (1959) ER is not the main purpose in one's life but plays an instrumental one only which is achievement of self-interest. Here one does not serve one's religion, but that the religion is warped to serve him. This may result in the conception of certain detrimental traits in SME entrepreneurs. ER tends to encourage undesirable characteristics, instead of nurturing religious faith and conviction as it is a self-serving approach employed to achieve social norms that suit oneself. This approach is positively related with anxiety, prejudice and is negatively related with philanthropy(Donahue 1985). Baker and Gorsuch (1982) identified certain traits such as anxiety, ego weakness, lack of self-sentiment and paranoia to be negatively related with intrinsic religiosity but positively related with ER. Wincenta et al., (2010) state that strong ties might result in confining an entrepreneur's inclination in responding to potential prospects. They also point out that managing such relationships occupy precious reserves and time. Ties are a 'two-way street' which might result in one firm becoming dependent on others, thus extending power to the other members, and resultantly hindering innovation and giving rise to disputes and opportunism. Since majority of SMEs in Pakistan are either sole proprietorship or partnership concerns it means that the owner and the firm are one and the same. Therefore, following ER fosters a negative mindset which in turn has a detrimental effect on firm performance, causing impediment in growth. As examined above, the second hypothesis of this paper is:

H2: Following ER adversely affects the growth of SMEs in Pakistan; H0: Following ER does not adversely affect the growth of SMEs in Pakistan

4.3.3 Formal external credit and SME firm growth

H1 and *H2* clearly imply the presence of ER and the toxic effect it has on the mindset of SME owners and consequently firm growth. Now we examine the impact of formal credit on firm performance to help identify a way to break this barrier of despair. Previous studies have shown a positive relationship between access to external finance and the performance of businesses. According to Pissarides (1999), surveys conducted throughout the world point out to one major constraint faced by SMEs and that is lack of finance for business growth. This problem emerged from economies under transition usually characterized by underdeveloped capital markets where access to finance is based on historic data and networks which link banks and financial institutions with other companies. The activities of banks and other financial institutions are based on experience and trust. They also depend upon macroeconomic stability, the track record of potential borrowers, their managerial ability and accounting skill. The obstacles faced by SMEs with regards to access of finance is also reflected in their financing patterns. In case of large firms more than 20% of their financing is catered through bank credit whereas in case of SMEs less than 10% of their working capital needs are met with bank finance. Similarly, large firms enjoy a comparative advantage in terms of trade credit and development finance contradictory to SMEs which finance a major portion of their investment through equity, informal finance and other internal sources in place of bank credit. (Beck et al., 2006, Konte and Ndubuisi, 2021). Availability of finance has been discernible by a rise in the proportion of start-up SMEs as well as opportunities for SMEs to grow into vibrant and transformative entities (Beck 2013, Beck et al., 2019). Given the role of formal external finance in enhancing SME growth, the third hypothesis of this paper is:

H3: Bank Credit enhances firm performance; H0: Bank Credit does not enhance firm performance

4.4 Data and Measures

4.4.1 Study Setting, sampling and data collection

Our empirical study, as discussed in the earlier chapters, has been conducted on Pakistan focusing on the two industrially developed provinces namely the Sindh and the Punjab. The data was collected in Pakistan through a questionnaire survey conducted on 416 SMEs out of which 412 were male and 4 were female small and medium size business owners. The data was collected over a period of over 4 months from December 2018 to March 2019.

We have used mixed method approach in our study.

4.4.2 Qualitative Analysis

A two-stage sampling procedure was followed where in the first stage the personnel who could approach SMEs were identified for, as previously discussed, that procuring information from SMEs in Pakistan is an extremely challenging task. In the next stage these firms were approached, and questionnaires were discussed with each respondent in order to make them understand as the questions were in English which is not the first language in Pakistan. The main body of the questionnaire focused on the size of the SMEs and problems being faced by them regarding access to finance.

Questionnaire analysis was the best method for this research as the SMEs in Pakistan are not very sophisticated therefore the best way to make them participate in the survey is through questionnaires, which is designed on a simple format, easy for them to understand. Moreover, through questionnaire survey it was easier to reach a large group of SMEs spread over two culturally diversified provinces of Pakistan. Cultural diversification in Pakistan has resulted in different credit requirements within SME sector. Most importantly, the required information was collected while maintaining the anonymity of the participants who were reluctant to disclose their identities. Considering the general mind-set of the SME entrepreneur we designed the questionnaire using simple English, using easy to understand words and largely used multiple choice of Likert scale to collect the responses. English is a second language in Pakistan which is why it was better to keep the responses as succinct as possible.

Random sampling in two completely different geographical locations has been used in this survey as it precisely represents the SME firms being examined in different locations of the country and applied random sampling methods, thus providing greater precision in data collection. This ensures that each subgroup within the SME firms is accurately illustrated in the sample and also my using this technique we aim to eliminate selection bias. The main purpose of using questionnaires for survey was to collect first-hand data from SMEs, as in the case of Pakistan not much actual information is available concerning problems faced by SMEs in obtaining formal credit.

The questionnaire consisted of a combination of multiple-choice and closed ended questions using Likert scale, covering areas of the firm including demographic, financial information, state of external financing, future growth, obstacles to growth, discussed in detail in Chapter Three.

4.4.3 Quantitative Analysis

i) Dependent variables

Our two main variables of interest here are Mindset and Annual Sales. According to H1, SMEs who follow ER end up with a pessimistic mindset for they are trapped between the self-proclaimed ideology of their networks claiming bank loans to be forbidden in Islam and their need for adequate additional funds for maintenance and growth of their businesses which adversely alters the mindset of SMEs. In other words, it leads to sub-optimal behaviour in relation to bank finance, which, in their case, is crucial for firm growth. During the survey, 65% of the responses suggested that the main reason for not obtaining bank credit (*refer to Table 6(9) in Chapter 3*) was the fact that such loans are "haram" or forbidden according to Islamic Sharia (law). Once we dig deeper and ask further questions, such as the one regarding the main sources of external funds (*refer to Table 6(10) in Chapter 3*) we notice that 65% opted for other sources namely family and friends for financial support. The exact similarity in response percentage reveals that respondents who proclaim bank loans to be forbidden in Islam are the same who are being supported by their family and friends and as already established, the social and business networks of SME entrepreneurs are generally one and the same. Therefore, we realise that these firms are under the influence of network pressure, leaders of which use an askew version of religion as a controlling mechanism to effectively gain power over its members. Similarly, the most important limiting factor in obtaining bank credit for future growth *(refer to Table 9(21) in Chapter 3)* also goes to the opinion that bank credit is prohibited in Islam where out of 416 responses 32% feel that way. Thus, we use a dummy variable coded "1" for SME entrepreneurs who are in need of credit but believe that it is 'haram' (forbidden) as prescribed by Islamic law according to the interpretation and view of their (religious) network members and "0" otherwise.

Our first dependent variable in H1 is a measure capturing pessimistic mindset regarding formal credit. To capture this, we solicit information on the perceptions of the entrepreneurs concerning formal finance using a five-point Likert scale with 1 = strongly disagree and 5 = strongly agree. To this end, we ask the extent to which they agree or disagree with the following four statements: 1) banks are not responsive to SME financing needs, 2) SMEs cannot provide reliable financial information to prove their credit worthiness, 3) There are no guarantee schemes for SME borrowings, and 4) there are no special financial institutions that promote SMEs, placing it under the ambit of 'Mindset'. Rajala and Tidstrom (2022) focus on the subjective perceptions of managers to recognise and gauge their mindset by using a t point Likert scale with 1 being fully disagree and 7 fully agree. On the basis of these variables, we create an index using factor analysis, with higher values implying adverse mindset or pessimism. In relation to the index, factor analysis is an appropriate tool to simplify multifaceted datasets involving numerous variables. It also facilitates different variables to be condensed into a few and thus help recognise clusters of responses.

In testing hypotheses two and three (H2 and H3), we use the log of firm sales as the dependent variable to test the effects of ER on firm performance and the role of bank credit in firm performance. Firm performance is taken as a dependent variable which can be measured by a firm's sales and the respondents in this instance were asked to report their total annual sales in a fiscal year (Kijkasiwat and Phuensane, 2020). In this paper our dependent variables are Mindset in one instance and firm Sales in another.

ii) Independent variables

In H1 our main independent variable is *ER* and the relationship it has on the mindset of SME entrepreneurs. We have also incorporated *FF Network* (family and friends network) to gauge the effect of informal finance on SME entrepreneurs. FF Network also referred to as social capital comprises of family support, personal and social relations (Dar and Mishra, 2020)

In H2 we have *ER*, to identify the influence of *ER* on the Sales of the firm, where annual sales being the measure of firm performance. We have *Financial Sophistication* to observe their impact of firm performance. The absence of audited financial statements is a typical trait of SMEs leading to informational opacity and ultimately financing constraints (Lu et al., 2022). We complete our set of independent variables by adding the level of discouragement of SME owners and the effect it has on firm performance. Here we include responses received from SMEs regarding Subsidies in place for interest payment, Lack of collateral, Banks are unapproachable, SME accounting system under-standard, Effort in obtaining external finance, Insufficient collateral, Lack of credibility of SMEs.

In H3 we study the effect of bank financing on firm performance. Here we have included *Working Capital, Term Loans, Credit Procurement firm structure, financial sophistication*, *financial bookkeeping*. Working capital and trade credit in particular is the main source of capital for majority of businesses throughout the world (Mättö and Niskanen, 2021).

iii) Control Variables

Firm Stage is included to show the relationship between the stage of the firm in the development cycle, thus gauging the maturity of the firm. Older entities are considered more creditworthy for they have survived the period of infancy (Cole and Sokolyk 2016). We then have Proprietorship followed by Partnership to observe the association between the firm structure and the general mindset of SME entrepreneurs. Proprietorships and Partnerships are used as proxies for measuring organisational structure (Cole and Sokolyk 2016).

Table 1 Descriptive Statistics of Variables

Characteristics		Variables	Code
Extrinsic Religiosity		ER	Dummy
Firm Orientation	Proprietorship Partnership		Dummy Dummy
Firm Stage	Stage of business (young /established)		Likert scale 1-5
FF Network	Family and friends' network		Dummy
Financial sophistication	Financial statements complied by own self Journal Ledger Annual reports Financial Forecasting		Dummy Dummy Dummy Dummy
Entrepreneur's Mindset	Banks are responsive to SME financing needs SMEs cannot provide reliable financial information to prove creditworthiness Guarantee Schemes for SME borrowings are available There are special financial institutions to promote SMEs	Mindset	Likert scale 1-5 Likert scale 1-5 Likert scale 1-5 Likert scale 1-5
Level of discouragement	SME accounting system under-standard SMEs lack of required collateral Banks are unapproachable Subsidies in place for interest payment Collateral is pre-requisite for getting the loan Lack of credibility of SMEs Credit Procurement		Likert scale 1-5 Likert scale 1-5 Likert scale 1-5 Likert scale 1-5 Likert scale 1-5 Likert scale 1-5 Dummy

4.4.4 Model Estimation

To test the hypotheses, factor analysis was employed. Factor analysis is the best analysis tool when used to simplify multifaceted data sets involving numerous variables. Our questionnaire was comprised of multiple-choice answers and Likert scale and for that alone, factor analysis is the best choice. It also facilitated many variables to be condensed into a few and helped recognising clusters of responses. When using Likert scale the quantity of variables can become cumbersome and factor analysis helps simplifying data thus providing researchers focus the clarity on their results. Moreover, factor analysis also assists in identifying correlations in variables.

In this study, we explicitly account for the fact that there is heterogeneity in relation to both entrepreneurial pessimistic mindset and firm performance (i.e., our two dependent variables). In other words, it is important to take into account the differential effects the independent variables may have across the entire distribution of the dependent variables. This is particularly useful for policy purposes as it is likely that the behavioural responses of SME entrepreneurs in relation to, for example, ER may not be constant; some SME entrepreneurs may be more pragmatic (i.e., may display lower levels of pessimism), others may, for example, follow religious doctrines more rigidly and thus may display higher levels of pessimism.

This suggests that the standard OLS estimator may not be appropriate since it captures the average effect, and thus, assumes that covariates, such as ER, have a constant effect on SME performance or mindset. Thus, we utilise the unconditional quantile regression estimator (UQR) as proposed by Firpo et al., (2009), which does not impose this restrictive assumption; it allows the marginal effects to vary across the distribution of the dependent variable conditional on the explanatory variables. As shown by Frolich and Melly (2013), the UQR is consistent, efficient and asymptotically normally distributed. In addition, it yields more precise estimates than the traditional conditional quantile regression (CQR) estimator of Koenker and Bassett (1978). Finally, it should be emphasised that our data are clustered given that the SMEs are nested within various localities/districts. Thus, the assumption of independence of observations is most likely violated as the residuals at the SME level may be related to that of the locality/district. To overcome this, we cluster the standard errors at the district level.

UQR approach facilitates in quantifying and investigating the impact of a specific issue on the unconditional distribution of results, regardless of other variables (Khanal et al., 2018). In our case the effect of ER on SMEs mindset and performance. In such cases the use of OLS (Ordinary Least Squares) estimators are unable to capture this kind of heterogeneity as it is established on location shift models (Khanal et al., 2018). OLS estimation is based on conditional means of dependent variables and by least squares.

UQR has a clear benefit over both the CQR (Conditional Quantile Regression) and OLS approach. The unconditional effect derived from UQR gauges the complete impact of ER on the Mindset of SME entrepreneurs and SME firm as the distribution in the UQR approach is not affected by specific covariates, but instead by the complete distribution The benefit of applying the UQR method is that it assists in providing information related to policy making by capturing the entire distribution of outcome variables (Dong and Yoon, 2020). Therefore, research suggests that UQR is preferred for analysis which is focused on policy making (Bonanno et al., 2018, Dong and Yoon, 2020). Our study is based on finding the relationship between ER, SME owner's Mindset, SME Performance which are all variables associated with policy interest.

Robustness Checks

To test for endogeneity, a two-step method followed proposed by Lee (2007) for UQR is followed. In first step, we estimate control function on the key independent variable ER. In second step, we use the control function as an additional variable in the Quantile Oaxaca decomposition. Even though, Lee's (2007) method is predominantly used in conditional quantile regression, it can also be applied to Firpo et al., (2009) UQR and this confirms that there is no endogeneity. To validate the robustness UQR was run multiple times using different independent variables and the result remained significant at all times. Finally, we check for multicollinearity where we have used Variance Inflation Factor (vif) and the results for all our variables are less than ten which clearly shows that there is no issue of multicollinearity in our sample.

