The Funding Gap and the Financing of Small and Medium Businesses: An Integrated Literature Review and an Agenda

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Abstract

Small and medium businesses contribute to the economies of developed and developing countries. However, they face constraints that are very different from large businesses. Chief amongst these constraints is access to finance. This paper provides an integrated review of the literature on the financing of small and medium businesses. Applying a qualitative critical context text analysis, the authors explore extant studies and identify the major themes and the different literature streams on small and medium business financing. The paper concludes by providing suggestions for future research from the gaps identified in the literature.

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Introduction

There has been an exponential growth in research attempting to understand the growth, development, and general operations of small and medium businesses. Commonly referred to with the acronym SMEs[3], small and medium businesses are a feature of all economies. Interest in SMEs extend beyond research frontiers to national governments and policy makers for a number of reasons. For one, in both developed and developing economies, SMEs account for a vast majority of firms and provide employment for a large number of people (Ayyagari, Beck, & Demirguc-Kunt, 2007; Beck & Cull, 2014; Hallberg, 2001; De la Torre, Peria, & Schmukler, 2008). In developed countries, SMEs provide more than 50% of manufacturing jobs (Ayyagari, Beck, & Demirguc-Kunt, 2007). In developing countries, they account for more than 60% of all jobs (Harwood and Konidaris, 2015). Small and medium businesses also account for a considerable percentage of the gross domestic product (GDP) of most countries. In low income countries, SMEs contribute between 16% and 20% to GDP, while in high income countries, they contribute more than 50% to GDP (Bungey, 2017; Tadesse, 2009). Moreover, many large firms that we know today started off as SMEs.

However, there are many constraints to the growth of SMEs, one of which is a lack of finance. Although lack of finance is one of the major constraints to the growth of all firms (Ayyagari, Demirguc-Kunt, & Maksimovic, 2005; Quartey, 2003), SMEs face more difficulties and constraints in accessing funds for growth than large firms (Beck and Demirkuc-kunt, 2006; Ayyagari, Demirkuc-Kunt, & Maksimovic, 2005; Carpenter and Peterson, 2002). In several national and regional surveys across the globe, owners and managers of SMEs consistently rank access to funds as the number one constraint to the growth of their firms (e.g. Beck & Cull, 2014; Beck & Demirguc-Kunt, 2006; Dong & Men, 2014; Jones-Evans, 2015).

[3] *In the remaining parts of this paper, the acronym, SMEs, is used alternatively with small and medium businesses to refer to the same class and size of businesses.*

Consequently, both extant research and empirical evidence have established that SMEs lack access to adequate finance to fund their operations and growth. This widespread phenomenon is sometimes referred to as the "funding gap" (Brown & Lee, 2014; Bungey, 2017; Predkiewicz, 2012).

Extant research on the funding gap has been conducted from two perspectives. The first viewpoint attributes the cause of financial constraints primarily to supply-side factors. A main tenet of this perspective is that information asymmetries and opaqueness of SMEs compromise financial institutions supply of funding. Even when funds are available, the same factors are bound to increase transaction costs making it too expensive, and consequently unprofitable, for SMEs to access. From the alternative perspective, demand-side factors relating to SMEs such as preferences and knowledge gaps on the viable sources of finance available, are the primary factors that account for inadequate finance for SMEs. Within these two perspectives are various literature streams with specific foci. A stream of research, for example, investigates the factors that influence bank credit and lending to small and medium businesses. Various national and multi-national studies also abound.

However, despite the voluminous literature on SMEs and the financing constraints they face, there has sparsely been a synchronization of these studies into a review. The few that exist have either focused solely on characteristics of SMEs and their sources of finance (e.g. Abdulsaleh & Worthington, 2013; Kumar & Rao 2015), SME financing within a single country (e.g. Mensah, 2004), financing constraints (e.g. Beck, 2007) or conducted a meta-analysis of empirical studies that have investigated the effectiveness of SME financing (e.g. Kersten et al., 2017). Consequently, the purpose of this paper is two-fold. First, we attempt an integrated review of the literature on the funding gap and SMEs to offer an overview of the various streams of literature on SME financing. Second, and more importantly, we present a research agenda with recommendations that promise newer perspectives and avenues capable of revealing more nuanced understanding of financing small and medium businesses for research, practice, and policy. We begin with brief explanatory overviews of the funding gap and extant definitions of SMEs before delving into the core of the literature review.

