

# Start-Up Financing

**Author: Tamoor Tariq**  
**University of Twente**  
**P.O. Box 210-420, 7513 BH Enschede**  
**The Netherlands**  
**t.tariq-1@utwente.nl**

## Abstract

Startup firms face restricted access to finance which acts as the main barrier to their growth. This paper aims to address different types of financing options that are available for the startup firms. The paper is divided into two sections. The first section examines the sources of finance for the small “Stat-up” firms during the firm life cycle. There are two types of startups analyzed in this paper. Firstly the startups that are yet to start their business operations or the (pre-startup) stage and secondly the firms that are already in operating phases but are considered to be still in the startup stage of the firm life cycle. Different sources of finance are explained for both types of the startups along with their advantages and disadvantages. Later the next section describes the financing trends across 5 different countries namely China, Germany, Ghana, Pakistan and United Kingdom. The main financing options in these countries are discussed along with the market conditions for these various sources.

## Keywords

Sources of finance, Small size firms, Venture capitals, Angel investors, Banks, Lending, Private Equity, Firm size, Financing patterns and Firm lifecycle

## Supervisor:

**Xiaohong Huang**  
**Henry van Beusichem**

**x.huang@utwente.nl**  
**H.C.vanBeusichem@utwente.nl**

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

*1<sup>st</sup> IBA Bachelor Thesis Conference*, June 27<sup>th</sup>, 2013, Enschede, The Netherlands.  
Copyright 2013, University of Twente, Faculty of Management and Governance.

## 1. INTRODUCTION

Access to finance for startup firms has always been an issue of debate within the circle of Economists and Researchers. Issues related to the capital structure decision have attracted lot of attention, because of the reason that these issues are primarily dominant in small size and young firms. This paper will therefore address the financing options that are available to these startup firms along with their pattern and duration of availability. Furthermore with the emphasis over possible alternatives the startup firms can adopt in order to make sure the smooth availability of finance in crucial times. The main small size of firms that are addressed in this paper refer to “Start-ups” and not the ones that are already operating. Since the financial options and preferences differ for both of them. During the period of the startup firms applying for finance, many constraints are encountered as well. These constraints will be addressed along with the relevant options.

The main concern for these startup firms is not only limited up to the fact that how these sources of finance are successfully acquired but also how these sources are effectively implemented once they are made available, since the startup firms lack both the experience and expertise in dealing with the core business operations. Hence the paper will also address the influencing factors of these financial sources over their lenders (Small firms) and the way in which the two parties proceed through thick and thin. The first section will explain the “Financing options” for the startups which is the main aim of this paper along with the influencing factors. The next section will discuss the financial patterns for the startups firms across various countries. Therefore the paper tries to address the important question of *“What are the main sources of finance for Startup firms?”* along with other sub question of analyzing the financing patterns in a “Geographical” context leading to the question about *“What are the financing patterns for startups across the world?”*

The methodology deployed to answer these research questions is literature review. The literature is rich with explaining various sources of finance along with their preferences and trends across various countries. Major part of the paper encompasses over the prominent sources of finance for these “Start-ups” firms, where the financing options are available during the different stages of the firm growth cycle. The paper will conclude with answering the research question of financing trends across various countries of the world. These countries include both the developing countries as well as America, China and European countries, giving an insight to the different trends depending upon the Economy and Financial infrastructure of the countries under study.

## 2. RESEARCH DESIGN

The research is based on the structured review of the literature. The first part of literature review includes the selection of most relevant articles on the basis of specific search terms and criteria. Once the articles are selected it is followed by the next step, which is the analysis of the selected articles. Based on the definitions of the key words, the present and the future sources of finance for the small size firms will be analyzed. Furthermore the results gathered from the analysis will be merged to give a meaningful interpretation and help in more structured literature review.

After the selection of the relevant articles, they are analyzed to find out various components that are available to answer the research questions of the paper. Once these components are

analyzed, they provide the structured overview of the sources of finance that are available for the startup firms.

In order to make sure that the relevant and authentic articles were to be selected the “Entrepreneurship Journal Rankings” by (Jerome Katz & Kim Boal, 2003) was used to select the journals from the “Financial Times Classification” ranking. Furthermore the information regarding the *database selection*, **Journal selection**, **Search criteria** and **key words** are explained in the following sub sections.

### 2.1 Database selection

Databases were used to select the relevant journals and literature in the initial phase of the search. The databases provide the structured search or journals and articles. The two databases that were used are “Scopus” and “Google Scholar”. The two databases helped by providing comprehensive access to the journals and literature as mentioned before. Both of the databases are in common use. However “Scopus” database majorly contributed in the access to relevant articles and was therefore the principal search engine for collecting the articles. It can be seen in the Appendix.

### 2.2 Journal selection

Out of top 35 Journals according to the Financial Times Classifications, 13 financial journals were selected that are rich with literature as required for the paper. All of these journals are authentic and acknowledged by the “Financial Times” as well for the credibility of these articles. . The articles are present in the related databases mentioned in the previous subsections. The articles are selected on the basis of citations as well. Almost all the articles selected are well cited.

### 2.3 Key Words

The keywords had to be highlighted under the Abstract in the articles or the keywords of the articles that are to be selected for the literature review. Keywords like “Sources of finance”, “Small size firms”, “Startups”, “Venture capitals”, “Angel investors”, “Banks”, “Lending”, “Owner’s capital”, “Firm size”, “Financing patterns” and “Financing lifecycle”. Though the main key word is “Sources of finance”, but as it is known that in not all the articles have all sources mentioned, some articles might give more preferences to Venture capitalist, or Angel investors, and Banks. Therefore these additional keywords were used to find the relevant articles and the way they are related to the literature review.

### 2.4 Search Criteria

In order to make sure the relevant literature is reviewed and to have an easy understanding of the articles following search criteria’s were used.

- All the articles need to be in English
- All of the articles selected have to be published in the year 1992 or later.
- The articles should be retrieved from the databases as mentioned above.

### 3. FIRM LIFECYCLE

Just like the products, firms also follow the same life cycle. The firm life cycle is divided into four different stages. Each stage has its own prescribed characteristics. The different stages of the firm lifecycle are Birth or Startup stage, Growth stage, Maturity Stage and finally the Decline or Revival stage.

Since the paper will address the sources of finance for the firms in their startup phase, therefore the sources of finance to be discussed would be related to the startup phase. Though some of the sources help at growth and maturity stage as well but the main aim is to cover the sources at the startup stage. The firm lifecycle explains the importance of “economic” rather than the age factor of the firm although age is an important factor for the growth. Just with the growth of the business, the financial needs as well as the options change too for the firms. As the firm grows, it gains experience and becomes less opaque information wise. With the transition of startup firms from one stage to another stage, the financial needs of the firms do also change. (Berger & Udell, 1998) have tried to explain these changing financial needs in the financing growth cycle of small firms. From the startup phase, as the firm grows, the new sources of finance available to them on equity side are (venture capital) and on the debt side (banks, finance companies). The startup stage is considered to be the starting point where the entrepreneur tries to convert an idea into a business opportunity. In the startup stage founder and the key personnel are the main employees of the firm followed by small funding requirements. The possible forces of funding at this stage are mostly self-finance, family, friends, colleagues and angel investors. The risks of failure to survive and transit into the next stages are very high. Once survived, the firms enter the growth stage with managers as more professional employees and the nature of operations become more formal. The revenues start to increase but still not profitable yet. The main sources at this stage are Venture capitalists, banks and strategic investors. Then comes the maturity stage where next generation of products and services of firm offering are tested. The employees are highly skilled and specialized personnel. The risk is lowered since increased revenues show stable growth. The main sources are same as in the previous stages, since it depends on how long the two agreed to work together. The financing options include Venture capitalists, Banks, Strategic investors and business angels. Finally by the time firm reaches maturity, it is capable enough to make their initial public offerings (IPOs). It depends upon the firms to decide whether to carry on with the sources of finance or not (Aurelian, 2008).