4.5 Analysis and Results

4.5.1 Potential biases

To evaluate SME entrepreneurs that follow ER and the impact it has on their mindset we estimate the following model *(H1)*:

$$\boldsymbol{Y}\ (\boldsymbol{\beta Mindset}) = \ f\ (x'\beta)$$
$$= \ f\ (\boldsymbol{\beta 0} + \boldsymbol{\beta ER} + \boldsymbol{\beta FOrient} + \ \boldsymbol{\beta FStage} + \boldsymbol{\beta FFNetwork} + \boldsymbol{\varepsilon}).$$

The influence of SMEs following ER on firm performance is assessed through the estimation of the following model *(H2)*:

$$\boldsymbol{Y}\ (\boldsymbol{\beta logsales}) = \ f\ (x1'\beta)$$
$$= f(\boldsymbol{\beta 0} + \boldsymbol{\beta ER} + \boldsymbol{\beta FOrient} + \boldsymbol{\beta FStage} + \ \boldsymbol{\beta FFNetwork} + \boldsymbol{\beta FS} + \boldsymbol{\beta EntDisc} + \boldsymbol{\varepsilon}).$$

The impact of bank finance on firm performance is gauged by estimating the following model *(H3)*:

$$\boldsymbol{Y}\ (\boldsymbol{\beta logsales}) = \ f\ (x2'\beta)$$
$$= \ f\ (\boldsymbol{\beta 0} + \boldsymbol{\beta BF} + \boldsymbol{\beta CP} + \ \boldsymbol{\beta FS} + \ \boldsymbol{\beta FB} + \boldsymbol{\beta FOrient} + \boldsymbol{\beta FStage} + \ \boldsymbol{\beta FFNetwork} + \boldsymbol{\varepsilon}).$$

Table 2 - Firm Characteristics and Corresponding Econometric Treatment

Characteristics	Dependent Variables	Independent Variables	Formula
Entrepreneurs' Mindset	Mindset		Mindset
	Annual Sales		Logsales
Extrinsic Religiosity		ER	ER
Friends and Family Network (FF Network)			FFNetwork
Firm Orientation		Proprietorship Partnership	FOrient
Firm Stage		Year Established Stage of business (young /established)	FStage
		Financial Sophistication	FS
		Financial Bookkeeping	FB
		Credit Procurement	CP
		Entrepreneurs' Discouragement	EntDisc
Working Capital and Trade Loans		Bank Finance	BF

Table 3: ER and Entrepreneurial Pessimism

Table 3 illustrates the relationship between ER and entrepreneurial pessimism in Pakistan. The binary dependent variable is ER. Sales is the natural log of sales. Proprietorship and partnership represent firm structure and are dummy variables taking the value of 1 if there is a negative relationship between firm structure and ER and 0, otherwise. Firm Stage also represents firm structure and is determined through the Likert scale, taking the value of 5 if a business is established and 1 if it is young. FFNetwork represents the strength of family and friends' networks and is a dummy variable, taking the value of 1 if there is a negative relationship between family and friends' network and 0, otherwise. Qual represents the highest qualification achieved by the Owner and is determined through the Likert scale, taking the value of 5 if the owner is highly qualified and 1 if the owner is not. Mindset represents four explanatory variables, Bank's responsiveness to SME financing needs; SMEs inability to provide reliable financial information to prove creditworthiness; availability of Guarantee Schemes on SME borrowings, and Special financial institutions to promote SMEs, and is determined through Likert scale

Mindset	1	2	3	4	5	6	7	8	9
Extrinsic	0.527	0.575	1.44	0.527	0.575	1.44	0.527	0.575	1.44
Religiosity	[0.099]***	[0.120]***	[0.148]***	[0.099]***	[0.120]***	[0.148]***	[0.099]***	[0.120]***	[0.148]***
Proprietorship	0.01	0.169	0.351	0.01	0.169	0.351	0.01	0.169	0.351
	[0.183]	[0.179]	[0.108]***	[0.183]	[0.179]	[0.108]***	[0.183]	[0.179]	[0.108]***
Partnership	0.088	0.17	0.196	0.088	0.17	0.196	0.088	0.17	0.196
	[0.190]	[0.190]	[0.116]*	[0.190]	[0.190]	[0.116]*	[0.190]	[0.190]	[0.116]*
Firm Stage	0.367	0.343	0.137	0.367	0.343	0.137	0.367	0.343	0.137
	[0.215]*	[0.194]*	[0.179]	[0.215]*	[0.194]*	[0.179]	[0.215]*	[0.194]*	[0.179]
FF Network	0.025	-0.072	0.029	0.025	-0.072	0.029	0.025	-0.072	0.029
	[0.105]	[0.113]	[0.115]	[0.105]	[0.113]	[0.115]	[0.105]	[0.113]	[0.115]
Constant	-1.883	-1.218	-0.627	-1.883	-1.218	-0.627	-1.883	-1.218	-0.627
	[0.666]***	[0.607]**	[0.556]	[0.666]***	[0.607]**	[0.556]	[0.666]***	[0.607]**	[0.556]
N	416	416	416	416	416	416	416	416	416

*Standard errors in brackets * p<0.10, ** p<0.05, *** p<0.01*

Table 3 illustrates the relationship between ER and entrepreneurial pessimism in Pakistan. The binary dependent variable is ER. In Table 3 *Mindset* is taken as a dependent variable and we notice a positive and significant relationship between *ER* and *Mindset* at the 1% level across all model specifications clearly indicating the level of influence of social networks on a firm's business activities. The variable *Mindset* is comprised of the responses provided under 'Entrepreneur's Mindset' in Table 1 and a positive and significant relationship with *ER* reveals the level of pessimism among these SME firms which is considerably high. Furthermore, there is a positive relationship between *Firm Orientation* and *Mindset*. The relationship is positive and significant at the 1% level for Proprietorship in models 3, 6 and 9. We observe a positive relationship between *Mindset* and *FF Network* across all model specifications, except models 2, 5 and 8. Across the remaining specifications, the relationship is positive. This affirms that firms use their social networks as alternative sources in obtaining external funds for their businesses. Therefore, hypothesis *H1* is accepted as the presence of ER does magnify pessimism in the hearts of SME entrepreneurs. We, therefore, reject the null.

Table 4: Firm Characteristics and Firm Performance

Table 4 illustrates the relationship between firm characteristics and firm performance. The dependent variable is logsales which is a proxy for firm performance. Sales is the natural log of sales. Proprietorship and partnership represent firm structure and are dummy variables taking a value of 1 if there is a negative relationship between firm structure and ER and 0, otherwise. Firm Stage also represents firm structure and is determined through the Likert scale, taking the value of 5 if a business is established and 1 if it is young. FFNetwork represents the strength of family and friends' networks and is a dummy variable, taking the value of 1 if there is a negative relationship between family and friends' network and 0, otherwise. FS represents the financial sophistication of the SME and comprises of four variables, Financial statements compiled by owner; Journal Ledger; Annual reports, and Financial Forecasting, and is a dummy variable taking a value of 1 if the SME is financially sophisticated and 0, otherwise. EntDisc represents the SME owner's discouragement level and comprises of seven variables, Subsidies in place for interest payment; Lack of collateral; Banks being unapproachable; sub-par SME accounting system; Effort in obtaining external finance; Insufficient collateral, and Lack of credibility of SMEs, and is determined through Likert Scale. P-values indicate the statistical significance at 10%, 5% and 1%, respectively.

Sales	1	2	3	4	5	6	7	8	9
Extrinsic Religiosity	0.35	-1.003	-0.136	-1.399	-2.311	-1.22	-1.399	-2.311	-1.22
	[0.383]	[0.384]***	[0.128]	[0.372]***	[0.565]***	[0.438]***	[0.372]***	[0.565]***	[0.438]***
Proprietorship	0.042	-0.252	-1.282	0.198	0.219	-0.9	0.198	0.219	-0.9
	[0.187]	[0.257]	[0.514]**	[0.221]	[0.269]	[0.506]*	[0.221]	[0.269]	[0.506]*
Partnership	-0.206	-0.468	-0.749	-0.137	-0.166	-0.456	-0.137	-0.166	-0.456
	[0.193]	[0.264]*	[0.497]	[0.206]	[0.251]	[0.478]	[0.206]	[0.251]	[0.478]
Firm Stage	0.49	0.217	0.851	0.472	0.056	0.673	0.472	0.056	0.673
	[0.350]	[0.417]	[0.333]**	[0.268]*	[0.355]	[0.319]**	[0.268]*	[0.355]	[0.319]**
FF Network	0.267	0.353	0.084	0.186	0.347	0.148	0.186	0.347	0.148
	[0.187]	[0.197]*	[0.237]	[0.171]	[0.183]*	[0.233]	[0.171]	[0.183]*	[0.233]
Self	-0.357	-0.775	-2.1	-0.048	-0.268	-1.52	-0.048	-0.268	-1.52
	[0.362]	[0.433]*	[0.375]***	[0.413]	[0.461]	[0.397]***	[0.413]	[0.461]	[0.397]***
General Ledger	-1.322	-0.573	-0.58	-1.307	-0.405	-0.433	-1.307	-0.405	-0.433
	[0.503]***	[0.290]**	[0.292]**	[0.472]***	[0.257]	[0.288]	[0.472]***	[0.257]	[0.288]
Annual Report	0.7	1.051	-0.77	0.158	1.459	-0.942	0.158	1.459	-0.942

	[0.495]	[0.546]*	[0.340]**	[0.579]	[0.719]**	[0.591]	[0.579]	[0.719]**	[0.591]
Financial Forecasting	0.892	1.632	3.734	0.551	1.216	3.634	0.551	1.216	3.634
	[0.186]***	[0.280]***	[0.428]***	[0.184]***	[0.266]***	[0.426]***	[0.184]***	[0.266]***	[0.426]***
Subsidies in place for interest payment				-0.413	-0.202	0.233	-0.413	-0.202	0.233
				[0.131]***	[0.146]	[0.192]	[0.131]***	[0.146]	[0.192]
Lack of collateral				-3.072	-1.067	0.439	-3.072	-1.067	0.439
				[0.517]***	[0.601]*	[0.420]	[0.517]***	[0.601]*	[0.420]
Banks being unapproachable				-0.704	-0.97	-1.191	-0.704	-0.97	-1.191
				[0.210]***	[0.250]***	[0.369]***	[0.210]***	[0.250]***	[0.369]***
SME accounting system sub-par				-0.125	-0.498	-0.108	-0.125	-0.498	-0.108
				[0.145]	[0.199]**	[0.248]	[0.145]	[0.199]**	[0.248]
Effort made in obtaining external finance				-0.436	-0.779	0.391	-0.436	-0.779	0.391
				[0.259]*	[0.367]**	[0.622]	[0.259]*	[0.367]**	[0.622]
Insufficient collateral				-0.644	-1.308	-0.864	-0.644	-1.308	-0.864
				[0.265]**	[0.320]***	[0.402]**	[0.265]**	[0.320]***	[0.402]**
Lack of credibility of SMEs				-0.262	-1.543	-2.108	-0.262	-1.543	-2.108
				[0.355]	[0.460]***	[0.694]***	[0.355]	[0.460]***	[0.694]***
Constant	0.531	2.903	3.862	3.048	5.538	4.4	3.048	5.538	4.4
	[1.156]	[1.315]**	[1.119]***	[1.079]***	[1.384]***	[1.302]***	[1.079]***	[1.384]***	[1.302]***
N	416	416	416	416	416	416	416	416	416

*Standard errors in brackets * p<0.10, ** p<0.05, *** p<0.01*

Table 4 illustrates the relationship between firm characteristics and firm performance. The dependent variable is logsales which is a proxy for firm performance. In Table 4 we have used unconditional quantile regression, with firm *Sales* being the dependant variable. The results of all variables in Table 4 show that, overall, a negative relationship exists between ER and firm performance. The coefficient for *ER* is negative and significant at 1%, indicating high extrinsic religious orientation amongst SMEs in Pakistan. The results are robust and statistically significant across all specifications, except model 1. The results reveal that stage of business, family and friend's network have a positive effect on the firm's performance. We have included the forms of annual accounts maintained by the firms which in turn provides an insight on the level of *financial sophistication* achieved by the SMEs so far and what effect it has on the performance of the firms. Firms who maintain annual accounts and financial forecasting improve their performance as maintenance of audited accounts has a positive relationship with firm performance. In contrast firms that maintain journal ledgers and bank statements only, fail to enhance their level of performance. The results for both are highlight significant at the 1% level across all model specifications. Therefore, the higher the level of financial sophistication the greater is a firm's transparency in business operations resulting in a positive effect on firm growth. We include responses provided by the SMEs on Likert scale, which we have clubbed under *'Level of discouragement' (refer to Table 1).* We observe that the responses received have a negative and significant impact on the performance of SMEs, which reveals an acute level of discouragement experienced by SME owners. This can be established by studying each variable and its effect on firm performance. Therefore, this regression clearly demonstrates a negative and significant relationship between the level of discouragement felt by SME owner's and the impact it has on their performance. Following ER does adversely affect the growth of SMEs in Pakistan and so we accept *H2.* We, therefore, reject the null.

Table 5: Banking Financing and Firm Performance

Table 5 illustrates the relationship between bank financing and firm performance. The dependent variable is logsales which is a proxy for firm performance. Sales is the natural log of sales. BF represents Bank Finance and comprises of two variables, working capital and trade loans, and is a dummy variable taking the value of 1 if the SME has access to bank finance and 0, otherwise. Credit Procurement represents SMEs efforts in obtaining external finance and is a dummy variable taking the value of 1 if the SME has made any effort in obtaining external finance and 0, otherwise. Proprietorship and Partnership represent firm structure and are dummy variables taking a value of 1 if there is a negative relationship between firm structure and ER and 0, otherwise. Firm Stage also represents firm structure and is determined through the Likert scale, taking the value of 5 if a business is established and 1 if it is young. FFNetwork represents the strength of family and friends' networks and is a dummy variable, taking the value of 1 if there is a negative relationship between family and friends' network and 0, otherwise. EntAge represents the owner's age and is determined through the Likert scale. FS represents the financial sophistication of the SME and comprises of four variables, Financial statements compiled by owner; Journal Ledger; Annual reports, and Financial Forecasting, and is a dummy variable taking a value of 1 if the SME is financially sophisticated and 0, otherwise. FB represents the SMEs knowledge of financial booking and is a dummy variable taking the value of 1 if the SME has the knowledge of financial bookkeeping and 0, otherwise. P-values reported indicate the statistical significance at 10%, 5% and 1%, respectively.