The Funding Gap

The existence of a funding gap was first identified in the United Kingdom by the Macmillan committee, set up by the government to study the British financial system in 1931 (Predkiewicz, 2012). Cressy (2002) provides two formal approaches to defining the funding gap. In the positive approach, it is defined as follows:

> "an equilibrium, in which the volume of lending is below that which would emerge in a competitive capital market with costless and complete contracting, no private information and rational expectation" (Cressy, 2002: pg. 2).

The normative approach defines the funding gap as "a market failure, the appropriate policy response to which is an increase in the volume of lending" (Cressy, 2002; pg. 2). In other words, a funding gap appears when there is a mismatch between supply and demand for capital as a result of permanent market failures (Predkiewicz, 2012). The funding gap thus constitutes the difference between the amount of funds companies require for operations and growth and the amount of funds that they actually receive.

Traditionally, information asymmetry, which can either be ex-ante or ex-post (Abdullah & Manan, 2011; Scholtens, 1999), exists between all businesses and outsiders. Ex-ante information asymmetry exists before finance is given and limits finance sources while ex-post information asymmetry increases default and makes financing more expensive by increasing transaction costs that are built into loans and credit facilities (Abdullah & Manan, 2011). However, both ex-ante and ex-post information asymmetry between SMEs and outside stakeholders is usually more acute. SMEs, generally, also do not have access to formal capital markets, apart from financial institutions, when they need external funding. Consequently, small and medium businesses are more prone to the consequences of any gap in funding.

The funding gap for SMEs is more acute in developing countries such as countries in Sub-Sahara Africa (Collier, 2009; Dong & Men, 2014; Sacerdoti, 2009; Vasilescu, 2010). According to Peria (2009), small and medium businesses find it particularly difficult to access bank financing and other formal sources of finance in Sub-Sahara Africa (SSA). Poor financial infrastructure and macroeconomic factors account for this lack of bank finance in SSA (Peria, 2009; Sacerdoti, 2009).

Defining Small and Medium Businesses

Unfortunately, there is no consensus to what exactly constitutes a small or a medium business in the literature as it differs from country to country. Even within Europe with a European Union (EU) definition and guidelines, individual countries work with different definitions of an SME (See Table 1 for definitions of SMEs in selected countries and regions). The only consensus on what constitutes an SME is that it is a business that is either small or medium in size, a seeming tautology. Using size to categorize businesses has the downside of firm size varying across economic sectors (Storey, 1994; Tonge, 2001; Abo & Quartey, 2010). However, it remains a viable method of classification because SMEs are very different from large businesses.

Different criteria have been used to measure and determine firm size. However, the most common criterion remains the number of employees in a firm (Berisha & Pula, 2015). Other common criteria are asset value, sales or turnover value, and balance sheet size. Various countries, and regional bodies and institutions[4], across the globe with policies and frameworks for categorizing firms according to size, have made use of a combination of these criteria. Some

[4] *Regional and global bodies such as the European Union, Organization for Economic Co-operation and Development (OECD), and World Bank have frameworks for the definition of small and medium businesses.*

frameworks provide for differences across sectors by using different definitions for different economic sectors while using the same criteria.

Insert Table 1 about here

However, this proliferation of policies and frameworks for SMEs is relatively recent. Prior to this proliferation, researchers developed pragmatic classifications to suit the purpose of their study. Tonge (2001) lists a number of studies and the different definitions of SMEs used.

The first attempt at formally categorizing businesses according to size was first made by the British Bolton committee in 1971 (Abo & Quartey, 2010; Berisha & Pula, 2015; Tonge, 2001). The Bolton committee developed what they referred to as an economic definition and a statistical definition of small firms, thus excluding medium firms. Summarily, the economic definition of a small firm was an independent firm holding a small market share, and managed in a personalized way (Abo & Quartey, 2010; Ali, Rashid, & Khan, 2014; Berisha & Pula, 2015; Tonge, 2001). Unlike the economic definition, the statistical definition was more opaque and only added further criteria for defining small business according to GDP, employment opportunities, contribution to the economy, and the rate at which the sector's contribution to the national economy had changed over time (Abo & Quartey, 2010; Ali, Rashid, & Khan, 2014).