### 4. STARTUPS

Although there are no clear definitions to define startups, however various criteria's like number of employees, annual sale, or net profit are some of the dimensions that could help differentiate between the definition for large and small startup firms. There are mostly two types of startup firms. The first type of startup is explained in the scenario of “Entrepreneur”, “Where an individual who thinks, reasons and acts to convert the ideas into commercial opportunities and to create value” (Leach & Melicher, 2012). This phenomenon refers to the stage even before the Birth or startup stage of the firm lifecycle. Describing it in a nutshell, this type is just before setting the foundations of the firm, where the owner (Entrepreneur) plans to convert an idea into a profitable opportunity, by planning to start a firm. On the other side, the second type explains the startup firms which are already carrying their operations and are in their working phase; however they are yet to achieve the status of a small developed and operating firm. These startups

are usually in the Birth or startup stage of the firm life cycle. (Aurelian, 2008) defines the first type of startups as firms where the initial business concept is formed. With the initial products and services that are to be offered are observed. The founder (entrepreneur) and some key personnel are the main employees, and the funding requirements are small as main funding sources are owner's capital, family, friends & colleagues. The risk of failing to deliver is very high. However the definition of the 2<sup>nd</sup> type of startup firms is explained by (Dilger, 2012) using different criteria's in European and American context. According to the author, European version of definition refers to a small startup firm of having less than 50 employees and annual turnover of not more than 10 million Euros, whereas on the other hand American version of definition for small size startup firm is one with not more than 250 employees and annual sales of not more than 1\$ million.

Another definition can be discussed here as well. According to (Beck, Kunt & Maksimovis, 2008), small firm is defined as startup firm if it has between 5 to 50 employees. Hence different definitions of the startups can be observed. However this paper will address the sources of finance for both types of the Start-up firms and how these sources of finance are made available at various stages of the firm's growth cycle.

### 5. TYPES OF FINANCING

There are different types of financing options that are available for the startups during the different stages of the firm life cycle. The financing types are based upon the level of growth of the startups from the first stage of the firm life cycle to the final stages along with their growth and production scale. Since the type of finance vary across different stage of the firm life cycle. These types are classified as followings (Leach & Melicher, 2012)

Seed financing, Startup financing, First round financing, Second round and Mezzanine finance.

The importance of the types of financing can be explained by the findings that about 23.7% of startup firms disappear within the first 2 years and further 52.7% are vanished in a time span of 4 years and the major reasons behind their failure are the bankruptcy, owner's health, and access to financing options. (Berger & Udell, 1998).

For any firm in the startup stage it is necessary to make sure the availability of finance exists in order to meet the initial needs by the entrepreneurs. In the initial stages when an entrepreneur decides to convert an idea into a business opportunity, he/she might lack financial resources to cover up the requirements. At that point, Seed financing is required in order to help the entrepreneur to develop the business concept. It is important for both types of startups. It comes under the category of the insider financing, where needs for finance are fulfilled by the startup team comprising of entrepreneur's own assets together with finance from the family, friends and colleagues. Seed financing stage investing is important for the good beginning of the startups. However once the initial phase is successfully reached, Startup financing is deployed in order to meet financing needs of the entrepreneur. Like the seed financing, startup financing is also important for both types of startup. In the startup financing, funds are needed to take a startup firm from having an established business opportunity to the initial stage of production and sales. This type of financing has major sources like “Business Angels” and “Venture Capitalists” (Robb & Robinson, 2012). Another type of financing is the first round financing; which is considered important for the 2<sup>nd</sup> type of the startups in order to decide if the startup will succeed through its

lifecycle. By nature first round is formal and the equity is provided externally to cover the shortfalls in the required finance for the startups to meet their expenses. Making sure the availability of first round finance, the options include commercial banks, suppliers and customer, and grants from the governments. The requirements for receiving finance from commercial banks and asking for the Trade credit represents it a formal type of financing option for the startups. Formal type of financing is in the sense of collateral requirements to be fulfilled by the startups in order to access for finance. First round financing is crucial since it decides the fate and the direction of the startups. The second round financing is required when the startup firms needs to expand its core activities or operations. This type of financing is required for the second types of startups where additional finance is needed to expand firm's operational activities. There is a direct relation between the growth and purchases, since as the growth increases, earning generated are used to pay the expenses which reduces the earnings and therefore the startups have to look for the second round of finance. The sources are still the commercial banks and suppliers & customers based on the phenomenon of previous history and trade credit respectively (Leach & Melicher, 2012). It is considered important for the 2<sup>nd</sup> type of the startup firms to make sure the availability of second round financing options since the demand for additional finance can occur at any stage of the firm lifecycle of the startups. Finally Mezzanine financing is another type of financing tool, where finance is needed for the marketing expenditure, expansion projects and for the improvement in products and services of the startup firm. Mezzanine finance is usually obtained through debt in the form of warrants. Warrants are the rights or options to purchase a venture's stock at a specific price within a specified time frame. The major use of mezzanine finance is for the plant expansion, marketing expenditures, product or service improvement and working capital. The major players involved to make sure the smooth availability of mezzanine finance are the Investments banks and commercial banks. Investment banking firms are firms that advise and assist corporations regarding the timing and the costs of issuing new securities (Leach & Melicher, 2012). Mezzanine instruments exist essentially as hybrid financial securities that contain both debt and equity characteristics along with a range of possible designs. Mezzanine finance is usually available in the later stages of the startup firms and to all the types of firms, it is considered to be an important source of finance for the startups in their later stages along with Venture capitalists and Strategic investors (Aurelian, 2008). Hence these types of financing are necessary in order to explain the sources of finance for both types of startups at different stages of the firm life cycle.

## 5. Sources of Finance

### 5.1 Owners' Capital

For the start-up firms in the initial stage, Owner's capital is seen as "Seed financing" when the options for external financing are limited. It is considered to be the primary option as a source of finance for the startups. Owner capital is a part of insider financing and is the largest sources of informal finance for the startups including owner's equity, loans and credit card. Insider finance channels mostly include finance from the family members, friends and affiliates of the firm (Robb & Robinson, 2012). Insider finance comprises of funds from the startup team that consist of owner's family, friends, relatives and colleagues. With the startups insider finance is an important option since these firms have no collateral or track records. Startups have difficulty in obtaining external finance because of the vague future prospects and find difficulty in signaling their

creditworthiness. However the question might arise about the amount of owner's capital, this could be argued by the fact that the owner might use some of the retained earnings, as finance for their startups expedition. But in most of the cases, especially for the startups, which are relatively young and are therefore unable to harvest any profits, so they turn towards the insider finance. (Berger & Udell, 1998). Furthermore the outside sources are restricted in providing finance in the early stages of startup developments until or unless the entrepreneur successfully demonstrates the existence of a profitable opportunity to the investors (Scholtens, 1998). Once the opportunity is spotted and utilized opens the door for finance for the startups. In the United States statistical results of national survey (Berger & Udell 2002) for small business finance conducted in 1993 show that the biggest category in providing finance for the small size firms is the Principal, or in other words the Owner's capital. Results show that 31.33% of the financing patterns lead to the Owner's capital, similarly in another survey similar trend is seen by Kauffman Firm Survey (KFS) in the United States from 2004 to 2011 where a sample of 4928 firms (Small) were used. Results showed that over 75% of the firms have at least some sort of owner's capital. On contrary owner's debt in the form of loans play a less significant role. According to (Berger & Udell, 1998) in the initial startup stage, the primary source of finance consists of "Startup team", beside owner, other members of this startup team includes friends, family members and colleagues. They act as a financing source in the form of interest free loans, or even donations to the startups with no formal requirements. Therefore this sort of financing is informal and insider since there are no strict requirements for the availability of credit.