Sales	1	2	3	4	5	6	7	8	9
Working Capital	0.735	1.515	1.57	0.735	1.515	1.57	0.735	1.515	1.57
	[0.316]**	[0.363]***	[0.525]***	[0.316]**	[0.363]***	[0.525]***	[0.316]**	[0.363]***	[0.525]***
Trade Loan	1.427	1.841	0.386	1.427	1.841	0.386	1.427	1.841	0.386
	[0.294]***	[0.414]***	[0.698]	[0.294]***	[0.414]***	[0.698]	[0.294]***	[0.414]***	[0.698]
Credit Procurement	-0.912	-2.145	-0.486	-0.912	-2.145	-0.486	-0.912	-2.145	-0.486
	[0.343]***	[0.402]***	[0.632]	[0.343]***	[0.402]***	[0.632]	[0.343]***	[0.402]***	[0.632]
General Ledger	-1.125	-0.472	-0.684	-1.125	-0.472	-0.684	-1.125	-0.472	-0.684
	[0.481]**	[0.283]*	[0.296]**	[0.481]**	[0.283]*	[0.296]**	[0.481]**	[0.283]*	[0.296]**
Financial Forecasting	0.991	1.571	3.3	0.991	1.571	3.3	0.991	1.571	3.3
	[0.217]***	[0.324]***	[0.483]***	[0.217]***	[0.324]***	[0.483]***	[0.217]***	[0.324]***	[0.483]***
Self	0.006	-0.062	-2.079	0.006	-0.062	-2.079	0.006	-0.062	-2.079
	[0.370]	[0.392]	[0.409]***	[0.370]	[0.392]	[0.409]***	[0.370]	[0.392]	[0.409]***
Annual Report	0.125	0.202	-0.561	0.125	0.202	-0.561	0.125	0.202	-0.561
	[0.554]	[0.861]	[0.664]	[0.554]	[0.861]	[0.664]	[0.554]	[0.861]	[0.664]
	0.715	2.949	-0.532	0.715	2.949	-0.532	0.715	2.949	-0.532

Financial Bookkeeping	[0.526]	[0.725]***	[0.552]	[0.526]	[0.725]***	[0.552]	[0.526]	[0.725]***	[0.552]
Proprietorship	0.176	-0.032	-1.168	0.176	-0.032	-1.168	0.176	-0.032	-1.168
	[0.188]	[0.251]	[0.497]**	[0.188]	[0.251]	[0.497]**	[0.188]	[0.251]	[0.497]**
Partnership	0.000	-0.181	-0.569	0.000	-0.181	-0.569	0.000	-0.181	-0.569
	[0.193]	[0.249]	[0.476]	[0.193]	[0.249]	[0.476]	[0.193]	[0.249]	[0.476]
Firm Stage	0.625	0.063	0.701	0.625	0.063	0.701	0.625	0.063	0.701
	[0.323]*	[0.334]	[0.310]**	[0.323]*	[0.334]	[0.310]**	[0.323]*	[0.334]	[0.310]**
FF Network	0.339	0.451	0.107	0.339	0.451	0.107	0.339	0.451	0.107
	[0.188]*	[0.190]**	[0.231]	[0.188]*	[0.190]**	[0.231]	[0.188]*	[0.190]**	[0.231]
Constant	-0.192	1.57	4.071	-0.192	1.57	4.071	-0.192	1.57	4.071
	[1.125]	[1.120]	[1.138]***	[1.125]	[1.120]	[1.138]***	[1.125]	[1.120]	[1.138]***
N	416	416	416	416	416	416	416	416	416

*Standard errors in brackets * p<0.10, ** p<0.05, *** p<0.01*

Table 5 illustrates the relationship between bank financing and firm performance. The dependent variable is logsales which is a proxy for firm performance. We begin by including *Bank Finance* and observe a positive and significant association with *Sales* at 1% level. We also add *Credit Procurement* and the negative relationship with *Sales* significant at 1% level confirm the SME firms who have not applied for bank finance suffer from reduced firm performance. It is observed from Table 5 that the level of financial sophistication has a positive effect on firm performance. *Financial Forecasting* has a positive and significant association with *Sales* at the 1% level followed by *Annual Accounts* and *Financial Bookkeeping* whereas *General Ledger* and *Self* have an adverse relationship with *Sales*. This confirms that the more financially sophisticated a firm becomes the more improved is their performance. There in an inverse relationship between *Proprietorship* and *Partnership* with *Sales* but a positive one with *Firm Stage* and *Sales*. There is a positive relationship between *FF Network* and *Sales* as most firms as most firms acquire additional finance from their social networks in order to establish or grow their business. The above assessment provides a clear picture of the significance of external funds necessary for the growth and performance of SMEs in Pakistan and how important it is for these firms to approach financial institutions to improve their cash flows leading us to accept *H3.* We, therefore, reject the null hypothesis.

4.6 Analysis and Discussion

Our analysis of *H1, H2* and *H3* shows a potent presence of ER which is boosting an unhealthy influence on the mindset of SME entrepreneurs which in turn is detrimental to firm performance in Pakistan. Our first model examining *H1* is applied to establish the presence of ER within the social network of SMEs in Pakistan and the effect it has on the mindset of the SME owner. We have included the variable Firm Structure in all three models as most of the firms included in the sample are either sole proprietorship or partnership concerns where the owner and the firm are one and the same and the entrepreneur is directly involved in the daily business operations. However, such firms are referred to as 'unstructured' and are therefore extremely prone to suffer from unlimited liability in case of default which brings them under the term 'risky ventures' by financial institutions. Moreover, the capital raised by these firms is quite meagre as the former is a one-man show and the latter comprising of a small group with constrained resources constricting any room for growth. In order to procure additional funds SMEs suffering from financial constraints turn to informal means of finance as a substitute for formal credit and informal credit may come from several sources like friends and family, business associates and private money lenders (Nguyen et al., 2022). This is important as here a positive relationship with ER would mean a direct impact on the mindset of the entrepreneur which in turn would directly affect firm activities. Moreover, we observe that as most of the responses have come from businesses that are established and have achieved a certain level of maturity the extent of the influence of ER is considerably deep-rooted.

The variable of family and friends network is also included in all three models for it shows the presence of a strong social network within the SME firm owners. The presence of this network has a positive effect on ER as well as firm performance as this is the only source of external funds the SMEs have for either establishment or growth of their business. However, a setback of this source of finance is that the SME borrowers become vulnerable to their creditors in getting their rules dictated to them and they have to follows these norms whether they like it or not. Also, these creditors are also short on liquidity and so the SME borrowers is unable to get the amount of funds actually required for the growth of business. The positive and significant relationship between Entrepreneur's Mindset and ER and an adverse impact of ER on future growth of firms shows the significant level of pessimism in the hearts of SME entrepreneurs and how effectively it is hindering the future performance and growth of these firms. *H1* suggests that following ER nurtures pessimism in the minds of SME entrepreneurs. Pessimism usually gives rise to discontentment and gloom so let us examine what impact this has on SME performance. *H1* and *H2* clearly suggest a positive inclination of SMEs towards procurement of formal credit despite the massive influence of ER within their social network. The willingness but inability of SME firms to approach banks for credit along with their lack of performance or growth of their business amplifies their pessimism which traps them in a vicious cycle.

The main reason for building the third model is to examine *H3* which shows how bank credit can break this vicious cycle and enhance firm performance if SMEs are allowed an opportunity to approach banks for finance. Like most previous studies here too we observe a positive relationship between access to external finance and the performance of SME firms. The analysis in *H3* identifies a positive influence of working capital finance and trade loans on firm growth. As established earlier the SMEs are generally opaque owing to information asymmetry which is why loans are usually rejected due to firms either having no credit history or are too risky. SMEs cannot achieve optimal performance without the option of external finance which is evident from the fact that around 93% of entities experienced an adverse impact on their growth due to their failure to obtain bank credit *(refer to Table 6(14b) in Chapter 3).*

Table 3 summarises our findings in relation to the drivers of entrepreneurial pessimism. In the model, we control for a number of potential determinants of pessimistic mindset including SME characteristics (i.e., structure and maturity), owner characteristics (i.e., firm stage [proxy for experience]) and whether they rely on family and friends' networks in their day-to-day business operations. The study on SMEs has provided sufficient proof that small firms suffer from credit constraints comparatively more than large companies as they are informationally opaque and therefore their uncertainty increase making them riskier and on top of that lack adequate collateral (Levenson and Willard 2000, Berger and Udell 2006, Beck and Demirguc-Kunt 2006, Hlioui et al., 2022). On the whole, the results indicate, consistent with hypothesis 1 (H1), that extrinsic religiosity is associated with entrepreneurial pessimism in relation to credit, a result which is statistically significant at the 1% level. This implies that the negative views in relation to formal credit is the result of ER, which fosters a negative mindset where SME entrepreneurs are not thinking rationally but are driven by the desire to conform with the norms dictated by their social networks. In this particular case, the norms view formal credit as "haram" even though this is not the case. Thus, ER exacerbates market failures such as informational frictions that are already rampant in developing countries such as Pakistan. As mentioned previously, ER is associated with stress and anxiety for fear of being evaluated by others.

In Table 4, we explore the effects of ER on SME performance. The results in the first three columns show that ER has significant detrimental effects on firm performance. This is consistent with our prior expectations. We argue that practising ER results in pessimism in the minds of SME entrepreneurs as they view the business environment more unfavourably than it really is. For instance, they may use the leaders of their social networks as the only source of information but questioning this information may be associated with risks including potential exclusion and ostracization. Thus, entrepreneurs in this type of environment may lack knowledge regarding the availability of alternative sources of formal financial assistance or products so they may have little option than to follow the system put into place by their respective network leaders and in this case, it is self-induced credit rationing. Moreover, they may exclusively rely on their networks to obtain financing although this type of informal financing may not be appropriate for their growth aspirations. It should be emphasised that when SMEs become dependent on others within their social networks, then this in effect implies that their decision making may be influenced by others. This may hinder innovation and give rise to opportunistic behaviour.

It is important to explore the relationship between ER and SME performance while accounting for general discouragement factors. According to the literature on discouraged borrowers, SMEs may refrain from seeking bank credit if they perceive banks as being unwilling to deal with them or if they are smaller, younger or with less capital (Mac an Bhaird et al., 2016; Gama et al., 2017). Thus, there is a risk that ER may be capturing general borrower discouragement among the SMEs. Therefore, in columns 4 – 6, we include seven proxies capturing different dimensions of borrower discouragement. Interestingly, the coefficient of ER becomes larger and statistically significant at the 1% level across the different distributions. Thus, we confirm our second hypothesis (H2) that ER does adversely affect the performance of SMEs in Pakistan.

As one would expect, we find that borrower discouragement factors are associated with lower SME performance. The use of family and friends' network has a positive influence on performance whereas there is diminishing returns to owner experience. Considering financial sophistication, basic tools such as self-produced financial statements and journal ledgers are associated with poorer performance while more advanced tools such as professional annual reports and financial forecasting are associated with stronger performance.

Our final exercise is to ascertain the effects of bank finance on SME performance as proposed by hypothesis 3 (H3). Table 5 summarises the results. Accounting for SME and owner characteristics, financial sophistication, discouragement and use of family and friends' networks, our results show that obtaining bank credit for working capital or trade positively influence firm performance. This finding provides a clear picture of the significance of external funds for the growth and performance of SMEs in Pakistan. The result also underlines how important it is for SMEs to approach financial institutions to improve their financial outlook.

Our study explains the vicious cycle that has trapped SMEs in Pakistan who require additional funds to grow while at the same time avoiding commercial banks, which leaves them with a sole alternative of relying on their networks for financial support. There are certain downsides to such support in Pakistan, the main one being the undue influence of SME network leaders who use ER to harness power within their network. This opens a window of opportunity for network leaders to gain power over their indebted members and force them not to approach banks for credit, labelling it as 'haram' (forbidden) triggering self-induced credit rationing. SME networks are not as financially liquid as banks and therefore are only able to provide limited funds to their members which is not enough to enhance SME performance leading to stagnation in growth. SME members who are unable to find any way out of this situation feel constricted, giving way to a feeling of pessimism and gloom identified through our focus groups and confirmed by our hypotheses, H1 and H2. The purpose of testing H3 is to check whether bank credit is indeed associated with higher performance, which we confirm. Thus, if SMEs had access to bank credit, they would not need to rely on their networks so much as access to funds and alternative forms of finance would make them more self-reliant while enabling them to make their own decisions regarding their business operations instead of looking to their network leaders for approval.

The chasm between SMEs and financial institutions has given levy to the intensive growth in practising of ER within the SME networks, thus amplifying the rigidity in their beliefs that bank credit is out of their reach due to the belief that bank loans are prohibited. This also implies that businesses that form part of the SME networks use ER to conform to prevalent cultural and social norms, instead of following the core ideas of their religion, this, in turn, is having a detrimental effect on their mindset and subsequently on their performance.

4.7 Conclusion

A financially strong SME sector can play a pivotal role in the process of economic development as it can facilitate job creation, innovation and economic efficiency. For this sector to prosper, however, it needs an enabling environment that allows entrepreneurs to make optimal decisions based on their specific needs. In the context of Muslim majority countries such as Pakistan, informational frictions coupled with extrinsic religiosity (ER) can lead to unique challenges for SMEs. On the one hand, SMEs are more susceptible to credit constraints and financial exclusion while at the same time being more reliant on bank credit. On the other hand, a significant fraction of SMEs dismiss bank credit all together resulting in greater financial dependence on their business and social networks.

Using primary data and applying unconditional quantile regressions, we examine the effects of ER on entrepreneurial pessimism. Our results show that ER has significant adverse influence on the mindset of the SME entrepreneurs, making them more likely to harbour distorted views regarding the overall business environment including the availability and suitability of formal credit. Throughout the paper, we have argued that ER is closely related to social desirability, which involves the need to conform to prevailing norms within one's network in order to avoid becoming a social pariah. Thus, ER can be a potent tool that can be used to control network members and one of the most effective methods employed is invoking the word "haram" to dissuade SMEs from seeking (formal) credit from financial institutions.

Our results also show that ER has a significant negative influence on SME performance. There are various potential reasons for this observed adverse effect. For example, entrepreneurs within SME networks where ER is prevalent tend to spend more time and resources to maintain and manage these network relationships, instead of focusing on and pursuing what is best for their own business. Moreover, the high frequency interactions within the network leads to over embeddedness, which in turn is associated with uniformity in relation to proficiencies, mindset and knowledge within the network. In addition, ER discourages the search for useful information relating to one's business because the main source of information would be from those within the network due to trust issues. Also, the SME's decision-making may not be optimal given their informational gaps but also due to the desire to conform to the norms within the network. Therefore, ER fosters a negative mindset which in turn has a detrimental effect on the performance of SMEs.

To the best of our knowledge, this paper is one of the first to explore why SMEs that need external finance shun formal credit while at the same time borrowing from informal channels including those within their networks and leaders. This paradox underlines the presence of ER as this group of people are essentially following those who control their social, business and religious network, which in this case is one and the same. The irony is that those the SMEs are procuring finance from are also the ones who propagate the view that obtaining finance from banks is "haram". This means that the SME networks are caught in a vicious circle, where they cannot approach banks due to potential social consequences, so they seek credit from informal channels though this may not be appropriate for their specific needs. Interestingly, our results show that bank credit does have a significant positive influence on firm performance. Therefore, utilising less appropriate sources of finance is impediment to SME vibrancy.

In conclusion, the findings of this study add a new dimension to the existing literature on the relationship between financing, networks and firm performance in an emerging market context where religiosity plays a significant role. Our study calls for policies that can minimise the gap between SMEs and financial institutions by enlightening the SMEs about the availability of external capital that is Sharia-compliant instead of relying exclusively on sub-optimal informal loans. Our study can be extended to other countries in Asia and Africa where there is majority of Muslim entrepreneurs sharing similar beliefs whilst operating in challenging environments with significant informational frictions.