The lack of a consensus definition of SMEs complicates comparisons. This is especially true for empirical studies. While acknowledging the importance of contextualization of studies relating to SMEs and their financing, enlightening dynamics and nuances relating to financing each business category is often lost in any lumped up analysis. Similarly, very few studies actually separate micro and small businesses from medium businesses. Most simply just lump all "small" businesses into SMEs and even include micro businesses as SMEs in their studies.

Padilla-Perez & Ontanon (2013) is an exception and makes analysis based on separate categories of SMEs but this exception is rare in the literature. Fortunately, the emergence of World Bank's enterprise surveys, a database of enterprise surveys of 139 countries, other general surveys and data bases, have increased the rate at which cross- and multi-country studies are conducted (e.g. Beck & Cull, 2014; Dong & Men, 2014; Fowowe, 2017; Quartey et al, 2017). More recent single country studies have even made use of the enterprise surveys and other data bases (e.g. Czarnitzki 2006; De Moor, Wieczorek-Kosmala, & Blach, 2016; Hernandez-Canovas & Martinez-Solano, 2010; Khan, 2015). These data bases facilitate better inter-study comparisons.

Sources of Finance for SMEs

Somewhat surprisingly, extant research shows that the sources of finance available to SMEs are almost the same as those available to large firms. The challenge for SMEs is that they face more constraints in accessing them than large firms (Beck, 2007; Berger & Udell, 1998; Dong & Men, 2014), especially in developing countries (Dong & Men, 2014; Sacerdoti, 2009; Vasilescu, 2010). Most small and medium businesses are not listed in stock exchanges and therefore do not have access to capital markets (Berger & Udell, 1998; Dong & Men, 2014; Wagenvoort, 2003). Thus, they are not required to make information available to the public. This exacerbates the information asymmetry that exists between small and medium businesses and their external stakeholders; a fact long established by Stiglitz & Weiss (1981), and reiterated in most studies.

Broadly, sources for finance for SMEs may either be formal or informal, internal or external, equity or debt, short-term or long-term (Abo & Quartey, 2010; Eniola & Entebang, 2015a; Hanedar, Altunbas, & Bazzana, 2014; Khan, 2015; Nguyen, 2013; Xiao, 2011). Some specific sources overlap these broad categories, and are more prevalent in some world regions than in others. In Europe, for example, banks remain a major source of finance for SMEs, especially before the global financial crisis of (Harrison & Baldock, 2015; Lawless, O'Connell, & O'Toole, 2015; Ono and Uesugi, 2014; Vermoesen, Deloof, & Laveren, 2013; Wehinger, 2012). Japan is different - banks remained the main source of finance for SMEs even during the global financial crisis (Ono and Uesugi, 2014). SMEs in the United States also source funds from banks more than from other sources (Berger & Udell, 1998; Moritz, Block, & Heinz, 2016; Robb, 2002). However, in Africa, SMEs are mostly informal, and rely on informal sources of finance (Beck & Cull, 2014; Quartey, 2003). We present an overview of sources of finance utilized by SMEs that have been studied extensively in the literature.

Venture Capital

Venture capital is intermediated funds provided by financial institutions, limited partnerships, and other organizations through venture capitalists (Abdulsaleh & Worthington, 2013; Berger & Udell, 1998). It serves as a formal and an external source of finance for SMEs. Traditionally, venture capitalists make "private non-exchange-traded equity investments in a business venture" (Snyman et al, 2014: pg. 168). However, because of the huge risks and investments of investing in SMEs, in recent times, venture capitalists also invest in convertible securities (Abdulsaleh & Worthington, 2013; Cumming, 2006). Berger & Udell's (1998) study showed that SMEs use venture capital as they grow. However, Xioa (2011) reports that in China, venture capital is used mainly at the start-up stage. The seeming conflict may result from definition and classification. Berger & Udell (1998) and Snyman et al (2014) explicitly state that in some countries, business angel finance is classified and included as venture capital. The use of venture capital by SMEs is largely limited to developed countries and therefore literature on their use by SMEs in developing countries is limited.