The main advantage of owner's capital in terms of startup team is that family, friends and colleagues that make the availability of finance in the early stage of the financing cycle do not get involved in the financial monitoring, with or without the formal measures and ratios (Leach & Melicher, 2012). On the contrary for the startup team with no controlling over the finance provided, there might be the chance for the misuse or high risk taking by the owner. Therefore despite of all the fact, Owner's capital remains the first primary source of financing option for the startups.

### 5.2 Banks

As a source of finance for the startup firms, Banks are the most well know sources of finance after owner's capital. Banks are financial institutes that provided finance to all type of firms irrespective of their size. In any bank-based system, major role is played by the banks in facilitating the flow of money between various investors and organizations along with the surplus cash that require them. Countries where bank based financial system have very strong banks, with major purpose of monitoring corporations and are involved in the strategic decision making of that market. Banking finance is important for startup firms since they rarely obtain long term debt or equity, as they must rely on the bank credit as a major source of finance, since they obtain much of the external capital from the entrepreneur's own funds, and informal investors like family members, friends and colleagues (Walker, 1989). The decision for startup firms to opt for banking finance depends upon different criteria's like time frame, amount of credit availability, level of interference and supervision and they vary across firms.

For the startup firms it is vital to rely on the finance from the banks since the financial situation of the startup firms appear to be very opaque for the investors, therefore without the presence

of a financial intermediary firm like the banks it becomes too costly for the investors to gain information in order to grant credit to the startup firms. Hence bank plays an important role of classic financial intermediaries, solving the problem for the startup firms by generating the information about them, by setting terms of the loan contract to improve the incentives of the startup firms. For any startup firm, acquiring bank finance opens up many ways to gain access to finance as banks provide different types of financing options that include Credit trade, low interest loans, interest free loans, reduction transaction cost, protection against credit crunches, and credit risk insurance (Boot, 1999).

Banks provide assistance in terms of renegotiating the contract whenever the startup firms are facing financial difficulty, and by diversifying the risks across many small business credits. Banks act to form long term relations with the startup firms and with the passage of time, as the working relationship matures between the two, it results in lowered interest rates and less collateral requirements in terms of further financial assistance, however the banks on the hand could impose “migration restrictions” on these startups as well in order to avoid them to opt for other sources of finance. (Meyer, 1998). Furthermore banks make sure the fluent availability of finance to the startup firms without any disruptions or discontinuities. Another advantage of using banking finance is that they demand less monitoring and the controlling rights as compared to other options for finance. They are not interested in the ownership of the firms. They mostly monitor the contract violations, worsening performances, or failing the quality of the contract that could endanger their loan (Yerramilli & Winton, 2008). However as far as the question regarding the ease of banking finance for the startup firms is concerned, (Florin, Dino, & Huvaj, 2013) hold a different point of view, according to them even after the entrepreneurs ran out of their capital in the initial stages of the startup, they still consider the option for banking finance to be still too risky for the banks to consider for providing capital or not. Even if the entrepreneur could somehow manage to obtain financial resources from the banks, the terms of providing those resources are themselves unaffordable for the startups. Furthermore banks are in a continuous need for funds, especially the liquidity funds in their course of business. Such needs might include demanding additional loans, loan commitments, and increased demands for the repayment from the startups. Failure to meet the liquidity needs have a negative impact over the banks, hence creating costs for the banks (Boot, 1999). Another issue that might come across the startup firms includes the aspect of projects with the positive future Net Present Value (NPV) to restrain from further borrowing from the banks, hence derailing the long term commitments with the banks. The worst scenario could be encountered as a result of this backing off from their commitments by the startup firms, banks that hold the information about the startups are no longer bound to keep the information secretly. Hence information can be leaked which would make the condition worst.

## Relationship Lending

Banks provide different types of financing options that include Credit trade, low interest loans, interest free loans, reduction transaction cost, protection against credit crunches, and credit risk insurance. The availability of these types depends upon the kind of relationships that prevails between the bank and the borrower. The intensity of contact between the firm and the banks explain the relationship between the two. For a startup to have an access to finance, the lender and borrower relationship

is very important. This can be defined in terms of relationship lending, where the information gathered by the bank on the basis of continuous contact with the owner is used in decision making for the provision of the finance. Under relationship lending, banks rely on the so called “soft information” about the startup firms over period of time, about the owner of the startup firms, the local community and especially the industry the firm plans to operate. The “*soft information*” comprises of mainly the assessment of future prospects of the firms, by assessing their financial reports, along with information acquired from their suppliers, neighbors, and customers (Berger & Udell, 2006). This information gathered by the institution regarding the credibility of startup businesses is through the repayment history, renegotiations, and periodic submissions of the financial statements. This is followed by further information regarding the deposit accounts, transaction history and payroll data provides a clear picture of the economic situation and the stability of the firm (Berger & Udell, 1998) (Cowling, Liu, & Ledger, 2012). Therefore in order to make the availability of credit easily accessible whenever needed, startup firms need to make sure that the issue of “relationship lending” is not overlooked.

For the startups, banks are no doubt an important source of finance that make sure the credit supply is not disturbed during the entire duration of the contract. However the decision to opt for the financing options for startups still lies in the hands of the owners.

## 5.3 Angel Investors

For a start-up firm it is important to look for the sources of finance that are easily available. Different from the mainstream environment of financial market, Angel finance is an informal market for the direct finance where the individuals can invest directly in the small companies or start-ups through an equity contract. Angel investors are wealthy individuals that operate as informal or private investors that provide venture financing for the small startup firms (Leach & Melicher, 2012). As the name suggests, angel investors are individuals of high net worth and therefore the amount they wish to invest in the small size firms is mostly the same as it is required by the firm on the other hand (Berger & Udell, 1998). The amount of finance provided by the angel investors vary across individual and depends on the firm’s perspective for need.

Business angels mostly draft the contracts between them and the entrepreneurs in terms of prioritizing the safety of their investment. It is the contract that specifies the right and the obligations of both parties about what will be done by whom and when. The main objective is to align the incentives of the owner and the investors on the basis of performance and control measure.

Referring to the National survey for small firm finance in 1993, an estimated 3.59% of the small size firms across the United States were financed by the angel investors. Though it seems less but angel investors are high net worth individuals that provide direct funding to the start-up firms in their initial starting phase (Berger & Udell, 2002). The interaction between angel investors and the small start-up firms is an interesting phenomenon. Qualified angels can search through the data of startup firms to search the company of their interests. After which the angels and entrepreneur are put together on a table to enable them discuss the opportunities of investments and terms and policies of engagement. Business angels not only provide finance to the start-up firms but also with the “human capital” in the form of skills and competencies they hold to assist the

newly start-ups as well as already operating small size firms during the different scenarios.

Another benefit of business angels is that they provide “social capital” used to enhance contacts of the newly established firm. “Business Angel Networks provide the channel of communication between private capital investors (angel investors) and the entrepreneurs seeking risk capital”. Business angel networks (BAN’s) facilitate small start-up businesses especially in their early stages, with very small amount of finance in order to raise the equity capital (Mason & Harrison, 1997). Furthermore if everything goes well, business angels help increase the financial support for the firms (Macht & Robinson, 2008). The main reason why angel investors are a good source of finance for the start-ups is that they demand less control. The existing informal nature of angel market could be the best solution to reduce the problems related to information in the early stage of the new start-up financing needs. (Berger & Udell, 1998). Another advantage of angel finance is that angel investors invest their own money as compared to the venture capitalists that have a legal duty of care for how they invest. In addition to that business angels make quick investment decisions and the business angels require less specialist financial and legal due carefulness, as a result they incur low costs for investments (Mason). One of the key findings in literature revealed a surprising fact that most of the business angels prefer investing in the startup firms when they are in their growth stage, rather than the startup or birth stage or even before the firm is setup. This comes up with a diversified view of financing preferences for the business angels. However still business angels play a key role in providing financial support to the startup firms in their initial stage as well. (Freear, Sohl & Wetzel, 1994).