The next chapter investigates the mindset of discouraged borrowers formed owing to the indulgence of self-credit rationing, which over time has created a vitriolic outlook among SMEs regarding formal finance thus building an insurmountable challenge to the acquisition of SME credit. This is a unique study based on empirical data, focusing on the opinion of SMEs concerning bank credit as majority of them have reached a mature business cycle, and yet refuse to approach financial institutions for credit thus broadening the gap between the need for credit and its actual utilisation in this poorly developed sector.

5. CAUSTIC PERCEPTION OF DISCOURAGED BORROWERS – A DETRIMENT TO SME FINANCING?

5.1 Introduction

Access to finance for firms holding favourable prospects of investment is vital for economic growth, however, there is a group of SME firms which although have positive opportunities for investment yet refuse to apply for external credit for fear of rejection and are referred to as 'discouraged borrowers' (Kon and Storey, 2003, Cowling et al., 2016, Rostamkalaei et al., 2020, Morales, 2022). Discouraged borrowers fall under the category of borrowers who although require additional finance for enhanced performance and future growth yet do not venture towards formal credit as an option of obtaining funds. Discouragement among prospective borrowers is a prevailing result in the financial market (Rostamkalaei et al., 2020; Anastasiou et al., 2022). Prior research on the literature of borrower discouragement focused on understanding the entrepreneurial traits leading to discouragement (Chakravarty and Xiang, 2013, Mac an Bhaird et al., 2016, Morales, 2022).

The purpose of this study is to examine how the psyche of an already discouraged borrower is further aggravated due to the caustic mindset regarding bank finance. The central idea of this chapter is to examine a crucial aspect of these discouraged borrowers which has not been studied before which is how the frustration caused by the refusal to approach banks for a loan on one hand and the need for additional funds essential for the performance and growth of their businesses on the other has constructed a silent but stalwart barrier between banks and financial institutions thus trapping the SME firms in a vicious circle of stagnant growth. Discouragement can be effective if it discourages risky borrowers but detrimental if it disheartens healthy borrowers from approaching for credit (Kon and Storey, 2003). The topic of borrower discouragement among SMEs until recent times has not been much researched and pretty much overlooked (Cowling et al., 2016, Brown et al., 2022). This is the first detailed analyses of the perspective of SMEs regarding bank finance based on empirical research.

The supply of credit which is determined by its availability is generally the focus of most studies (Petersen and Rajan, 1994, Berger and Udell, 1995, Cole and Sokolyk, 2016) but the demand for finance which is assessed by its need usually remains unobserved (Cole and Sokolyk, 2016). The aspect of demand for SME finance has not received adequate notice reason for which might be the gaps in information regarding our comprehension of the mechanism involving small business lending (Cole and Sokolyk, 2016). The choice of an SME entrepreneur not to procure credit due to fear of loan rejection is considered a substantial impediment to firm investment. (Levenson and Willard, 2000, Mac an Bhaird et al., 2016). SME firms that although require credit yet make no effort in acquiring it for fear of being refused are known as discouraged firms and studies discovered that the number of discouraged firms were twice as many as those that were refused a loan for the aspect of discouragement amongst borrowers is quite challenging to explore because in contrast with loan rejections, discouragement is generally overlooked (Freel et al., 2012, Mac an Bhaird et al., 2016, Drakos and Giannakopoulos, 2018). Some research can be found on such firms, but they are usually clubbed with rejected borrowers which is why the characteristics specific to them remain ambiguous and the core assumption of a discouraged borrower is that although SMEs require finance, yet they refuse to apply for credit believing that their request for a loan would be rejected owing to previous instances. This absence of motivation to seek external credit would result in SME entrepreneurs downgrading their business goals (Xiang et al., 2014).

In theory, borrower discouragement is the direct result of failures in the financial market (Fraser et al., 2015, Morales, 2022). The main reason for the occurrence of borrower discouragement is the prevalence of asymmetric information in the financial market (Stiglitz and Weiss, 1981, Morales, 2022). In order to help overcome the obstacles faced by SME concerns in accessing credit governments all over the world have introduced several schemes to boost the supply of finance such as loan guarantee schemes and funds to raise initial capital for businesses in hopes of filling the alleged demand and supply gap of funds (Levenson and Willard, 2000). Bank lending being the main source of external credit for businesses raise the issue to credit rationing as in most cases SMEs even though being credit worthy are unable to access finance at any price (Stiglitz and Weiss 1981, Freel et al., 2012), causing discouragement among SME borrowers who refuse to apply for credit owing to fear of rejection.

This chapter makes four distinct contributions to present literature: First, this is the first study focusing on the major consequence of discouragement prevalent among SMEs which is dissatisfaction of SME firms due to their refusal to approach banks for credit as well as their lack of additional funds and how it widens the gap between financial institutions and SMEs, thus giving rise to a caustic outlook towards bank credit. Second, the data collected from Pakistan is unique for this is empirical research considering that gathering first-hand information from SMEs in Pakistan is extremely arduous. Third, this study is not only beneficial in understanding the issues faced by SMEs when approaching banks for credit, but this model can be replicated in most developing as well as developed economies around the world facing similar constraints pertaining to SME lending. Several studies have focused on the problems faced by SMEs in acquiring bank credit when compared with large companies in both the developing as well as the developed countries (Berger and Udell, 1998, Du et al., 2017). Fourth, the study can help policymakers devise appropriate measures to counter the constraints faced by SMEs in procuring formal credit. Dong and Men (2014) confirm that substantial amount of study has been conducted on SME financing constraints in the emerging economies but because most of these markets are still in transition and therefore not perfect which is why it is essential to understand the credit needs specific to these SMEs when designing polices to encourage SME progress.

A clearer perception of these firms would greatly assist policy makers in forming informed policies (Cole and Sokolyk, 2016). The outcome of our findings would provide policymakers a new perception regarding the type of policies required to be introduced specifically targeting discouraged borrowers, encouraging them to initiate and maintain their relationships with financial institutions for procurement of additional finds essential for their growth and expansion.

The next section of this paper states the relevant literature followed by section three which explains the research hypothesis and methodology and section four describes the model estimation. We discuss the results in section five and conclude in section six with implications and prospects for future study.

5.2 Theoretical Background

5.2.1 The Theory and Concept of Discouraged Borrowers

Our study is based on the theory of discouraged borrower introduced by Kon and Storey (2003) and investigates how inaccessibility of the banking sector affects the already discouraged borrowers leading to a caustic outlook of SMEs towards bank finance. The definition of a discouraged borrower is a creditworthy concern in need of credit refuses to approach the bank for a loan by choice for fear that its request might be turned down. (Kon and Storey, 2003). The level of discouragement in an economy might be the result of the amount incurred on application costs, banks' screening errors and the interest rate charged by banks as compared to those extended by moneylenders (Freel et al., 2012).

Studies highlight information opacity to be the root cause of a discouraged borrower whereas attainment of trustworthy information from SMEs suffering from information asymmetries is the main worry faced by lenders, affirming that asymmetric information results in banks having inferior information about the borrowers and gathering information becomes more costly (Han et al., 2009, Naegels et al., 2022). On the other hand, information asymmetry leads to certain SMEs not applying for finance even though they require funds for their business and this group of SMEs is known as discouraged borrowers who are creditworthy but refuse to apply for credit fearing that their request might be rejected (Kon and Storey 2003, Naegels et al., 2022).

By studying discouraged borrowers, we can assess the efficacy of financial institutions in extending credit to SMEs regarding application costs and screening errors. The most decerning characteristic of discouraged borrowers is that they are generally overlooked (Kon and Storey

2003). This situation is exacerbated by the presence of information asymmetries thus making it impossible to gauge the quality of an SME business (Han et al., 2009, Naegels et al., 2022).

Qi and Nguyen (2021) through the study of their survey conducted across 30 countries in Eastern Europe and Central Asia conclude this region to be categorised as highly corrupt where there is less likelihood of businesses having their legal rights safeguarded and therefore do not have much faith in their legal and financial structures. This results in the creation of informal relationships which thrive in this environment and have a potent sway on how business activities are carried out.

Information asymmetry between borrower and lender results in credit rationing as the borrower is unable to measure the merit of SME projects and despite the fact that banks apply various lending mechanisms to finance SMEs which suffer from information opacity yet most of these firms continue to face credit constraints (Artola and Genre, 2011). A well-cited feature responsible for restrained credit supply to 'good' borrowers is the frequency of loan refusals (Mac an Bhaird et al., 2016).

High interest rates are also identified as a significant driver in spreading discouragement amongst creditworthy borrowers in Eastern Europe in applying for finance (Brown et al. 2011). A higher financing cost might lead to good firms suspending or relinquishing their investment prospects (Mac an Bhaird et al., 2016). Kon and Storey (2003) developed the theory of discouraged borrowers explaining the reason for the existence of such group by building on the theories related to credit rationing which focused on the main issue involving these firms which is asymmetric information.

Research related to discouraged borrowers has become the focus of a number of academics, researchers and policy makers. One of the main reasons for this is the substantial number of discouraged borrowers which have been reported in previous studies (Cole and Sokolyk, 2016, Freel et al., 2012) so much so that they outweigh the ones that are in fact rejected. This phenomenon also points out towards market failure as discouraged borrowers highlight market imperfection where this misplaced fear of rejection within the SME structure may have strong implications on the economic wellbeing (Rostamkalaei et al., 2020).

The significance of borrower discouragement can be observed in the example provided by Popov (2016) which states the negative effect on the balance sheet of monetary policy if discouraged borrowers are not included in the account. Constraints in accessing credit owing to borrower discouragement can have significant impact on real economic consequences on employment, sales and investment. (Ferrando and Mulier, 2022).

Academics identify borrower discouragement as a massive hindrance to investment growth (Levenson and Willard, 2000, Mac an Bhaird et al., 2016). They also verify that credit worthy firms that refuse to apply for credit for fear of rejection are twice as many, which results in the level of investment being sub-optimal. (Levenson and Willard, 2000, Freel et al., 2012, Mac an Bhaird et al., 2016).

Brown et al., 2022 in their study identify a complex mix of features that shape borrower discouragement among SMEs. The precise reason causing borrower discouragement is still ambiguous despite various studies on this topic which is basically due to borrower heterogeneity. The responses received in various surveys on borrower discouragement mark fear of refusal of their credit application as a primary factor. However, there are several other instances where issues pertaining to covenants and collaterals are also identified as a chief cause (Chakravarty and Xiang 2013, Cowling et al., 2016).

Freel et al., (2012) place considerable weightage on the demand -side of formal credit by stressing upon the enormity of the number of discouraged borrowers as compared to the ones that are refused and placing emphasis on the issues of discouraged borrowers to be addressed rather than focusing on the supply-side of credit. They give examples of reasons that lead to discouragement such as costly credit applications and interest rate charges by banks on credit.

5.2.2 SMEs discouragement out of fear versus out of informal turndown

The study of borrower discouragement brings to light two forms of discouragement, one which is invoked due to fear of refusal of loan application and the other is the result of informal turndowns by financial institutions. In the first instance the borrower is unaware of his creditworthiness and therefore only assumes that his credit application might be unsuccessful but in the second case the borrower is verbally informed beforehand by the financial institution with which he has a business relationship about the fate of his application if he chooses to apply for a loan. Rostamkalaei et al., (2020) explain another demand side aspect by presenting the phenomenon of informal turndowns, which has not been discussed much, to develop a better understanding of the restraints experience through the demand side of accessibility to credit.

Brown et al., (2022) in their paper use the example of Rostamkalaei et al., (2018) who in their study have examined two different types of borrowers who have indulged in self-credit rationing, the first one are those who refuse to approach financial institutions for credit due to fear of rejection or they think that it might not be the right time to apply for credit. The second are the ones who did not apply only when their lenders had verbally reused them finance hinting that if they do apply for credit their loan application would most likely be refused.

Here we discuss two types of loan discouragement experienced by SMEs one which involves entrepreneurs to fear approaching banks for credit based on their own self-analysis and second are those SMEs which have received prior information from banks that their application would be refused should they choose to apply for a loan. The latter case is referred to as ‘informal turndown’ (Rostamkalaei et al., 2020).

Rostamkalaei et al., (2020) identify the difference between discouraged borrowers from those that are sure that they will be rejected. In other words, they have been informally told by the financial institutions that if they do formally apply for finance their application would be turned down. This differentiation is noteworthy as the first implicates market imperfection while the latter may signify efficient sorting. Generally informal refusals take place when there is an established business relationship between SMEs and financial institutions where the exchange of soft information has taken place. Such relationship allows financial institutions to gauge the risk taken on a borrower which in turn secures the reputation of SMEs which would otherwise be jeopardised if the proceed with a formal application and then get rejected.

Borrowers are discouraged to apply owing to two main reasons one is if they fear that their loan application would be rejected if they do approach banks for a loan and secondly the banks may have verbally refused them stating that if they do apply for a loan their application would most likely be rejected and this is referred to as informal turndown (Cox and Jappelli, 1993, Duca and Rosenthal, 1993). This is the reason why creditworthy firms that do not approach financial institutions for credit become observationally obscure in the presence of those firms that have received an informal turndown by banks (Popov, 2013).

5.2.3 Conventional Mindset of the Banking Industry

In this chapter we focus on borrowers who have refused to apply for formal credit due to certain reasons one of the main being the fact that banks make themselves unapproachable to SME credit clients. This is chiefly due to the conventional outlook of the banking sector which prefers large companies with transparent business operations in their portfolio rather than small ones suffering from information opacity such as SME firms. Berger et al., (2011) discuss the advantages for bankers when lending to large companies as compared to small firms. They stated that loan officers usually tend to focus on large companies as they are comparatively more transparent and possess hard information which improves their credulity as opposed to small firms who are in possession of soft information which is difficult to quantify which hampers their reliability.

In order to understand the reason for SME discouragement in accessing financial services we begin by studying the outlook of the banking sector. A financial institution consists of various different activities such as deposit versus credit, domestic versus international banking and balance sheet versus off-balance sheet transactions. (Liu et al., 2020). We study a dimension that still remains instilled at the heart of the banking sector despite emergence of new policies and processes but that has not been investigated yet: the conventional outlook of the banking industry of emerging economies such as Pakistan.

Du et al., (2017) and Brewer and Genay (1994) use the term “conventional wisdom” to define the stance taken by large banks when dealing with SME finance explaining their reluctance in extending credit to SMEs is due to their inferior collateral coupled with informational opacity. This tends to make the firms risky as banks face problems establishing the creditworthiness of the borrowers and in order to reduce this risk, they use techniques such as strong collateral requirement and high interest rates (Stiglitz and Weiss, 1981, Du et al., 2017). According to Uchida et al., (2011) and Du et al., (2017) informational opacity is the key characteristic in defining SMEs for as opposed to large companies they refuse to share pertinent information concerning their employees, suppliers and clients neither do they maintain proper audited financial statements. In order to overcome this issue Berger and Udell (2006) share a probable resolution in the form of relationship lending where the bank and borrower can build a long-term relationship.