Bank Finance

Banks provide loans, overdrafts, and different forms of secured credit to SMEs (Dwyer & Kotey, 2015). A host of extant studies provide strong evidence that banks are the major providers of finance to SMEs in developed countries, especially in Europe (Badulescu, 2010; Harrison & Baldock, 2015; Lawless, O'Connell, & O'Toole, 2015; Lopes & Costa, 2017; Ono and Uesugi, 2014; Vermoesen, Deloof, & Laveren, 2013; Wehinger, 2012; Vera, & Onji, 2010). However, the same cannot be said about developing countries. Quantitative empirical studies by Beck & Cull (2014), Beck (2007), and Beck, Demirguc-Kunt, & Peria (2008), showed that SMEs in developing countries, especially in Africa, do not have access to credit and loans from banks. Even when they do, high interest rates, stringent requirements such as provision of collateral, and other transaction costs discourage SMEs from accessing finance from Banks (Azeem & Chughtai, 2013; Beck & Cull, 2014; Dong & Men, 2014). Survey studies of banks' perspectives on lending to SMEs have found that banks consider SMEs as a more profitable segment than large firms, even in developing countries (Beck, Demirguc-Kunt, & Peria, 2008; De la Torre, Peria, & Schmukler, 2008). The challenge in developing countries, especially in Africa, is that most SMEs are small and operate largely in the informal economy (Kauffmann, 2005).

An important stream of the literature seeks to understand the models, mechanisms, and the general nature of bank financing to SMEs. The consensus in most of the literature is that small and domestic banks provide more financing to SMEs (Berger & Udell, 1998; Berger & Udell, 2006; Canales & Nanda, 2012; Carter et al., 2004; Berger et al., 2005; Hassan et al, 2017; Hernandez-Canovas & Martinez-Solano, 2010; Sengupta, 2007). The postulation is that small and domestic banks have more capacity to engage in relationship lending, the use of soft information and continuous personalized contacts to lend to SMEs (Beck, Demirguc-Kunt, & Peria, 2011; De Young, 2002; Hassan et al, 2017; Hakenes et al, 2014). The argument is that relationship lending reduces the information asymmetry between SMEs and banks. Baker and

Collins' (2010) study of the British banking industry from 1944 to 1960 which found that transaction banking, the use of hard information from balance sheets, reduced bank financing to SMEs within the period, seems to corroborate this postulation. However, some studies have found contrary evidence to the consensus. For example, Rahman, Rahman, & Kljucnikov (2016), and Shen et al (2009) have found that all banks lend to SMEs and relationship banking is not the only effective means of providing banking services to SMEs in Bangladesh and China. In a global study of 45 countries across Asia, Africa, South America, and Europe, Beck, Demirguc-Kunt, & Peria (2011) also had similar findings. In addition, despite the use of relationship banking in Africa, SMEs still have little access to bank finance because of the high costs associated with relationship banking (Beck & Cull, 2014). Bouslama's (2014) study suggests that banks' internal structure, competition and concentration of banking sectors (Mercieca, Schaeck, & Wolfe, 2009) may also explain the nature of bank financing to SMEs. Consequently, factors other than what have been postulated in extant literature, may affect the nature of bank financing to SMEs.

Trade Credit

SMEs also get financing when they purchase goods and "instead of paying for the goods and services with cash (i.e., immediately), the firm pays its suppliers with a lag which creates the equivalent of a loan (i.e., trade credit)" (Bakker, Klapper, & Udell, 2004: pg. 15). In countries with weak legal environments, trade credit ranks as the most popular alternative source of finance to bank finance (Klapper, 2006). Even in developed countries, trade credit remains a popular and important source of finance for SMEs (Bakker, Klapper, & Udell, 2004; Berger & Udell, 1998; Ogawa, Sterken & Tokutsu, 2013). However, trade credit can be quite expensive (Berger & Udell, 2006). Consequently, it is no surprise that some studies (e.g. Ono and Uesugi, 2014; Ogawa, Sterken & Tokutsu; 2013) did not find any evidence of trade credit supporting the growth of small and medium businesses. However, because trade credit helps to provide some form of liquidity, it helps to support the survival of SMES (Abdulsaleh & Worthington, 2013; Yano & Shiraishi, 2012).