On the other hand there are problems encountered as well for selecting angel finance, since the market is invisible and uneven, which is the main reason why angel market is overlooked. Similarly while the business angels may be seen as informal investors, the main drawback is that they face difficulties in maintaining continuous financing. (Leach & Melicher, 2012) and the problem arises during the follow-on funding, especially the individual business angels who lack this capacity. Hence this creates the danger of ultimate cease of startup operations. Also another drawback is that they bring less financial expertise to the newly established firm as compared to the other sources. Since there exists no directories of the angel investors and no financial records of the investments they undertook, it becomes even more difficult to find the most appropriate angel investor. Concluding to the fact that the market invisibility factor of these business angels and the limited financial scope are the main drawbacks of business angels. There exists a contact gap between the entrepreneurs and the business angels, which as a result tends the entrepreneurs to look for unscientific and passive approaches of finance, diverting their interest towards their family, friends, colleagues and business associates. The development of Business angel networks (BANs) could help overcome this potential problem of contact gap by bringing the donor and the recipient on one platform. (Mason). However a survey conducted in England between 1975 and 1986 showed that angel investors dominated venture capitals in the category for financing small size firms and start-ups, since they have informal consulting relationship with the owners (Fenn & Liang, 1998). Despite all of these unsolved issues, start-up firms look towards angle investors as one of the most important sources of finance.

## 5.4 Venture Capital

Proceeding towards other sources of finance, the option of Venture capital is another considerable factor in this category. Venture capital is the main source of finance for the high technology firms (both small and large). Venture capital is a type of financial capital made available by the venture capitalists in the early-stage of the firm that often involves ample risk of total loss or failure for the startups. Venture Capitalists on the other hand are individuals that join informal and organized firms (startups) in order to raise and distribute the venture capital to new and rapidly growing new ventures and business opportunities (Leach & Melicher, 2012).

Venture capitalists mostly preferred to invest in the startups in order to make them compensate for the initial negative cash flows and to finance their growth ambitions. Since the startup firms require additional finance in the initial stages of their development with increase in scale of production and turnover (Dimov & De Clercq, 2006). Discussing about the types of industries in the financing categories of venture capitalists, literature provides a look at the financing preferences for VCs. Though venture capital is available for the startup firms in the form of funds that consist of pension funds, investments, private investors, joint ventures between small and large firms, venture capitalists mostly invests in small firms. There are more chances for the startups to acquire venture capital once they are established as compared to the pre-startup phase where owner’s capital and banks are the key sources of finance (Maier & Walker, 1987).

Venture capital is a formal kind to financing strategy made available to the startups, however making sure the availability of venture capital is now on the policy agenda in many of the advanced countries. Since venture capital is a key source of finance in the startup stage as well as growth and maturity stage of start-up firms, Venture capitalists typically invest in the portfolio companies once they began preparing for their initial public offerings (IPO) (Tan, Huang & Lu, 2013). However there also lies a time frame for the duration of venture capital, For the Venture capitalist the time frame lies between five to ten years and often they receive not any real or meaningful returns during this period (Maier & Walker, 1987).

Venture capitalists carry many advantages with them. VCs are generally interested in the growth as well as increase of their venture value when making their investments, therefore the growth potential of the entrepreneur and the capability of management team of the startup firm to realize the growth are dominant to Venture capitalists. The venture capital funds add a lot to the startup firm in the form of the experience and skills they hold as compared to the banks. Venture capitalists add to the startups by making sure that the entrepreneur stays motivated, since they don’t aim to run the business themselves meaning that they are not interested in the having the ownership of the startups. In addition to that VCs provide the startup firms with the social capital, where entrepreneurs get to know more about new venture capitalists, hence broadening the platform of venture networking (Alexy, Block, Sandner & Ter Wal, 2012). Besides providing financial and motivational support to the startups, the specialized expertise of the VCs helps reduce the failure rate of the startups. Specialized expertise in the form of controls over the management enables them to implement the corrective actions. Furthermore through the expertise provides by the VCs in the later stage help understand and deal with the complexities of the firm hence increasing the learning ability of the startups. (Dimov & De Clercq, 2006).

On the other hand Venture Capitalists hold some drawbacks as well in their way of financing startup firms. The venture

capitalists to some extent do insist on having the control of the board of directors, and corporate decisions regarding future equity dilution to be in their hand as well. With such preferences VCs aim to represent a fair deal for all (De Clercq, Fried, Lehtonen & Sapienza, 2006). Venture capitals can reduce the size of investment every time, if there still exists uncertainty. With the internationalization of business operations lead them to exposure of economic and political risks, and may increase the uncertainty at least, which increases the need for information exchange for the venture capitalists. In addition to this, venture capitalists implement new organizational structures, procedures, and processes for the administrative requirements which might be considered as interference in the operations of the startup firms. Since the VCs mostly invest in the startup firms already established, and in working phase the issue of agency problem might occur where VCs and their assistances might be in a conflict with the Entrepreneur's or managers interests. Therefore in this scenario VCs might prefer increased monitoring over a span of time that might result increase their agency risk. This is found out to be true with other reasons including lack of sufficient information, decision making skills and insufficient efforts towards expense reduction (Berger & Udell, 1998) (LiPuma, & Park, 2013). In a nutshell for the small size firms to make sure that venture capital is the primary source of funding the strategic planning should be highly opportunistic and firm should represent the capacity for growth and promise high return on investments.

## 5.5 Trade Credit

It is another source of finance for the startups which is largely relationship based. As the firm grows, there might be a shift in their dependence from the informal sources of finance to more formal sort of sources. It can be another source of finance for the 2<sup>nd</sup> type of startups discussed in this paper, since it is available in the later stages of the firm lifecycle. As the startup proceeds in the different stages of the firm lifecycle, Trade credit becomes an important source of working capital (Charvis, Klapper & Love, 2011). Banks are the main providers of trade credit. It is measured by the accounts payable at the end of the prior year. Small amount of trade credit is perceived enough from the transaction costs, liquidity and cash management point of view for the startups. Referring to the NS (National Survey, 1993) 15.78% of the debt finance was provided by trade credit to the small businesses across the US. such a significant financing percentage makes trade credit as an extremely important to the startup business finance.

Trade credit helps startups in various ways, by providing a support during the credit crunches, contractions of monetary policy or may be other shocks or economic recession that may lead the financial institutions less willing to provide finance to the startup firms.

On the other hand trade credits are very expensive, with a typical trade credit arrangement for the payment to be due in full in 30 days. Furthermore in the US, Small firms tend to pay the account payable sooner and try to become less dependent on the trade credit because of it being quite expensive ( Berger & Udell, 1998).

## 5.6 Leasing

Leasing is another source of "asset-backed" finance. It is another formal type of external financing option beside Trade credit. Lease finance is a more refined type of finance and is rarely available in the lower income countries (Charvis, Klapper & Love, 2011). Leasing involves the purchasing of a fixed asset

by a lender or a lessor. It is a common method of financing equipment and real state by both the banks and leasing companies across many countries. The borrower, after purchasing of the fixed asset, enters into a rental contract with the provider who specifies the payment schedule. In many contracts there is a possibility of the presence of an option where the borrower can purchase the asset at the end of the contract at the pre-specified price.