SMEs cannot be confused for being smaller versions of large companies and as such face greater problems in acquiring bank loans (Yoshino and Taghizadeh-Hesary, 2018, Yin et al., 2020). Firstly, SMEs are comparatively more informationally opaque owing to the lack of information set-up and credit history. For instance, inability to maintain audited financial accounts leads to asymmetric information issue reducing the firm’s credibility and monitoring such a firm tends to become costly for banks. Secondly, SMEs are mostly unable to fulfil adequate collateral requirements of banks to cover their risk. The situation exacerbates with the presence of asymmetric information among SMEs causing banks to demand more collateral to address their risk when extending credit. (Yoshino and Taghizadeh-Hesary, 2018, Yin et al., 2020). Thirdly, there is the issue of moral hazard in which the firm intentionally undertakes a contract providing misleading information or takes unusual risks after procuring credit (Yin et al., 2020).

The fact that banks are conservative in their lending procedure is quite renowned (Carey et al. 1998), which is why SME entrepreneurs refuse to approach banks for credit knowing full well that their application would be turned down. This is in complete contradiction to what is experienced by large companies for they expect their loan application to be successful (Rostamkalaei et al., 2020). Firms in their infancy also suffer from bank conservatism for unlike large companies, SMEs experience 'the liability of newness' which involves presence of information asymmetries, inexperienced business owners, inefficient business procedures. This terms their firms as 'risky' which in turn forces them to give up on the idea of approaching financial institutions for formal credit. (Rostamkalaei et al., 2020).

5.3 Identifiable Characteristics of Borrower Discouragement

When analysing the financing gap between SMEs and financial institutions in Pakistan we need to first identify if borrower discouragement is the reason why these firms refuse to approach banks for credit. Looking at the profitability of the firms provided by our sample data, we observe that 64% of the sample own fixed assets between PKR1 and PKR50 million and 56% hold current assets between PKR1 and PKR50 million. Moreover, 51% achieve annual sales between PKR 1 and PKR 50 million and 61% enjoy annual net income between PKR1 and PKR50 million *(refer to Table 2(4a, 4b, 4c, 4d) in Chapter 3).* On the whole, these descriptive statistics offer evidence that our sample although belonging to a comparatively good economic profile still feels discouraged in approaching banks for formal finance as discouragement is termed as an inefficient means of self-rationing mechanism. We analyse certain characteristics of firms to help us identify the existence of borrower discouragement among SME firms.

Firm Characteristics: Older firms are generally characterised as more creditworthy as they have already succeeded in overcoming the risks associated during the period of their infancy and have also built a track record in the business market which makes it easier for financial institutions to scrutinise them. Proprietorship concerns are believed to be more reliable when extending credit as compared to partnership concerns and corporations as the proprietor and the concern are one and the same and so the lender can seize the entrepreneur's personal assets in case of default on loan (Cole and Sokolyk, 2016). The sample that was covered during our survey, 60% of which comprised of sole proprietorship concerns and 26% were partnership firms. When analysing the business sector, 61% were involved in retail, 24% in manufacturing and the remaining 15% in the service sector. 74% of the firms in the sample fall under the category of small enterprise and the remaining 26% are medium enterprise. 91% of our sample consists of established firms that have been in business for more than five years. As majority of the firms are small thus 74% have fill-time employees between 1 and 25 and 11% have the size of permanent human resource between 26 and 50 persons *(refer to Table 1 in Chapter 3 for all of the above figures).*

The above figures are very favourable and yet 50% of the sample has not been approached by any bank for a loan which clearly depicts the fact that SMEs by and large do not hold much interest to banks in their financial inclusion *(refer to Table 5(8) in Chapter 3).*

Firm Owner's Characteristics: This includes features of the chief owner of the business, holding the largest business and in our sample 85% of the owners are between the ages of 26 and 55 years. 91% of the owners run established firms as they are more than 5 years old. 48% of the owners started their business *(refer to Table 5(7) in Chapter 3)* with their own funds and 50% of the responses suggested that they did not make any effort in approaching banks for credit *(refer to Table 5(8) in Chapter 3).* Those who did not approach for a formal loan firmly believed that they did not require audited financial statements as they are nothing more than just a requirement of banks which shows that most SME firms are unaware of the importance of audited financial accounts. 50% of the sample maintained audited financial accounts while the remaining 50% considered it a hassle. The 50% who did maintain audited financial statements only did so for they consider it a requirement of bank documentation *(refer to Table 3(5b) in Chapter 3).* This also reveals the extent of information asymmetry present within the Pakistani SME sector. This brings us to another importance factor relating to the SME finance gap which is the relationship between SME firms and banks.

<u>Firm-Creditor relationship:</u> Financial institutions that have a longer relationship with their clients are liable to favour their credit application as they may have gathered more information regarding the firms' business activities (Cole and Sokolyk, 2016). We asked our respondents the most important limiting factors that hinder SMEs from obtaining bank finance for future growth *(refer to Table 9(21) in Chapter 3).* Several responses were provided by the respondents, but the most popular ones were high interest rates, tedious and lengthy process of banks, banks are unapproachable, and bank loan is forbidden in Islam. The uncertainty and risk associated with entrepreneurial ventures and product innovation; entrepreneurs may result in encountering substantial obstacles in obtaining bank credit. These barriers might be in the form of loan refusals, appreciated interest rates on formal credit, cumbersome collateral prerequisites which may ultimately give rise to discouragement among borrowers (Brown et al 2022).

<u>Network Effects:</u> The gap between SMEs and financial institutions have given power to the social networks with which these SMEs belong. Although SME firms follow the pecking order theory and rely most on their internally generated funds, yet all businesses require a certain amount of additional funds to expand, innovate and grow and SME concerns are no different. In the absence of formal financial support these SMEs then turn to their networks for additional financial support. The business and social networks of most SMEs are one and the same and so, leaders of their networks cash on the fact that these SMEs are totally reliant on their financial support and try to gain absolute power and authority over their network. This problem has been discussed in detail in Chapter Four. Our data shows that 73% of the loans applied by SME firms were approved *(refer to Table 6(13) of Chapter 3)* which along with the fact that 50% refused to approach financial institutions for credit out of which 65% stated that bank loan is forbidden in Islam *(refer to Table 6(9) in Chapter 3)* nor were they approached by any banks for the purpose of financial inclusion, clearly revealing the presence of borrower discouragement within the SME sector of Pakistan.

5.4 Hypotheses

Asymmetric information reduces the degree of trust between the borrower and the financier which results in information costs, consequently resulting in lost ventures. (Binks et al., 1992). Brown et al., (2022) in their study analysed Longitudinal Small Business Survey (LSBS) which is compiled in the UK Department for Business, Energy and Industrial Strategy (BEIS) in which they focused on the various facets of borrower discouragement which includes if an SME entrepreneur requires credit in the previous 12 months but did not approach banks for a loan due to any of the following reasons such as fear of being refused, greater risk, deficiency in credit history, existing economic situation, knowledge of financial products, and the hassle associated with applying for credit. The above reasons provide an apt picture in discerning probable market imperfections.

Our survey provided us with definite responses clearly indicating the different techniques used by banks to create a barrier between them and the SMEs. The respondents clearly suggested that banks not only avoid SMEs when entering into a financial relationship but also create extensive hurdles in discouraging SMEs from approaching them for a loan. This has caused immense frustration among SME entrepreneurs most of them being fearful of approaching banks for a loan. The inaccessibility of the banking sector along with the inability of SMEs to raise adequate additional funds necessary for growth and expansion of their businesses has resulted in the creation of a caustic environment between SMEs and the financial sector. Among them are the five most prominent tools used by the financial sector to discourage SMEs from approaching them for credit:

- *Tedious and lengthy process of banks:* One of the obstacles faced by SME with regards to access to bank credit is the tedious procedure involved such as collateral requirements, bank paperwork, interest rate payments, need for special connections (Beck et al., 2006). Our survey showed that about 35% of the responses adamantly suggested the most important limiting factor in obtaining external credit for future growth is the difficult and time-consuming procedure of banks when extending credit to SMEs *(refer to Table 6(9) in Chapter 3).* In case of SMEs lack of access to bank credit have twice the adverse effect on their growth than large firms (Beck et al., 2006). Banks need to improve their turn-around-time when processing credit applications of SMEs.

- *Banks are unapproachable:* During our survey we made a startling discovery that most of the respondents blamed bank personnel of adopting a discourteous attitude when approached for financial services by either them or their acquaintances. This made majority of them apprehensive of the banking sector for fear of being slighted by bank staff. This finding came as a surprise for such demeaning attitude has been previously unheard of. According to our survey findings around 28% of the responses revealed fear of approaching the banking sector for finance owing to the objectionable behaviour of their staff members *(refer to Table 9(21) in Chapter 3).* They provided previous examples of bank personnel outright refusing to entertain their request for credit. This is generally the result of a rigorous conservative outlook of the Pakistani banking sector which is causing unnecessary financial suffering to the SME borrower.

- *High Interest Rate:* According to Beck et al., (2006) the two factors, cost of finance and access to finance are closely related specially in developing countries where cost of finance is rated over 35% as a major growth deterrent in case of SMEs. Similarly access to finance also acts as a major constraint as rated by about 30% of SMEs. These factors are directly related to a firm's growth. High transaction costs not only increase the cost of borrowing but also restrict access to finance for smaller groups such as SME. There have been several instances Eastern Europe where loan application was discouraged through increased interest rates (Brown et al., 2018, Horvath and Lang, 2021). According to our survey 18% of the responses who did not approach banks for credit suggested high interest rate to be an important deterrent in obtaining external finance for future growth *(refer to Table 6(9) in Chapter 3)*.

- *Insufficient collateral:* SME loans mostly require pledge of some personal security or guarantee of entrepreneur (Avery et al., 1998, Hasan et al., 2017). In our survey, 12% of the respondents who made no efforts in approaching financial institutions for finance identified collateral an obstacle to finance *(refer to Table 6(9) in Chapter 3).* which proves that majority of SMEs in Pakistan are able to provide sufficient collateral if given the opportunity to build a credit relationship with banks. However, the problem lies in the fact that while reviewing the case for extension of credit to SMEs 85% of our responses complained that the collateral asked by the banks was either equal to or double the amount of the loan request *(refer to Table 7 (15g) in Chapter 3).* In the presence of information asymmetries, the asset provided by firms as security when applying for a loan is an important mechanism in resolving the issue of credit rationing. Generally, banks rely on asset-based lending, credit scoring and fixed asset lending mechanisms. These techniques require the presence of a concrete asset whether personal or business related to be received as a collateral by banks when extending a loan. (Brown et al., 2022).

- *Bank Loans are prohibited in Islam:* SMEs, owing to the existence of information asymmetry, encounter greater issues when attempting to access external sources of funds, thereby relying more on internally available sources (Gregory et al., 2005, Lopez-Gracia and Sogorb-Mira 2008, Beck 2013). Similar is the case with Pakistan where most SMEs are either unable to approach banks for credit or are avoided by banks in financial inclusion, leaving them no option other than to turn to their respective business networks for informal financial support. This sort of self-induced credit rationing has been covered in detail in Chapter Four where 65% of the respondents refuse to even approach banks for credit, stating that the leaders of their social group believe it to be forbidden according to Islamic Sharia (law) *(refer to Table 6(9) in Chapter 3).* However, 61% of the responses also hoped to achieve future growth through both external funds as well as internally generated capital *(refer to question 20 of questionnaire).*

The above responses based on the perception and past experiences of SME entrepreneurs reveal an acute level of discouragement which has led to the creation of Caustic Outlook.

Tedious and lengthy process of banks + Banks are unapproachable + High Interest Rate + Insufficient collateral + Bank Loans are prohibited in Islam = Caustic Outlook

Based on our survey and SME responses, the hypotheses for this chapter are as follows:

H1: SME's Caustic Outlook towards formal credit is the result of discouragement faced by them in the past.
H0: SME's Caustic Outlook towards formal credit is not the result of discouragement faced by them in the past.

H2: The Caustic Outlook of SMEs refrains them from acquiring formal credit.
H0: The Caustic Outlook of SMEs refrains does not them from acquiring formal credit.

H3: SME's Caustic Outlook towards formal credit aggravates their future Financial Obligations.
H0: SME's Caustic Outlook towards formal credit does not aggravate their future Financial Obligations

5.5 Methodology and Measure

The survey, as already discussed in Chapters Three and Four, was carried out in Pakistan between December 2018 to March 2019 which focused on the country's two largest provinces of Sindh and Punjab by the end of which responses of 416 SMEs were collected.

5.5.1 Dependent variables

In this paper our dependent variables are *Caustic Outlook*, *Credit Procurement* and *Financial Need*. The variable *Caustic Outlook* has been defined in 5.4. During our survey we had asked our respondents whether or not they had made any effort towards obtaining external finance. The responses received were tabulated under *Credit Procurement* which is used as a dependent variable in *(H2) (refer to Table 5(8) in Chapter 3).* SMEs in general are refused credit when applying for formal credit and this negative perception results in majority of entrepreneurs not bothering to even apply for finance (Holton et al., 2013, Ferrando et al., 2017, Morales, 2022) We have used *Credit Procurement* as a dependent variable in our hypothesis (*H2*) in order to identify and study the frustration caused by SME's refusal as well as inability to raise sufficient funds necessary for improved performance. In hypothesis (*H3)* we use *Financial Need* as the dependent variable for it this is based on the responses collected from the query concerning the need for financial assistance necessary for future growth of SMEs *(refer to Table 9(20) in Chapter 3).* Here we study how firms plan to finance their future growth (*Financial Need)* and what impact does it have on *Caustic Outlook*.

5.5.2 Independent variables

In *H1* we include the variables loan *Not Applied and Loan Rejected* and in *H2* and *H3, Caustic Outlook* is taken as an independent variable. Discouraged firms are the ones that require bank credit but do not apply for it (Wernli and Dietrich, 2022) and denied firms refer to those who applied for bank finance but were refuse (Kon and Storey, 2003, Han et al., 2009, Cole and Sokolyk, 2016, Wernli and Dietrich, 2022).We have the variable *Qualifications* which is included in all three regressions and *Expected Growth in (H2) and (H3)*. Firm Stage is associated with structural risk, that is, the age of the firm. This variable is identified for its impact on credit rationing and borrower discouragement, for the more established the firm is, its chances facing any difficulty in raising credit diminishes (Binks and Ennew, 1996, Cassar, 2004, Beck et al., 2005, Vos et al., 2007, Han et al., 2009, Freel et al., 2012, Chakravarty and Xiang, 2013, Rostamkalaei, 2017). Firm Stage refers to years established which indicates an entrepreneur's level of maturity and is used as a proxy for an entrepreneur's level of experience and entrepreneurs lacking experience will encounter a higher possibility of being discouraged in the financial market (Han et al., 2009, Rostamkalaei, 2017). *Firm stage* may ascertain the performance of the firms as a whole (Cowling et al., 2015; Peric and Vitezic, 2016, Rostamkalaei, 2017).