Leasing finance is usually available during the second stage of the firm lifecycle, where the firm tries to expand its business activities and seek various financing options (Aurelian, 2008). Leasing can be used to provide finance to the startup firms, because the underwriting decision is based on the value of asset being leased. Furthermore it can also provide an optimal sharing of the tax benefits for both the lessor and borrower. Since the taxes are divided and are shared equally or as mentioned according to the agreement between the lessor and borrower (Berger & Udell, 2006). On the other side, it can be observed that small startup firms usually do not utilize the option of leasing finance unevenly as compared to the large size firms. However the leasing finance does not fulfill the financial gap of small firms most particularly in the countries with under developed institutions. The main reason behind this justification is that the use of leasing finance is positively related to the development of the financial institutions and the equity market as well (Beck, Kunt & Maksimovis, 2008). Hence leasing is another source of finance available to the startup firms.

After the discussion of different sources of finance in the previous section, this section will focus on the addressing different patterns for sources of finance across five different countries. The sample comprises of countries from the list of developed countries of the world and two (third) world countries. Developed countries include United Kingdom and Germany whereas for the third world countries, the sample comprises of Ghana and Pakistan and finally China, which is an under developed country. The analysis will comprise of the main sources of finance that are currently used by the small startup firms and how do they vary across the other available financing options. The analysis will begin with detailed description of developed world countries China, Germany & UK followed by the financing options for startups in African nation of Ghana and Asian country, Pakistan.

## China

China's financial system and its success has been an issue of debate for a long time. On one side where the realization of country's economic growth has been strongly linked to its financial system on the other hand it has been criticized on the issue that the main driver of the economic growth is the public sector that is heavily dependent on the informal finance and mechanisms for governance as compared to the formal type. So normally the small startup firms in China do not enjoy sufficient support from their financial system. The main principle embedded in the Chinese economic policy is the principle of "Grasp the big and let go of the small" which says it all to primarily focus on the large firms and keep the issue of small firms out of discussion (Du & Girma, 2012). Hence this gives a little insight of how the financial system mainly operates in China.

It has been found out that the main reason for the small startup firm financing constraint is the issue of information asymmetry. This is where these firms are either completely unaware of the

options available or are reluctant to explore new sources due to the classical corporate infrastructure that limits them to opt for other sources of finance such as angel investors or venture capitalists. As a result the primary source for the startups to focus on is the Owner's capital (Chavis, Klapper & Love, 2011). As the financial system in China is mainly based upon providing finance for the large size firms and emphasizing less on the small startup businesses, meaning that the formal sources of finance that are more relevant to the large firms are considered important as compared to the informal sources of finance for the small startup firms, hence the entrepreneurs have no other option other than their own capital or retained earnings as the primary source of finance for the startups (Scholtens, 1998). The startups therefore rely majorly on the Owner's capital in order to meet the initial financial needs; however the risk of failure is comparatively high since the additional financial needs (Follow-up) finance could threaten the existence of small startup firms. However one can think about the option of Venture Capitalists (VCs) for the Chinese startups, though the Asian VCs have shown considerable progress in last couple of decades, but the main concern many researchers have agreed upon is that much of the investment in Asian countries should be considered as private equity investments. Private equity investments are the investments in the equities of the firm that are not traded publicly. As a result studies have revealed that in addition to the financing option, the traditional VC investment practices are also not incorporated and effective when it comes to China. Hence the Chinese startups are less relied on the VCs and pay more weightage to the owner's capital as the first source of finance for their startups (Tan, Huang & Lu, 2012).

Although (Beck, Kunt & Maksimovic, 2008) have explained that 29.93% of the Chinese firms mainly depend on External finance in the form of equity, development banks, commercial banks, supplier credit and leasing arrangements. With the external financing, banks dominate with 10.17% of finance provision followed by 2.41% for Equity and supplier credit each, 1.63 % for the leasing agreements and 4.63% by the development banks. The remaining percentage counts for the internal sources of finance. Hence it is found that for the startups in China, internal sources of finance are the primary options available for the startup firms in order to fulfill their financial needs in the startup and later stages of the firm lifecycle.

## Germany

German institutional structure is actually Bank-based system where banks are dominant and these financial intermediaries develop long term relationships with the German firms. German financial infrastructure is not like other countries, as it prevents liquidity constraints from occurring. There are two different institutional features of the German financial infrastructure. Firstly companies in Germany are almost entirely dependent upon banks to meet their financing needs. Secondly the banks other than supplying capital to the firms are also extensively represented on the firm's supervisory boards. Smaller firms have relatively few liquidity restrictions, because of the institutional infrastructure of Germany that enables the provision of priced capital to the small firms (Audretsch & Elston, 2002). This is further acknowledged by (Harm, 1992) who portrays the German financial structure in which small firms are financed by small banks that are divided into two systems. Firstly the saving banks also known as (Sparkassen) and secondly the Credit cooperatives. There is an active support by the government in the small firm industry, especially the business startups. Government policies played an important role in motivating entrepreneurs seeking innovation.

However (Berger & Schaeck, 2011) present a different point of view regarding the financing option for startups in Germany. In 2001 a survey of financing of small and medium sized enterprises in Western Europe under the University of Cambridge (Martin, Turner, and Sunley 2001), three countries, Germany, Italy and U.K were involved. From a sample of 524 firms, it was found out that 47% of the firms preferred venture capital over bank loans explaining them to be not appropriate, insufficient and even not available at all to be used as a source of finance. Furthermore Business angles were ranked as the second most important sources of finance after venture capital. (Beck, Kunt & Maksimovic, 2008) tried to explain the different financing patterns in Germany. The authors argue that in most of the developed countries like UK, US and Germany, firms use internal resources to fulfill their financial needs. According to their research 54.29% of the financial needs are met by external finance, with banks and equity having the highest values of 16.84% and 23.13% respectively. With other sources like Leasing 0.74%, Supplier credit 0.94% and Development bank 8.52%. Findings are indeed surprising with a Bank-based financial system like Germany; firms prefer equity over banks as the sources of finance. Hence two completely different perspectives are highlighted in the literature.

## United Kingdom

Back in 1980 and 1990s banks were the dominant sources of finance for the small size firms in the UK, according one Bank of England Quarterly bulletin report (Lund & Wright, 1999), 60.6% of the finance for the startup firms was made available by the banks. Banking industry dominated the financing sector with people having very little information regarding the financing tools like venture capitalists, angel investors, leasing and trade credit. Venture capitalists occupied 2.9%, Leasing 16%, factoring/suppliers/customers 5.7% and others 7.2% of the financing market. However in a survey conducted in 1997 showed that although still banks dominate the financing options, but their percentage has been reduced drastically, on the other hand percentage for the Leasing increased up to 27.1% with very little increase in other options.

A similar trend is seen across the survey conducted by (Beck, Kunt & Maksimovic, 2008) where out of all the external sources of finance banks dominate with 13.14% as compared to equity with 11.56%. however there has been a rapid increase in the financing options by the business angels as well. According to one study, there are an estimated amount of 20,000 to 40,000 angel investors in the UK, that contribute between 0.5 billion Pounds to 1 billion pounds in almost 3,000 to 6,000 small businesses every year. Since the major factor behind such big investments includes high financial returns over the investments. However one of the main fact that differentiates the UK's business angels from others is the notable fact of being passive, meaning that they hardly participate in any annual review and are reluctant to get involved in the critical decision making processes. In other words, as a part of their disadvantage, business angels tend to avoid providing assistance and adding special skills to the startups in the crucial time of decision making (Macht & Robinson, 2008).

Hence banks are the main sources of finance for the startups in UK, though the scenario has been changed after the economic crisis of 2007 that has changed the banking operations and the industry. Major Banks that played a crucial role during the recession were (HSBC) and Barclays. Barclays focused their attention towards Middle East for additional capital, where as the (HSBC) remained unaffected to a great extent (Smallbone, Deakins, Battisti & Kitching, 2012). UK was the last major

economy country to emerge from the recession, with its GDP falling consecutively along with the Bank of England's interest rate that remained at its lowest value of 0.5%. It has been observed that during the period of recession, lending institutes like banks mainly use the criteria of firm size in order to make their lending decisions, this makes the access to fiancé for the startups and firms operating at micro level restricted. Due to the restricted availability of finance, many small firms decided to reduce their dependence on the external finance. Hence due to the economic recession and the policies adjustments on the assistance of Bretton woods institutes, the ability of small size firms to access to external sources of finance has been restricted, thereby resulting in the reduced speed of economic recovery in UK (Cowling, Liu & Ledger, 2012)

## Ghana

In the category of third world countries, Ghana is one of the developing country from the Sub-Saharan African region. The main emphasis will be to understand the primary source(s) of finance for the startup Ghanaian firms. Results from the observation of 25 unlisted firms between 1998 and 2002 showed that for the small size firms, 17.7% of the retained earnings are used as a further source of finance, whereas 67.8% is supported by the external debt and 2.4% by issuing new equities. Internal finance is second most important source of finance after external debt. As a result of heavily dependence of Ghanaian firms on the external debt, the debt equity ratios are relatively higher for them and the growth is mostly financed by the short term debts in the form of bank loans. Despite of the fact that the short term debt is cheaper as compared to the long term debt, still the risk to the startups is very high (Yartey, 2011).

A similar trend has been explained by (Buatsi, 2002) where description about the cost of credit has been made by explaining the fact that startup firms in Ghana mainly consider banks as the first resort to obtain working capital which is followed by the bank overdraft facility. Owner's inner circle or the members of the startup team are considered just a source since they are mainly dependent on the banks for short term debt financing. A very different perception is drawn by the Ghanaian firms while applying for the finance from the banks, the firms do not consider that they would able to acquire finance from any other source other than the banks, however on the other hand it has been observed that firms while applying for the long term finance from the banks usually don't expect to be successful in gaining the required debt. Eventually the researchers have emphasized over the government backed financing schemes and to enable government to improve education quality that will motivate by generating confidence in business dealings along with better understanding of various financing options present other than the banks and owner's capital. The literature review has unveiled the unawareness of other financing options like venture capitalists and angel investors for the Ghanaian firms. The startup firms are either just a business opportunity yet to be availed or are firms already operating but are in their initial phase of operation. Hence the factor of "Age" is the main drawback in their access to finance. The older and large the firm is the more it depends upon the banking finance, thereby restricting the access to finance for the new startup firms. The same argument is further supported by (Abor & Biekpe, 2007) that have explained the need for SMEs in Ghana in building stronger relationships with the banks and other sources in order to gain adequate collateral requirements and making their access to finance easy and secure

## Pakistan

Finally moving towards the financing patters in another developing (third world) country Pakistan, there are many financing options available to small startup firms. However the decision to opt for any of them solely depends upon the entrepreneur based on two important factors, namely the availability and the religious paradox. Being a Muslim state and came into existence from the partition of India on the basis of religious beliefs. The practice of religious doctrine can be observed in the economic market as well. Therefore the religious aspect has led to the development of Islamic banking, and this phenomenon is found out to be extensively successful in making its way as a prime source of finance for the startups and small business across the country.

Islamic Banking or (interest- free banking) caught the spotlight in 1975 with the establishment of Dubai Islamic bank. That is the world's first Islamic bank operating on the Islamic principles. Islamic banking refers to the doctrine of zero interest over the short term and long term loans. Talking about the way in which Islamic bank operates, it is seen that from the theoretical perspective, Islamic banking is quite different from the traditional banking because of the fact that interest (riba) is prohibited in Islam. This states that the banks are not allowed to offer a fixed rate of return on the deposits and are also not allowed to charge interest on the loans issued. The important phenomenon of Islamic banking is its paradigm of Profit and Loss Sharing (PLS). This is based on profit sharing and joint venture concepts of contracting in Islam. Under the paradigm of PLS, the assets and the liabilities of the Islamic banks are integrated in such a way that the borrowers share the profit and the losses with the banks. And similarly banks in turn share their profits and losses with their depositors. The PLS paradigm of the Islamic banking allows banks to lend long term loans with higher risks and returns and hence promote the economic growth.

However on the other side, PLS paradigm strict banks to greater market discipline. The banks have to monitor their borrower and the investments to make sure the profits and losses reported are true. There can be various reasons for the poor adoption of PLS paradigm in practice. One reason could be that it leads to principal-agent problems, moral hazards relating to information asymmetry and the profit sharing option could enable the entrepreneur to high risk projects to gain maximum returns. Another problem could be the lack of management and controlling rights resulting in agency problems (Chong & Liu, 2008). On the other hand in Islamic banking, the threat to the banking sector does not exist because the bank's losses are expressed in the reduced value of the deposits. Since the liabilities never exceed the assets, as a result Islamic banking cannot default. It therefore creates a staunch believe of the entrepreneurs to opt for banks (especially with Islamic banking principle) as the primary source of finance for fulfilling the startup financial needs (Cornelisse & Steffelaar, 1995).

According to the research done by (Beck, Kunt & Maksimovic, 2008), it has been found out that 43.13% of the main source of fiancé for the firms in Pakistan comprises of external finance out of which banking industry dominates with 29.96% which is even higher than countries like Germany 16.84%, Indonesia 17.17% and China 10.17%. On the other hand other financing options like equity, leasing, supplier credit and development banks provide 5.63%, 1.50%, 2.92% and 1.04% finance respectively. Such an extensive dependence of the Pakistani firms over the banking finance have shown great sympathy with

the Islamic banking system. Since the operation of such banking system is easy and affordable, if the borrower just has to pay back the principal value with no interest during the time of the contract, the cost of credit is reduced to a great extent. Since the borrower is no longer liable for the interest payments. This creates dual effect over the borrower, firstly it is according to the religious belief and secondly though available to everyone, the credit costs are very less due to no interest payments. Hence in Pakistan Islamic banking has become the prime source of financing for the small size startup firms. The trend is seen fully functional even with the individuals trying to access for loans in order to start any kind of business, from retail shop to a business firm (Rammal & Parker, 2012).

However other than banks, the angel investor market and the venture capitalist market are almost non existing in Pakistan. Often banks act as angel investors to provide startup seed finance for the firms however banks do face problems of costly and difficult loans when the behavior of the borrower is opportunistic. Though acting as the main source of finance for the startups could provide banks with the monopolistic powers and there exists a strong chance of these powers to be misused. The issues of political interference, contract enforcement and loans issued on the basis of political inspiration are issues yet to be resolved in order to make the banking industry more transparent and accountable. Despite of all the facts, banking industry has become the prime source of finance for the firms in Pakistan leaving behind other financing options of Angel investors and Venture Capitalists.

Title: Financing patterns around the world.