FT Employees refers to the number of full-time workers employed by the firm, measuring the size of the firm. Firm size has as impact on the perception regarding access to credit where the firms with the least number of employees (smallest firms) have the most negative perception regarding access to formal credit and there is no significant difference between perception of the smallest and the medium sized firms (Canton et al., 2013, Nguyen et al., 2022). Large companies are generally perceived to be comparatively more creditworthy as they are well established, diversified and can provide more tangible security than SMEs and therefore report fewer financing problems (Wernli and Dietrich, 2021). The variable *Location* is the place where the firm is established, and our sample comprises of firms situated in either the Sindh or Punjab province where 83% (ADB Asia monitor 2021) of Pakistani SMEs are located. Factors associated with location are important as certain categories of location may be linked with the level of discouragement (Freel et al., 2012).

5.5.3 Control variables

We control for certain variables which have a greater likelihood of affecting borrower discouragement. We have *Proprietorship, Partnership* and *Retail.* Proprietorship and similar simple firm structures face a greater likelihood of credit constraints (Leon, 2015a, Cole and Dietrich, 2017, Nguyen et al., 2022).

Robustness Tests

To address the issue of endogeneity we conducted the Wald Test with *ivprobit* command, which confirmed no presence of endogeneity, enhancing the reliability of our model. Lastly, we check for multicollinearity by once again using Variance Inflation Factor (vif) (Han et al., 2017) and here the results for all our variables are less than five, confirming no multicollinearity issues in our sample. To confirm the robustness different specifications of the models have been tested with different independent variables and we have reported our preferred specification of the models. Tables 1 and 2 outline the key variables used in this chapter along with their statistical treatment.

Table 1 – Variable Description and Explanation of Statistical Parameters

Dependent Variables	Independent Variables	Description	Code	Mean
Credit Procurement		SMEs who tried to approach banks for credit - Dummy	Yes=1; No=0	0.49029
Financial Need		Dummy	Internal Only=0 Internal & External=1	0.38107
Caustic Outlook		Tedious and lengthy process of banks - Dummy Banks are unapproachable - Dummy High Interest Rate - Dummy Insufficient collateral - Dummy Bank Loans are prohibited in Islam - Dummy	Yes=1; No=0 Yes=1; No=0 Yes=1; No=0 Yes=1; No=0 Yes=1; No=0	0.91019
	Not Applied	SMEs that did not apply for loans	Yes=1; No=0	0.50243
	Loan Rejected	Those who applied and their request was rejected	Yes=1; No=0	0.13592
	Proprietorship	Dummy	Yes=1; No=0	0.59709
	Partnership	Dummy	Yes=1; No=0	0.26214
	Firm Stage	Early Start up (less than 1 year) Young (1-5 years) Established (more than 5 years)	1 2 3	2.91505
	Retail	SMEs in sample belonging to the Retail Sector	Yes=1; No=0	0.60922
	Years Established	Number of Years the firm has been established	Number of years	13.69712
	Qualifications	High School Vocational Bachelor's degree Others	1 2 3 4	2.12379
	Expected Growth	Reduction of business	1	2.49757

		No change Moderate Growth Substantial Growth	2 3 4	
	Location	Punjab Sindh	1 2	0.86165
	FT Employees	Full-time Employees	Log of Employees	2.76332

Table 2 – Firm Characteristics and Variable Definitions

Characteristics	Dependent Variables	Independent Variables	Formula
	Caustic Outlook Credit Procurement Financial Need		CO CP FN
		Loan Reject Loan Not Applied	Reject NApplied
Firm Orientation		Sole proprietorship Partnership	FOrient
Firm Structure		Year Established Stage of business (young /established)	FStruc
		Retail	Retail
		Owner's Qualification	Qual
		Location of Business	Location
		Full-time Employees	FTE

5.5.4 Model Estimation

H1: SME's Caustic Outlook towards formal credit is the result of discouragement faced by them in the past.

To address hypothesis 1, the following model is applied.

$$\boldsymbol{Y}\ (\boldsymbol{\beta CO}) = \ f\ (x'\beta)$$

$$= \ f\ (\boldsymbol{\beta 0} + \boldsymbol{\beta NApplied} + \boldsymbol{\beta Reject} + \boldsymbol{\beta FOrient} + \boldsymbol{\beta FStruc} + \boldsymbol{\beta Retail} + \boldsymbol{\beta Qual} + \boldsymbol{\beta Location} + \boldsymbol{\varepsilon}).$$

Table 3: Past Discouragement and Caustic Outlook

Table 3 provides coefficient estimates of the Ordered Probit Model. The dependent variable *Caustic Outlook* is mentioned at the top left corner of the regression column. *Caustic Outlook* is a measure of acute level of discouragement as defined in Section 5.4. Independent variables are as defined in Table 1.

Ordered Probit Regression		Number of obs	=	416
		LR chi2(10)	=	377.19
		Prob > chi2	=	0.0000
Log likelihood =	-295.37214	Pseudo R2	=	0.3897

Caustic Outlook	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Not Applied	3.312916	0.371040	8.93	0.000	2.58569	4.04014
Loan Rejected	0.922531	0.230395	4.00	0.000	0.47096	1.37410
Proprietorship	-0.046777	0.210512	-0.22	0.824	-0.45937	0.36582
Partnership	-0.169669	0.225205	-0.75	0.451	-0.61106	0.27173
Firm Stage	-0.638295	0.209816	-3.04	0.002	-1.04953	-0.22706
Retail	0.103297	0.134157	0.77	0.441	-0.15965	0.36624
Qualification	0.043679	0.066280	0.66	0.510	-0.08623	0.17358
Location	1.355987	0.289086	4.69	0.000	0.78939	1.92259
/cut1	1.53832	0.87791			-0.18234	3.25899
/cut2	4.66383	0.94034			2.82078	6.50687
/cut3	5.11613	0.93916			3.27541	6.95685
/cut4	6.67007	0.95980			4.78890	8.55124

Ordered Probit Model has been employed in this regression, as our dependent variable which is *Caustic Outlook* comprises of a set of responses such as those regarding *Tedious and Lengthy*

Process, Banks are unapproachable, High Interest Rates, Insufficient Collateral, Bank Loans are prohibited in Islam, thus making the response data polychotomous. Ordered Probit Model works best in analysing polychotomous response data. An ordered probit model is employed to estimate the regression model as the dependent variable is a categorical variable (Greene, 2012, Kampouris et al., 2022)

The relationship between *Caustic Outlook* and loans *Not Applied* as well as *Loan Rejected* is favourable and highly significant at 1% level. Almost all SMEs in our sample are either *Proprietorship* or *Partnership* concerns which we have taken as our third and fourth independent variables and they show an unfavourable association with the dependent variable. *Firm Stage* is negatively and significantly related to *Caustic Outlook* as opposed to *Year Established* and Retail which are both positively related to the dependent variable. We also observe a positive relationship between *Qualifications* and *Caustic Outlook* and a highly significant positive relationship between *Location* and *Caustic Outlook.*

H2: The Caustic Outlook of SMEs refrains them from acquiring formal credit.

To address hypothesis 2, we use the following regression model. A bivariate probit model is used to test hypothesis 2. The bivariate probit model is chosen in this instance since we have caustic outlook and credit procurement as our two binary dependent variables (Y1, Y2) and the aim is to jointly model them as a function of our chosen explanatory variables.

$$\boldsymbol{Y}\ (\boldsymbol{\beta CP}) = \ f\ (x'\beta)$$

$$= \ f\ (\boldsymbol{\beta 0} + \boldsymbol{\beta CO} + \boldsymbol{\beta FOrient} + \boldsymbol{\beta FStruc} + \ \boldsymbol{\beta FTE} + \ \boldsymbol{\beta Retail} + \boldsymbol{\beta EntAge} + \boldsymbol{\beta Qual} + \boldsymbol{\varepsilon}).$$

Table 4: Caustic Outlook and Credit Procurement

Table 4 offers coefficient estimates of the Bivariate Probit Model. The dependent variable for each regression is Caustic Outlook in the first instance and Credit Procurement in the second. Caustic Outlook is a measure of acute level of discouragement whereas Credit Procurement is the measure of the efforts made by SMEs in obtaining bank finance

Bivariate Probit Model			Number of obs	=	416	
			Wald chi2(10)	=	233.82	
Log likelihood =	-303.24657		Prob > chi2	=	0.0000	

	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Caustic Outlook						
Location	2.13867	0.27037	7.91	0.000	1.60874	2.66859
Expected Growth	-0.70426	0.09279	-7.59	0.000	-0.88613	-0.52238
_cons	-1.85630	0.56089	-3.31	0.001	-2.95562	-0.75698
Credit Procurement						
Caustic Outlook	-2.70369	0.31174	-8.67	0.000	-3.31468	-2.09269
Proprietorship	-0.98580	0.38289	-2.57	0.010	-1.73625	-0.23535
Partnership	-1.07869	0.40259	-2.68	0.007	-1.86775	-0.28963
Firm Stage	-0.69249	0.42595	-1.63	0.104	-1.52734	0.14236
FT Employees	0.26769	0.13122	2.04	0.041	0.01049	0.52489
Retail	-0.24760	0.19171	-1.29	0.197	-0.62334	0.12815
Qualification	0.38965	0.09132	4.27	0.000	0.21068	0.56863
_cons	3.64889	1.35809	2.69	0.007	0.98708	6.31070
/athrho	0.33472	0.29406	1.14	0.255	-0.24164	0.91107
rho	0.32275	0.26343			-0.23704	0.72165

Likelihood-ratio test of rho=0: chi2(1) = 1.6541 Prob >chi2 = 0.1984

In analysing H2 we have employed a Bivariate Probit Model as understanding the relationship between SMEs mindset towards procurement of credit and their Caustic Outlook regarding formal credit is extremely necessary for this attitude is the cause of grave hindrance towards firm performance and ultimately future growth. The Bivariate Probit Model approach is useful is measuring the association between Credit Procurement and Caustic Outlook as we can measure the association between Credit Procurement, Caustic Outlook and Expected Growth of the firms. The Bivariate Probit Model is frequently used when analysing human attitudes on a binary behavioural outcome. It is typically employed when the dichotomous variable is the outcome of interest, which in this case is the *Credit Procurement* regarding formal credit and the possible outcome may include qualitative information in the shape of a dummy variable. By using this estimation method, we remove the issue pertaining to sample selection bias (Rehman, 2016). A bivariate probit model is employed to demonstrate inter-related issues (Greene 2012, Broome et al., 2022). Bivariate probit regression allows us to assess the proclivity of two different but associated options. The advantage of using bivariate probit estimation is that it accounts for the effects of not just the explanatory variables but also the associated error terms, which if overlooked may cause bias in the estimated parameters (Nguyen and Vu, 2022).

The first section of the model identifies the relationship between *Caustic Outlook* and *Location* along with *Caustic Outlook* and *Expected Growth*. Here *Caustic Outlook* is the dependent variable with *Location* and *Expected Growth* being the independent variables. There is a favourable relationship between *Location* and *Caustic Outlook* and an unfavourable one between *Caustic Outlook* and *Expected Growth* both significant at 1% level.

In the second section we analyse the relationship between *Credit Procurement* and *Caustic Outlook*. Here *Credit Procurement* is the dependent variable and *Caustic Outlook* is the independent variable. *Caustic Outlook* is inversely associated with *Credit Procurement* which is negative and significant at 1% level. We also find an unfavourable relationship between *Proprietorship* and *Partnership* concerns with *Credit Procurement*. We also observe an inverse relationship between *Retail with Credit Procurement* but a favourable one with *FT Employees and Years Established*. There is also a favourable association with the *Qualification* which is significant at 1% level.

H3: SME's Caustic Outlook towards formal credit aggravates their future Financial Obligations.

To address hypothesis 3, the following regression model is used. Similar to hypothesis 2, we use bivariate probit model, since we have caustic outlook and financial need as our two binary dependent variables (Y1, Y2) and the aim is to jointly model them as a function of our chosen explanatory variables.

$$\boldsymbol{Y}\ (\boldsymbol{\beta FN}) = \ f\ (x'\beta)$$

$$= \ f\ (\boldsymbol{\beta 0} + \boldsymbol{\beta CO} + \boldsymbol{\beta FOrient} + \boldsymbol{\beta FStruc} + \ \boldsymbol{\beta FTE} + \ \boldsymbol{\beta Retail} + \boldsymbol{\beta EntAge} + \boldsymbol{\beta Qual} + \boldsymbol{\varepsilon}).$$

Table 5: Caustic Outlook and Future Financial Need

Table 5 offers coefficient estimates of the Bivariate Probit Model. The dependent variable for each regression is Caustic Outlook in the first instance and Financial Need in the second. Caustic Outlook is a measure of acute level of discouragement whereas Financial Need is the measure financial assistance essential for SMEs for future growth.

Bivariate Probit Model		Number of obs	=	416
		Wald chi2(9)	=	141.81
Log likelihood =	-399.67366	Prob > chi2	=	0.0000

	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]	
Caustic Outlook						
Location	1.61256	0.23450	6.88	0.000	1.15295	2.07217
Expected Growth	-0.50300	0.08962	-5.61	0.000	-0.67865	-0.32736
_cons	-1.35457	0.44979	-3.01	0.003	-2.23614	-0.47300
Financial Need						
Caustic Outlook	-0.44769	0.08380	-5.34	0.000	-0.61192	-0.28345
Proprietorship	0.58956	0.22624	2.61	0.009	0.14614	1.03298
Partnership	0.35633	0.23049	1.55	0.122	-0.09541	0.80808
Firm Stage	0.56533	0.23444	2.41	0.016	0.10583	1.02483
FT Employees	-0.31006	0.07439	-4.17	0.000	-0.45587	-0.16426
Retail	-0.30849	0.12170	-2.53	0.011	-0.54702	-0.06996
Qualifications	-0.13782	0.05968	-2.31	0.021	-0.25478	-0.02085
_cons	-0.64446	0.77014	-0.84	0.403	-2.15391	0.86500
/athrho	1.05743	0.15390	6.87	0.000	0.75580	1.35907
rho	0.78468	0.05914			0.63859	0.87618

Likelihood-ratio test of rho=0: chi2(1) = 62.0406 Prob > chi2 = 0.0000

In analysing H3 we once again use the Bivariate Probit Model as this technique is appropriate when investigating two correlated variables, in this case *Financial Need* and *Caustic Outlook.* The dependent variable for H3 is a dummy variable (Khan, 2022) used as a proxy for measuring the financial requirement either through internal or external finance.

In the first section of our model, we once again analyse the association between *Caustic Outlook* with *Location* and *Expected Growth*. Here again we notice a positive relationship between *Caustic Outlook* and *Location a*nd an inverse one between *Caustic Outlook* and *Expected growth*, both significant at 1% level.

In the second section we take *Financial Need* as our dependent variable, and we notice a negative relationship between the firms' *Financial Need* and their *Caustic Outlook* regarding external credit which is significant at 1% level. The variables *Proprietorship* and *Partnership* are also favourably related to *Financial Need*. There is an inverse association between *FT Employees* and *Financial Need* which is significant at 1% level. We find an unfavourable association between *Retail* and *Financial Need.* There is an inverse relationship of *Qualification* and *Financial Need* of SMEs.