Count ries	Exter nal finan ce	Ban k	Equi ty	Leas ing	Supp lier credi t	Develop ment bank	Infor mal
China	29.13 %	10.1 7%	2.41 %	1.63 %	2.41 %	4.63%	5.93 %
Germ any	54.29 %	16.8 4%	23.1 3%	0.74 %	0.94 %	8.52%	4.13 %
Ghan a	67.8 %	--	2.4 %	--	--	--	17.7 %
Pakist an	43.13 %	29.9 6%	5.63 %	1.50 %	2.92 %	1.04%	2.08 %
Unite d Kingd om	36.12 %	13.1 4%	11.5 6%	2.91 %	7.47 %	0.58%	0.47 %

Sources: Financing patterns around the world (2008)

## 6. CONCLUSION & LIMITATIONS

This paper analyzes different sources of finance that are available to the startup firms. In order to add to the literature the second section shows the results of different financing options in five different countries. The paper explains that during the firm lifecycle various options of finance are available to them. Startup firms are distinguished in two types, firstly the pre-startup stage, and the one that are already operating. **For the firms in the pre-startup stage the primary source of finance is the Owner's capital, followed by Banks and Angel investors.** Whereas for the startups already in operating phases the financing options vary. Literature review found out that for such startups Venture Capitalists, Trade Credit and Leasing are the principal sources of finance. These options are exercised at different stages of the firm lifecycle. During the firm life cycle, the initial two stages are mostly dominated by the Owner's capital, Banks and Angel investors. Once the startup starts operating and needs additional finance or spotting opportunities

to further broaden the process financing options like Venture Capitalists, Trade credit and Leasing are the central financing tools available for the startups. Each source of finance carries with it some advantages and disadvantages ranging from the issues of control, accountability, level of interference, competencies & skills future prospect regarding the success of startups. Financing options like Owner's capital have advantage that they are easily available for the startups followed by the fact that the startup team comprising of the family members, Friends and colleagues do not demand control over their share of finance. Similarly Banks are another source that is at the moment most easily available source of finance for the startups. They play the role of business angels as well. Banks make easy access to finance for the startups along with reduced costs (interest rate) as the relationship strengthens. Venture capital, Trade Credit and Leasing are the financing options available for the startups in their later stage of the firm life cycle. Venture capitalists do demand control over the firms operations sometimes if the firm is not achieving their targets. Finally with the trade credit and leasing options, they can be exercised once a firm is established and would need finance to satisfy its financial needs. Though trade credits are expensive, yet they help continue firm's financial support whenever finance is required.

The second part of the paper analyzes financing options dominant in five different countries namely China, Germany, Ghana, Pakistan and United Kingdom. It was found out that Owner's capital was the primary source of finance for the startups in China and Ghana. Banks were the dominant sources of finance in Pakistan and United Kingdom. Finally in Germany, which is a bank based system has Banks and Venture Capitalists as the primary sources of finance for the firms. Hence there are different financial trends across these countries depending on various factors ranging from the financial system to the religious beliefs (Islamic Banking), and lack of knowledge of other financial options to restricted facilities for the startups. Therefore sources of finance are available for the startups in almost all the countries; it is just the matter of finding the right one and carrying it till the end.

The main limitation of this paper is that the literature reviewed is mostly old and it does not provide any evidence of how the changes in approach have taken place with the passage of time. There have been changes in the preferences of the startups over the last decade. Furthermore after the economic crisis, the situation has changed to a greater extent where especially Bank based financial systems have to counter numerous challenges. Therefore the situation can vary along with the required options of finance for the startups.

## 7. ACKNOWLEDGEMENT

On the behalf of this thesis paper, I would like to acknowledge my Supervisors especially Xiaohong Huang for allowing me to complete my thesis under her kind and dedicated supervision. I would further extend my acknowledgment to the second supervisor Henry van Beusichem. I am thankful to my Family, My friends and colleagues who have been always with me, keeping me motivated and determined.

## REFERENCES

- Abor, J; & Biekpe, N; (2007) "Small Business Reliance on Bank Financing in Ghana", *Emerging Markets Finance and Trade*, vol. 43, no. 4, pp. 93–102.
- Alexy, T, O; Block, H, J; Sandner, P; & Ter Wal, J, L, A, (2012), "Social capital of venture capitalists and start-up funding", *Journal of Small Business Economics*, 39:835–851
- Atherton, A; Cases of start-up financing an analysis of new venture capitalization structures and patterns, 2010, *International Journal of Entrepreneurial Behaviour & Research* Vol. 18 No. 1, pp. 28-47
- Audretsch, B, D, & Elston, A, J; (2002), "Does firm size matter? Evidence on the impact of liquidity constraints on firm investment behavior in Germany", *International Journal of Industrial Organization* 20 1–17
- Avery, B, R; Bostic, W, R; Samolyk, A, K; (1998), The role of personal wealth in small business finance, *Journal of Banking & Finance* 22 (1998)
- Beck, T; Kunt, D, A; & Maksimovic, V; (2008), "Financing patterns around the world: Are small firms different?" *Journal of Financial Economics* 89, pp. 467–487
- Berger, A. N., and G. F. Udell (1994), "Lines of credit and relationship lending in small firm finance", *Stern school of Business, New York University, New York*.
- Berger, A. N., and G. F. Udell (1998). "The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle," *Journal of Banking and Finance* 22, 873–897
- Berger, A. N, & Schaeck, k; (2011), "Small and Medium-Sized Enterprises, Bank Relationship Strength, and the Use of Venture Capital" *Journal of Money, Credit and Banking*, Vol. 43.
- B.T. Gregory, M.W. Rutherford, S. Oswald, & L. Gardiner (2005). "An empirical investigation of the growth cycle of small firm financing", *Journal of Small business Management*, 43 (4), pp. 382–393
- Berger, A, N & G, F, Udell (2002); Small business credit availability and relationship lending: The importance of bank organizational structure, *The Economic Journal*.
- Berger, A. N, & G. F. Udell (2006), "A more complete conceptual framework for SME finance", *Journal of Banking & Finance* 30
- Boot, A,W,A; (2000), Relationship Banking: What Do We Know?, *Journal of Financial Intermediation* 9.
- Buatsi, N, S; (2002), "Financing non-traditional exports in Ghana", *Journal of Business & Industrial Marketing*, Vol17, No 6
- C. Aurelian (2008), "Considerations regarding the SME's access to finance", Vol 70, No 1
- Chavis, W, L; Klapper, F, L; & Love, I; (2011), "The Impact of the Business Environment on Young Firm Financing", *The world bank economic review* ,vol. 25, no. 3, pp. 486–507
- Chong, S, B; & Liu, H, M; (2008) "Islamic banking: Interest-free or interest-based?", *Pacific-Basin Finance Journal* 17
- Cornelisse, A, P; & Steffelaar, W; (1995); Islamic Banking in Practice: the Case of Pakistan, *Development and Change* Vol. 26pp. 687-699.
- Cowling, M; Liu, W; & Ledger, A; (2012), "Small business financing in the UK before and during the current financial crisis" *International Small Business Journal* 30(7) 778–800
- D. Jan & G. Saurafel. "Firm Size, Source of Finance, and Growth - Evidence from China", *International Journal of the Economics of Business*
- De Clercq, D; Fried, H, V; Lehtonen, O; & Sapienza, J, H,(2006), "An Entrepreneur's Guide to the Venture Capital Galaxy", *Journal of Academy of Management Perspectives*
- Dilger, J, R; Small Business Size Standards: A Historical Analysis of Contemporary Issues, 2012, Congressional Research Service,
- Dimov, D & De Clercq, D,(2006), "Venture Capital Investment Strategy and Portfolio Failure Rate: A Longitudinal Study, Baylor University
- Du, J; & Girma, S; (2012), "Firm Size, Source of Finance, and Growth - Evidence from China", *International Journal of the Economics of Business*
- Fenn, W, G, and Liang, N; (1998), "New resources and new ideas: Private equity for small businesses", *Journal of Banking & Finance* 22
- Florida, R; and Smith Jr, F,D; (1993); Venture Capital Formation, Investment, and Regional Industrialization, *Annals of the Association of American Geographers*, Vol. 83, No. 3, pp.434-451
- Florin, J; Dino, R; & Huvaj, N, M; (2013), Research on angel investing: a multilevel framework for an emerging domain of inquiry, *An International Journal of Entrepreneurial Finance*
- Freear, J; Sohl, E, J; & Wetzel JR, E, W; (1994) "Angels and non-angels, Are there differences?", *Journal of business venturing* 9, 109-123
- Hamilton, R, T; & Fox, M, A; (1998), "The financing preferences of small firms owners" *International Journal of Entrepreneurial Behaviour & Research*, Vol. 4 No. 3
- Harm, C,' (1992), "The financing of small firms in Germany", *Country Economics Department, The world bank*
- Hillier, D.J. and Clacher, I. and Ross, S. and Westerfield, R. and Jaffe, J. & Jordan, B. (2011) "Fundamentals of corporate finance".