5.6 Discussion

In our first hypotheses (*H1*) we have *Caustic Outlook* as our dependent variable which is favourably and significantly associated with loan *Not Applied* as well as *Loan Rejected*. The variables *Not Applied* and *Loan Rejected* signify the presence of discouragement among SME firms who wish to obtain additional finance but are either afraid to apply for credit or if they do apply then they are refused credit by financial institutions. In Table 3 we distinguish between SME firms who did not approach any financial institution for a loan and club them under the variable *Not Applied* and those firms that have had their loan application rejected come under the ambit of *Loan Rejected*. Out of the 50% responses who did try to approach financial institutions for additional capital, 73% of the loans were approved and 27% *(refer to Table6(13) in Chapter 3)* rejected. Out of these 73% approvals majority are medium size exporters availing export refinance facilities extended by the SBP to boost exports. This clearly suggests that and increase in either loan *Not Applied* or *Loan Rejected* would increase *Caustic Outlook* of entrepreneurs. The effect of loan *Not Applied* and *Loan Rejected* over Caustic Outlook is considerably substantial clearly showing that they both have a direct impact over the outlook of SME firms. If the level of discouragement overshadows the rate of refusal, then it is more suitable to tackle the apprehensions of these borrowers rather than focusing on the supply side of credit (Freel et al., 2012, Naegels et al., 2022).

We notice an inverse association between *Firm Stage* and *Caustic Outlook* for 91% of our sample have reached a mature business cycle which should reduce *Caustic Outlook* however, out next variable *Retail* negates that by having a positive relationship with *Caustic Outlook*. The variables *Proprietorship* and *Partnership* are inversely related to *Caustic Outlook* as most SMEs in our sample comprise of either sole proprietorship or partnership concerns and out of the 73% loans that were approved 52% were medium size importers or exporters. This is the reason why the outcome of the loan is not supported by either of the two concerns which is a clear indicator of the presence of caustic outlook caused by discouragement among SMEs. 61% of our sample comprises of firms belonging to retail sector *(refer to Table 1(3b) in Chapter 3)* therefore even if firms might appease their caustic mindset as they mature yet the fact that majority of them are retailers and are short of additional finance required for their day-to-day business operations coupled with the fact that they are discouraged, that is, they are practising self-induced credit rationing, which further intensifies their *Caustic Outlook*. Freel et al., (2012) notice certain distinguishing features of discouraged borrowers which includes previous experience in business, strategy, relationship with banking sector. Cole and Sokolyk (2016) identify discouraged firms as being considerably different from refused firms in terms of profitability, size and owner's experience.

We see a favourable association between *Qualifications, Location* and *Caustic Outlook* which clearly suggests that the more academically qualified an entrepreneur and more discouraged he would feel regarding either fear of rejection or actual refusal. Moreover, our sample comprises of firms situated in the Sindh and Punjab provinces which are both industrially as well as academically advanced and a positive association with *Caustic Outlook* shows that entrepreneurs are more educated and therefore aware of the importance of additional finance and feel greater discouragement in approaching banks for finance thus developing an acerbic mindset. We accept this hypothesis (*H1*) as our variable Caustic Outlook is based on the result of past experiences faced by SME owners with regards to formal credit and an inverse relationship between *Caustic Outlook* and loan *Not Applied* and *Loan Rejected* clearly highlights the presence of discouragement among SME entrepreneurs regarding bank loans.

Our second hypothesis (*H2*) is estimated through a Bivariate Probit Model where our first dependent variable is *Caustic Outlook* showing a favourable relationship with *Location* but an adverse association with *Expected Growth*. Here we also notice that both relationships are extremely significant. This shows a greater Caustic mindset in the location where is SMEs are situated and an increase in Caustic Outlook would directly impair the prospects of future growth. Our second dependent variable is *Credit Procurement* and there is an unfavourable and significant association between *Caustic Outlook* and *Credit Procurement*, which shows that majority of the SMEs have developed a caustic mindset against the financial sector thus discouraging procurement of formal credit.

We also notice an adverse relationship between the variables *Sole Proprietorship* and *Partnership* with *Credit Procurement.* This clearly signifies the presence of discouragement among the two segments which comprises of a majority of the SME sector. The association being inverse and significant make it obvious that SMEs avoid obtaining formal finance. *Retail* is also inversely related to *Credit Procurement* which shows that majority of SMEs in our sample who belong to the retail sector maintain opposing beliefs regarding external credit. There is a favourable relationship between *Credit Procurement* and *FT Employees* which shows that an increase in credit procurement would in turn increase SME human resource capital. Most of the SME entrepreneurs in our sample have received formal education which creates a favourable relationship between their *Qualification* and credit procurement. Discouragement in acquiring credit is witnessed all over the world however the situation is more critical in developing countries owing to the existence of weak infrastructure which also adversely affects their financial system, substantially diminishing the assurance of SME entrepreneurs in their banking system (Qi and Nguyen, 2021).

When SMEs were asked whether or not they have ever made any efforts to approach banks for credit 50% of the respondents provided a negative response. However, SMEs are relatively smaller firms who are unable to generate internal funds adequate for business operations and thus require finance from external sources. The fact that they are already discouraged and do not approach financial institutions for credit coupled with their inability to generate sufficient internal funds increases their frustration adding fuel to their negative outlook. Therefore, an increase in *Credit Procurement* would decrease the *Caustic Outlook* of SME owners, which means that if SME customers start approaching banks for credit, most of them, being creditworthy would succeed in getting the required amount necessary for business growth and expansion which in turn would reduce caustic outlook. Therefore, we accept the hypothesis *H2* as the negative relationship between *Caustic Outlook* and *Credit Procurement* shows a strong invisible barrier erected by the SME entrepreneur against formal credit.

In our third hypothesis (*H3*) once again we use the Bivariate Probit Model where the first dependent variable is Caustic Outlook showing the same significant relationship with Location and Expected Growth as in the previous hypothesis. We have taken *Financial Need* as our second dependent variable which has been derived from responses gathered from the query asking SMEs how they plan to finance their business for growth. We notice that the relationship of firms' *Financial Need* inversely relates to their *Caustic Outlook* regarding external credit, and this is due to the actual financial requirement of the SME firms which is not being sufficiently fulfilled due to the absence of external formal sources of funds. In our survey the respondents were asked how they plan to finance their business for future growth and 38% of the responses leaned towards raising finance from internal sources only whereas 61% included both internal as well as external sources of finance *(refer to Table 9(20) in Chapter 3).* This clearly shows that although SME firms understand that external credit is essential for future development and expansion yet their acerbic outlook towards financial institutions prevent them from applying for formal credit. The increase in financial availability will reduce Caustic Outlook as they will feel more encouraged to use external sources as a means of acquiring credit for their business.

Here the variables *Proprietorship* and *Partnership* are favourably related to *Financial Need* as these firms forming a significant amount of our sample size do favour the need for additional funds despite their caustic outlook towards external finance. *Retail* is unfavourably related to *Financial Need* as this sector of SMEs require funds for growth of its businesses but are discouraged and therefore do not apply for formal credit. The variable *Qualification* has an adverse relationship with financial need for although majority of SME owners have a decent formal education and realise the importance of external credit as means of fulfilling their financial needs for future growth, yet their caustic mindset restricts them from approaching banks for credit. Other surveys have identified price of credit such as rate of interest, charges on overdrafts and cost of credit application as a reason for reduction in demand for credit through self-rationing. (Brown et al., 2022).

We accept the hypotheses *H3* as it clearly depicts the debilitating effect on the future growth of SMEs which is result of the barriers erected by SMEs against the formal financial sector.

5.7 Conclusion

This chapter provides key insights into the creation and growth of borrower discouragement among SMEs. It provides an important addition by adding a new dimension to the growing literature of borrower discouragement as previous literature studies the various aspects of borrower discouragement but what happens to the psyche of an SME entrepreneur if this issue of discouragement prevails has not been studied before.

A greater need for additional finance is generally triggered due to external business environment that may unfavourably impact business transactions thus resulting in a decline in sales turnover, capital reserves and deteriorate the debt-to-equity ratio (Pindado et al., 2006).

This restricts the short-term liquidity of the business resulting in late payments, which in turn increases uncertainty (risk) thus amplifying financial constraints. Although the firms would experience an increase in their external credit requirements and will not only come across difficulties in accessing this amount but will also have to face additional financing requirements owing to pressures in liquidity and increased interest rates on loans (Neuberger and Räthke-Döppner, 2015), which is certain cases might lead to bankruptcy (Ghosal and Ye, 2015). This impact is specifically acute on SMEs as they are more likely to suffer from financial constraints (Brancati, 2015). SMEs that are suffering from deteriorating finances and business would be more discouraged from applying for formal credit particularly from financial institutions that usually follow financial statement-based lending. Their reluctance to approach financial institutions for credit would most likely be based on that fact that they are suffering from financial difficulties and are therefore do not fall under the ambit of financial inclusion (Mac an Bhaird et al., 2016).

The study provides evidence that discouragement amongst SME borrowers prevents them from taking on growth-oriented ventures thus making strong grounds for academics and policy makers to give more attention towards understanding the causes and consequences of this complex and otherwise obscure phenomenon.

In the next chapter we provide policy implications and conclusion.

6. POLICY IMPLICATIONS AND CONCLUSIONS

Policy Implications

Our research findings call for several policy measures, which policymakers can pursue in order to minimise the gap between SMEs and (formal) financial institutions in Pakistan. Our analysis strongly suggests that there is a significant communication gap between SMEs and the country's banking system where alternative lending methods also exist. Banks in Pakistan have done little to raise awareness among SMEs regarding the existence of alternative sources of finance such as Islamic finance which in recent years has gained tremendous popularity, not only in Pakistan, but also globally (Iqbal and Mirakhor, 2011). The findings presented in this research is equally pertinent to policymakers as well as financial institutions.

The study on extrinsic religiosity is unique and this kind of research focusing on the presence and influence of extrinsic religiosity on entrepreneur's mindset and SME networks has not been carried out before. Not much literature is available on extrinsic religiosity and its effects on entrepreneur's psyche. Most SME businesses in Pakistan are either sole proprietorship or partnership concerns where the owner(s) and the business are one and the same. Therefore, the state of mind of a business owner directly affects the activities of the business. In our study we confirm a silent but deep-rooted presence of extrinsic religiosity within the SME networks which is directly influencing the business decisions of its members, the most significant one regarding access to formal credit. This issue is critical as it is the result of lack of communication between SMEs and financial institutions forcing these firms to turn to their respective networks for financial support as a last resort. These SMEs, although outing up an appearance that they do not require external finance are in fact trapped within their network circle which is having a deteriorating effect on their mental state of mind. This is one of the primary methods of self-rationing that is being practised by SMEs in Pakistan concerning bank finance. On the other hand, majority of the banks in Pakistan still follow a conservative outlook and prefer large companies in their portfolio and ignoring SMEs in financial inclusion. Therefore, forced self-credit rationing along with being financially excluded leave SMEs with a feeling of helplessness which in turn leads to the creation of a caustic mindset regarding bank finance.

This brings us to the second most edifying problem faced by SMEs in Pakistan which is the issue of self-induced credit rationing, resulting from borrower discouragement and how its continuing existence has been creating a caustic environment amongst SMEs. Generally, policy efforts are mostly targeted on the supply side of credit rationing (Schneider and Veugelers, 2010, Bloom et al., 2019) without considering the issue of self-induced credit rationing which is a grave oversight. Taking into account the sub-optimal economic consequences that may arise due to borrower discouragement (Hutton and Nightingale, 2011, Cowling et al., 2016) more concentrated policy initiatives are required to reduce borrower discouragement.

This study provides us with a very important insight which is a blinding lack of communication between SME and financial institutions. Therefore, policy efforts are required to address both the above issues and the above problems may be alleviated through focusing on implementing the following measures:

Islamic Finance

During our survey the SMEs in our sample had made it abundantly clear that they were not at all aware of Islamic banking which was one of the prime responses that had emphasised the communication gap between SMEs and financial institutions. In the past twenty years there has been tremendous growth in the field of Islamic banking and finance not only within the Muslim countries but also across globally. This basically due to the introduction of new and innovative Islamic products, privatisation, introduction of broader structural reforms and global integration within financial markets (Zaher and Kabir, 2001).

The principle followed by the Islamic banking system forbids Riba known as usury, Gharar referred to as extreme uncertainty and Maysir or speculation and boosts profit and loss sharing principle. (Abdelsalam et al., 2016). Elnahass et al., (2018) state the main characteristic of Islamic banking which is based on the profit and loss sharing model, in other words it is a partnership between borrower and the bank which involves financial activities that are supported by real economic transactions backed by tangible assets. This adds to the financial stability of Islamic banks as compared to conventional banks.

Islamic finance gained prominence over the last ten years in the banking industry mainly in the Middle East and South-East Asia. The definition of Islamic finance is based on the principles of Islamic Shariah involving several prohibitions namely, payment or receipt of 'riba' which is known as interest, gambling or speculation or involvement in any industries that are forbidden in Islam such as alcohol, pornography, pork or weapons (Gheeraert, 2014). The growth of Islamic finance has been tremendous in the last 15 years, scoring growth rates of double-digits and not only inside the Muslim economies but outside as well (Fang, 2014).

The fundamental differences between Islamic finance and conventional lending are many, more specifically Sharia-compliant finance believe that cost is only allowed on goods and services and hence forbids charging of interest payments (riba) as well as speculation. Islamic finance is built upon the idea of profit and loss sharing which is also known as participation finance and is based on the fact that all transactions involve a real economic transaction and are therefore backed by a tangible asset (Beck et al., 2019).

Beck et al., 2019 find that the credit risk involved with Islamic banks is comparatively lower than conventional banks which adds to their stability as they are less affected by domestic interest rate shocks and have an enhanced asset quality. They also mention the case of Pakistan where Islamic banks experience lower default rate than conventional banks even when dealing with the same borrower.

According to Zaher and Kabir (2001) the Muslim world practiced Islamic mode of finance throughout the middles ages and most of its concepts and techniques were later adopted in European financing, but the term Islamic finance is comparatively new, evidence only in the middle of 1980s. They refer to Islamic finance with its other name that is Profit-Loss-Sharing (PLS) as opposed to the interest-based banking system debate based on the Islamic religious beliefs. They state the main contribution of a PLS-banking system Islamic Sharia in two ways, firstly it is 'riba al-nasi'ah', which means to fix a positive return on a loan in advance as a cost incurred on the waiting time and secondly it is 'ribaal-fadl', which takes place when there is a hand-to-hand transaction between commodities and both forms are forbidden in Islam. Baele et al., (2014) considers Pakistan to be one of the few countries globally where a coexistence of both conventional banking as well as an Islamic banking system can be found and has been prevailing for long time.

Islamic banking is based on the banking system that is consistent with the Islamic Shariah in its objectives as well as activities which involve either the principles laid down in the Holy Quran or the conduct of the Holy Prophet Muhammad (peace be upon him) (Baele et al., 2014). Islamic banks are less exposed to the risk involving credit activities not only as it is based upon the idea of risk sharing but also because it has a higher quality of assets which adds to its stability as compared to conventional banks (Beck et al., 2013, Baele et al., 2014).