- Klepper, S (1996), Entry, Exit, Growth, and Innovation over the Product Life Cycle, *Journal of American Economic Association*, Vol. 86, No. 3, pp. 562-583
- Korver, R, M; & Ongena, S, (2008), "European mezzanine, *Applied Financial Economics*".
- Laurence H. Meyer (1998). "The present and future roles of banks in small business finance", *Journal of Banking & Finance* 22
- Leach, C, J; & Melicher, W, R; (2012), *Entrepreneurial Finance*.
- LiPuma, A, J; and Park, S; (2013), "Venture Capitalists' Risk Mitigation of Portfolio Company Internationalization", *Entrepreneurship, Theory and Practice*
- Lund, M; & Wright, J; "(1999), "The financing of small firms in the United Kingdom", *Bank of England Quarterly Bulletin*
- Macht, S, A; Robinson, J; (2008), "Do business angels benefit their investee companies?" Newcastle Business School, Northumbria University, Newcastle upon Tyne, UK
- Maier II, B, J and Walker, A, D; (1987), "The role of venture capital in financing small business", *Journal of Business Venturing* 2
- Mason, M, C and Harrison, T, J; (1997), *Business Angel Networks and the Development of the Informal Venture Capital Market in the U.K.: Is There Still a Role for the Public Sector?* *Small Business Economics* 9
- Mason, M, C and Harrison, T, J; (2002); *The Geography of Venture Capital Investments in the UK*; Royal geographical Society
- Mason, A. C; *Informal Sources of Venture Finance*, Hunter Centre for Entrepreneurship, University of Strathclyde, Glasgow G1 1XH, United Kingdom
- Meyer, H, L; (1998), The present and future roles of banks in small business finance, *Journal of Banking & Finance* 22
- Pratt, M; & Crowe, A, (1995), *Mezzanine finance*, Bank of England Quarterly Bulletin
- Rammal, G, H; & Parker, D, L; (2012) "Islamic banking in Pakistan: A history of emergent accountability and regulation" *Accounting History*
- Robb, M, A; & Robinson, T, D; (2012), "The Capital Structure Decisions of New Firms, *The Society for Financial Studies*", Oxford University Press
- Rocca, L, M, & Rocca, L, T; & Cariola, A, (2011), "Capital structure decisions during a firm's life cycle", *Journal of Small Business Economics*
- Scholtens, B; (1999), "Analytical Issues in External Financing Alternatives for SBEs" *Small Business Economics* 12
- Smallbone, D; Deakins, D; Battisti, M; & Kitching, J; (2012) "Small business responses to a major economic downturn: Empirical perspectives from New Zealand and the United Kingdom", *International Small Business Journal* 30
- Stephanie A. Macht and John Robinson. "Do business angels benefit their investee companies?" Newcastle Business School, Northumbria University, Newcastle upon Tyne, UK
- Sufi, A; (2007), "Bank Lines of Credit in Corporate Finance: An Empirical Analysis" *Journal of The Review of financial studies*,
- Tan, Y; Huang, H & Lu, H; (2013), "The Effect of Venture Capital Investment, Evidence from China's Small and Medium-Sized Enterprises Board", *Journal of Small Business Management*
- Vos, E; Yeh, Y, J, A; Carter, S; & Tagg, S; (2007), "The happy story of small business financing", *Journal of Banking and Finance* 31
- Walker, A, D; (1989) "Financing the small firm" *Journal of small business economics*, pp. 285-296
- Yartey, A, C; (2011); "Small business finance in Sub-Saharan Africa: the case of Ghana", *Management Research Review* Vol. 34 No. 2, pp. 172-185
- Yerramilli, V; & Winton, A; (2008), "Entrepreneurial finance: Banks versus venture capital", *Journal of Financial Economics* 88

## **APPENDIX: (A)**

### **Financial Times Classification:**

1. *Journal of Accounting and Economics* (Elsevier)
2. *The Accounting Review* (American Accounting Association)
3. *Journal of Accounting Research* (University of Chicago)
4. *The American Economic Review* (American Economic Association, Nashville)
5. *Econometrica* (Econometric Society, University of Chicago)
6. *Journal of Business Venturing* (NYU/Elsevier)
7. *Journal of Small Business Management* (National Council for Small Business Management Development)
8. *Journal of Finance* (American Finance Association)
9. *Journal of Financial Economics* (University of Rochester/Elsevier)
10. *Review of Financial Studies* (Oxford University Press)
11. *Journal of Operations Management* (Elsevier)
12. *Harvard Business Review* (HBR Press)
13. *Journal of Small Business Economics*.

### **(B) Main Articles**

<b>Journals</b>	<b>Articles</b>
<i>Journal of Small Business Management</i>	2
<i>Journal of Banking and Finance</i>	7
<i>Journal of Business Venturing</i>	2
<i>Journal of Small Business Economics</i>	4
<i>International Journal of Entrepreneurial Behavior and Research</i>	3
<i>International Small Business Journal</i>	4
<i>International Journal of Entrepreneurial Finance</i>	5
<i>The Economic Journal</i>	1
<i>Journal of Financial Economics</i>	1
<i>Journal of Finance</i>	1
<i>Harvard Business Review</i>	1
<i>American Economic Association</i>	2
<i>International Journal of Economics &amp; Business</i>	2

## Appendix (C)

<i>Journal</i>	<i>Article</i>	<i>Database</i>
<i>Journal of Small Business Management</i>	<i>An Empirical Investigation of the Growth Cycle Theory of Small Firm Financing</i>	<i>Scopus</i>
<i>Journal of Banking &amp; Finance</i>	<i>The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle</i>	<i>Scopus</i>
<i>Journal of Banking &amp; Finance</i>	<i>The present and future roles of banks in small business finance</i>	<i>Scopus</i>
<i>Journal of Banking &amp; Finance</i>	<i>New resources and new ideas: Private equity for small businesses</i>	<i>Scopus</i>
<i>Journal of Business Venturing</i>	<i>THE ROLE OF VENTURE CAPITAL IN FINANCING WALL BUSINESS</i>	<i>Scopus</i>
--	<i>CONSIDERATIONS REGARDING SME's ACCESS TO FINANCE</i>	<i>Scopus</i>
<i>International Journal of the Economics of Business</i>	<i>Firm Size, Source of Finance, and Growth - Evidence from China</i>	<i>Scopus</i>
<i>Applied Economics</i>	<i>Firm size and capital structure: evidence using dynamic panel data</i>	<i>Scopus</i>
<i>Journal of Small Business Management</i>	<i>The Effect of Venture Capital Investment— Evidence from China's Small and Medium-Sized Enterprises Board</i>	<i>Scopus</i>
<i>International Journal of Entrepreneurial Behaviour &amp; Research</i>	<i>Do business angels benefit their investee companies?</i>	<i>Scopus</i>
<i>Journal of Financial Economics</i>	<i>Financing patterns around the world: Are small firms different?</i>	<i>Scopus</i>
<i>Oxford journals</i>	<i>The Impact of the Business Environment on Young Firm Financing</i>	<i>Google scholar</i>
--	<i>Financing innovative small and mediumsized</i>	<i>Google scholar</i>

	<i>enterprises in times of crisis</i>	
<i>Research paper 14th Annual Conference on Entrepreneurial Finance and Business Ventures</i>	<i>Uses of Equity Capital by Small Firms—Findings from the Surveys of Small Business Finances (for 1993 &amp; 1998)</i>	<i>Google scholar</i>
<i>The Economic Journal,</i>	<i>SMALL BUSINESS CREDIT AVAILABILITY AND RELATIONSHIP LENDING: THE IMPORTANCE OF BANK ORGANISATIONAL STRUCTURE</i>	<i>Scopus</i>