Baele et al., (2014) in their study have used Pakistan for their research using a dataset of 150,000 loans spanning over a period from 2006 to 2008 and found that the rate of default of Islamic banks is lower than their conventional counterparts, even if one borrower is utilising both Islamic as well as conventional loan facilities, the likelihood of him defaulting on an Islamic finance is considerably lower and most importantly borrowers associated with Islamic finance are either religiously devout or belong to a network which promotes religiosity and therefore as less likely to default on a loan.

Relationship Lending

A well renowned method of eliminating the communication gap between SMEs and banks is the encouragement of relationship banking. The importance of relationship period was initially acknowledged by academics while addressing the problem related to funding choice (Boot and

Thakor, 1994, Petersen and Rajan, 1994, Cenni et al 2015). The principle of repeated transactions over a period of time helped financial institutions in collecting information on the client which is beneficial for them in future. The collection of personal information on the firm helps establish business relationship between bank and firm as banks are better able to assess the financial credibility of the client. This allows the bank to be in a better position in providing best possible credit terms to its client and also enhance the availability of credit to its customer to avoid competition (Cenni et al., 2015).

The definition of relationship lending is a close association developed between firm and its financial institution owing to the involvement in repeated transactions over time which results in production of private information about the firm. Ties such as these not only help in a smooth process flow and improved availability of credit but also efficiency in decision making if the client experiences financial downturn (Boot and Thakor, 2000, Elsas, 2005).

The method of repeated interactions with the client to access necessary information about the borrower's business provides an insight to the firm's creditworthiness and is therefore considered as an apt technique for SMEs as they are generally opaque (Beck et al., 2018). Freel et al., (2012) confirm that the availability of soft information that is distributed through relationship banking can help improve access to credit for small firms suffering from lack of credit history, improper financial accounts and general information asymmetries. There is evidence pertaining to the accomplishment of relationship lending specially with firms that are informationally opaque the likelihood of a successful loan application increases. Relationship lending reduces borrower discouragement among firms.

Moro and Fink (2013) identify four lending techniques, financial statement lending grounded on the analyses of the company's financial statements, asset-based lending which examines quality and value of the asset provided as collateral and credit scoring lending, which is based on the company's credit history, all three of which are usually grouped under transaction lending and then there is relationship lending. Kano et al., (2011) examined the benefits of the relationship between banks and SME borrowers in Japan and confirmed to the importance of this relationship which has found the attention of policy makers, academics all over the world. They further state that studies investigating the advantages of this relationship can be found in Europe as well as the US.

The literature on SME credit highlights on the various lending technologies used by financial institutions when extending credit to SMEs (Berger and Udell, 2006, De la Torre et al., 2010, Kano et al., 2011, Berger and Black, 2011). Kano et al., (2011) identify two most important lending technologies namely relationship lending and financial statement lending. They argue that information verifiability plays a crucial role relationship lending. They define relationship lending as a close association built through the exchange of soft information.

Kano et al., (2011) state that relationship lending, in theory, envisages that a strong association between banks and SMEs leads to accumulation of soft information thus improving the availability of loans and pricing. However, they also highlight the capture effect which occurs when a borrower who is informationally opaque is reliant on a financial institution for its services and is shackled in this association being deprived of greater benefits which makes the finding inconsistent with the prior established statement that relationship lending is advantageous in the absence of verifiable information.

Funds acquired from family and friends has also been pointed out as a kind of financing available under the option of relationship lending prevalent in the developing world where members of a network use their personal connections and repute to provide credit to one another (Biggs and Shah, 2006, Du et al., 2017). Moro and Fink (2013) argue that trust plays a vital role in reduction of problems such as agency, transaction, monitoring and control costs, adverse selection and moral hazard. SMEs, generally suffer from information asymmetry and therefore end up being excluded from the capital market (Hirsch et al., 2018). Which is why various studies stress upon the importance of relationship lending between banks and SMEs which might result in lower transaction costs and improved supply of credit (Petersen and Rajan, 1994, Hirsch et al., 2018).

Studies are found recognising bank competition to be adversarial to financial strength and that firms being informationally opaque effect the association between bank competition and access to credit (Beck et al., 2006, Beck et al., 2013, Fungacova et al., 2017). The concept of credit rationing is more dominant in case of SMEs than large companies. SMEs usually experience credit rationing by banks if their relationship has been short in terms of the number of years. If the relationship with the bank is longer, the chances of obtaining credit for SMEs improve (Cenni et al., 2015). A constant relationship between banks and firms results in gathering of essential business information which reduces information asymmetries intrinsic to SMEs. This not only enables financial institutions in extending marketable loans but also strengthens firm-bank relationship over time (Cenni et al., 2015).

Financial institutions that encourage relationship lending acquire valuation information of the borrower over a period of time which enables them to extend credit even during financial distress. This is more beneficial for firms that are opaque, young, small or do not have adequate collateral (Beck et al., 2018).

Conclusion

In this research we have attempted to identify the most pressing barriers faced by SMEs in accessing credit from financial institutions in Pakistan. The issues highlighted are not only critical to the well-being of SMEs in Pakistan but are the ones that are generally overlooked due to their inconspicuous nature. Moreover, the difficulty in obtaining information directly from SME owners has further aggravated the situation. We have provided two very distinct solutions to policy makers that could greatly improve the number of SMEs in financial inclusion.

Limitations

To the best of our knowledge this is the first attempt in identifying the underlying causes adversely affecting SMEs willingness to approach financial institutions for acquisition of credit based on empirical data. This is also the first study focusing on the demand aspect of finance as it highlights the perspective of SMEs in Pakistan regarding formal credit and also provides a clear view of the miscommunication between banks and SMEs. As emphasised in a number of places in this thesis that hardly any research has been conducted focusing on the actual issues faced by SMEs in Pakistan with respect to obtaining bank finance. Whatever little research that has been conducted has focused on the supply aspect of bank credit while ignoring the demand side. These are the reasons why we have only been able to touch upon two edifying problems hindering SMEs from applying for bank credit. However, there is room for much research in this area as the gap in literature focusing on Pakistani SMEs is extremely wide. Moreover, the problems faced by SMEs in Pakistan from the perspective of banks has also not been included as the information pertaining to clients is sensitive and confidential and therefore banks were unable to provide us any information. Whatever secondary information available to the public is also very general and restricted.

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Appendix A

Questionnaire for SME Survey in Pakistan

A. GENERAL CHARACTERISITCS OF THE FIRM (DEMOGRAPHIC)

1. Information about SME Owner/Manager *(Choose ONE box only)*

i. Gender: ☐ Male ☐ Female

ii. Age: ☐ 18-25 yrs ☐ 26-35 yrs

☐ 36-45 yrs ☐ 46-55 yrs

☐ over 55 yrs

iii. Qualification: ☐ High School ☐ Vocational

☐ Bachelor Degree

☐ Others (Specify) ______________________

2. Name of your Firm: ____

Location of Business: ____

Year of establishment: __________________________

Telephone: ____________________________________

Email: ____

3. Answer the following *(Choose ONE box only)*

a) What best describes the ownership of your firm?

☐ Sole ownership ☐ Partnership

☐ Limited Company ☐ Others (Specify) __________________________

b) What best describes your core business sector?

☐ Retail ☐ Manufacturing ☐ Service

☐ Others (specify)

c) Which category does your firm fall under?

Micro ☐ Small ☐ Medium ☐

Large ☐

d) In terms of development, at which stage would you say your business is:

Early start-up (Less than 1 yr) ☐ Young (1-5 yrs) ☐

Established (more than 5 yrs) ☐

e) How many people does your firm employ?
Full time employees ________________

B. FINANCIAL INFORMATION OF THE FIRM

4. Answer the following regarding your firm's current financial status.

a) What was the estimated value of your firm's fixed assets (building, machinery, equipment, furniture etc.) in the year 2018?

____

b) What was the estimated value of the firm's current assets (cash, accounts receivables, deposit accounts, inventory value etc.) in the year 2018?

____

c) What was the estimated value of your annual sales for the year 2018?

____

d) What was the estimated value of the firm's net income for the year 2018?

____

5. Information on Accounts Management of the firm (*Choose relevant options)* :

a) What kinds of financial statements are maintained by your firm?

☐ Profit & Loss Statement ☐ Balance Sheet

☐ Cash Flow ☐ Bank statements

☐ Financial Forecasting ☐ Others (specify) ____________________

b) The financial statements of your firms are compiled by:

☐ Professional Accountant ☐ Self

☐ Others (Specify) ________________________

c) The above person has necessary knowledge on financial accounting and book keeping:

☐ Yes ☐ No

Note – Financing Sources: The financing sources can be broadly classified into two main sources:

1) Internal Funds (Personal funds; funds from family and friends without any cost involved)

2) External Financing (Bank; Private moneylenders; Government/NGO schemes etc.)

6. What was the estimated amount of internal funds (personal) used to start your business?

Rs.____________________ ☐ None

7. What were the sources of internal funds? *(Choose relevant options)*

Personal ☐ Family & Friends ☐ Other (Specify) _________________

8. Did you try to obtain external finance for your business?

Yes ☐ No ☐

9. If **"NO"**, what was the main reason for not seeking external financing? (Choose relevant options)

Sufficient Internal Funds	☐	Difficult Loan Procedure	☐
High Interest rate	☐	Lack of collateral	☐

Others (Specify) _____________________________________

10. If **"YES",** what were the sources of external funds used for your business? (Choose relevant options)

Bank Loans	☐	Govt./NGO Grants/Schemes	☐
Private Moneylender	☐	Others (Specify) ________________	

11. a) If you applied for Bank loan, what information did the banks ask for?
(Choose relevant options)

Business plan ☐ Financial statements ☐

Business total assets ☐ Owner's Equity ☐

Security (collateral) ☐ Others (Specify) ______________

b) What information did you provide to the banks while applying for loan?
(Choose relevant options)

Business plan ☐ Financial statements ☐

Business total assets ☐ Owner's Equity ☐

Security (collateral) ☐ Others (Specify) _______________

12. What was the main purpose of the external finance sought for?
(Choose relevant options)

Working Capital ☐ Fixed Cost (machineries/equipment) ☐

Debt consolidation ☐ Business Expansion ☐

Others (Specify) ____________________________________

13. What was the outcome of your bank loan application?

Loan Approved ☐ Loan Rejected ☐

14. Answer the following, if your bank loan was **REJECTED** *(Choose ONE only)* :

a) What reasons were given as to why the loan was rejected?

No reason given ☐ Insufficient collateral ☐

No credit history ☐ Too risky ☐

Others (Specify) ____

b) What was the impact of loan rejection on your business?

Serious financial difficulties ☐ Put plans on hold ☐

Project was terminated ☐ No impact ☐

Others (Specify) ____

15. Answer the following, if your loan was **APPROVED** *(Choose ONE only)* :

a) What was the total amount of bank loan applied for?

Funded Rs. ____________ Non Funded Rs. __________________

b) What was the total amount of bank loan approved by the bank?

Funded Rs. ____________ Non Funded Rs.______________

None

c) What was the loan amount taken from private moneylenders to start your business?

Rs.__________________________ None

d) From the total bank loan applied, how much did you manage to obtain?

Less than 25% 25% - 50%

50% - 75% 75% - 100%

100%

e) What was the interest rate charged on the loan?

____ Don't Know

f) What was the duration of the bank loan (loan term)?

Less than 1 year 1-2 years

3-5 years More than 5 years

g) What was the size (monetary value) of collateral required by the bank in proportion to the loan amount applied for?

None Half

Equal Double

More than two times

h) What collateral were you asked to provide to obtain the bank loan? *(Choose relevant options)*

None Business assets (Land & machineries)

Personal assets Others (Specify) ______________________________

C. INFORMATION ON EXTERNAL FINANCING SITUATION

16. Please indicate your degree of agreement or disagreement on the following Bank borrowing related statements (Choose ONE box for each sentence):

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The procedure for obtaining Bank loan is simple					
Banks are responsive to SME financing needs					
Banks' general commercial lending policies are favourable to SMEs					
Collateral is pre-requisite for getting bank loans					
Banks charge SMEs higher interest than bigger firms					
It is not difficult for good projects to get loans					
Firms with strong financial statements get loans easily					
It is easier to get short-term loan than long term					
SMEs face unfair competition from large enterprises in competing for bank loans					
The banks charge drastically higher interest rates on the loan taken.					

17. Please indicate your degree of agreement or disagreement on the causes of inaccessibility to bank loans (Choose ONE box for each sentence):

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
SMEs lack of required collateral					
SMEs cannot provide relaible financial information to prove the credit worthiness of the firm					
SMEs are usually too young to have enough information					
Loan application procedure is complex & time consuming					
SME loan request is too small to be worth considering					
Accounting systems used by SMEs is under standard					
High interest rates charged on SME borrowings					
Small size of owner's equity (personal seed money)					

18. Please indicate your degree of agreement or disagreement on the following Business Support related statements (Choose ONE box for each sentence):

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
There are clear policies and strategies to promote SME.					
In general, policies are in favour of larger firms.					
Business associations (such as BCCI) are helpful in getting loans from the banks.					
Guarantee Schemes for SME borrowings are available.					
Technical support for SMEs in accessing to bank credit is available.					
There are special financial institutions to promote SMEs.					
There are policies that encourage commercial banks to lend to SMEs.					
There are subsidies in place for interest payment.					
Business services available are aimed at larger firms.					
I would like further support in accessing finance.					

B. FUTURE GROWTH AND OBSTACLES TO GROWTH

19. Over the next two years, what is the expected business growth graph? *(Choose ONE only)*

Substantial Growth ☐ Moderate Growth ☐

No change ☐ Reduction of Business ☐

Close down the business ☐

20. If planning to grow your business, how do you expect to finance it? *(Choose ONE only)*

Internal Funds only ☐ External Finance only ☐

Both Internal and External ☐ Others, (Specify) ________________________

21. What do you see as the most important limiting factor to get external financing for the future growth **of the business? (Choose relevant options)**

No Obstacles ☐ Insufficient Collateral ☐

High Interest Rate ☐ Lack of information ☐

Others (Specify) ______________________________________

THIS IS THE END OF THE QUESTIONNAIRE. THANK YOU FOR YOUR TIME.

Appendix B

Ethics Approval

Research, Innovation and Academic Engagement Ethical Approval Panel
Doctoral & Research Support
Research and Knowledge Exchange,
Room 827, Maxwell Building
University of Salford
Manchester
M5 4WT
T +44(0)161 295 7012
www.salford.ac.uk/

20 November 2018

Safia Mahmood

Dear Safia,

RE: ETHICS APPLICATION –SBSR1819-01: Evaluating Barriers to SME Financing and Performance in Pakistan

Based on the information that you provided, I am pleased to inform you that your application SBSR1819-01 has been approved.

If there are any changes to the project or its methodology, please inform the Panel as soon as possible by contacting SBS-ResearchEthics@salford.ac.uk.

Yours sincerely,

Professor David F. Percy
Chair of the Staff and Postgraduate Research Ethics Panel
Salford Business School