Factoring

Factoring, a form of asset-based finance, is often referred to as current-asset financing (Bakker, Klapper, & Udell, 2004; De Vries & Cameron, 2003). In factoring, funding, usually cash, is extended based on the discounted value of trade debtors (Bakker, Klapper, & Udell, 2004; De Vries & Cameron, 2003). In addition to providing funds, factoring firms usually provide debt chasing and collection services for firms as trade debtors are exchanged for cash (Klapper, 2006). Factoring enables SMEs to improve their liquidity (Czternasty & Mikołajczak, 2013; Soufani, 2002). Despite the phenomenal growth of factoring in recent years, it is still used more by SMEs in developed countries than those in developing countries because developing markets have less supporting institutions (Ivanovic et al., 2011; Klapper, 2006; Tomusange, 2015). In some developing countries, such as Mexico, a variant of factoring, known as reverse factoring, in which firms with a high reputation guarantee purchases so that their clients can be funded by factoring companies is taking root (Bakker, Klapper, & Udell, 2004; Klapper, 2006). Empirical tests of the effects of the use of factoring by SMEs is still limited. One of the few studies available by Nistor & Popescu (2013), conducted a test using a sample of SMEs in Romanian but did not find any significant effect of factoring on the growth of SMEs. Studies such as Bakker, De Vries & Cameron (2003), Klapper, & Udell (2004), and Klapper (2006), have mainly described the factoring industry and its use by SMEs rather than provided empirical tests.

Leasing

Leasing is “an agreement whereby a lessor conveys to the lessee, in return for payment or series of payments, the right to use an asset (property,plant, equipment, or land) for an agreed-upon period of time” (Idrissa, 2016: pg. 1890). Research shows that unlike some other sources of finance, SMEs use leasing regularly. Although it is a form of debt finance (Berger & Udell, 1998), it is a viable alternative to outright purchase of assets for SMEs and helps to save cash-flow (Kraemer-Eis & Lang, 2012), especially for those that lack collateral to apply for loans from banks (Idrissa, 2016). Another reason small and medium businesses find leasing attractive is that it has tax-related incentives (Kraemer-Eis & Lang, 2012), facilitates growth (Lasfer and Levis, 1998), and is flexible (Idrissa, 2016; Kraemer-Eis & Lang, 2012). Although Abor (2007) shows that debt affects the performance of SMEs negatively, some empirical studies have shown that leasing, specifically, has a positive effect on the performance of SMES (e.g. Kampumure, 2009; Salam, 2013).

Technology-Enabled Sources

Formerly, the literature on SME financing regarded trade credit, leasing, and factoring as alternative sources of finance (Abdulsaleh & Worthington, 2013; Bakker, Klapper, & Udell, 2004; De Vries & Cameron, 2003). However, the advent of technology has enabled even more alternative sources in very recent times. In what can be aptly termed technology-enabled sources, peer-to-peer funding (Amadou, 2016; Duggan, 2013; Nehme, 2018), peer-to-business funding (Amadou, 2016), and other types of crowdfunding platforms have emerged. With the use of Financial Technologies (Fintech) technology-enabled sources are changing the way firms, especially small and medium businesses, access funds, even in developing countries (Amadou, 2016; Eniola & Entebang, 2015b). With models ranging from invoice discounting, and debt, to outright equity investments, these emerging sources are circumventing the restrictions of traditional financial institutions (Duggan, 2013; Eniola & Enteband, 2015b). Crowdfunding, for example, enables SMEs to raise funds from one or more individuals through online platforms (Lopes & Costa, 2017). However, academic research on these sources is still nascent and very scant.

Informal Sources

The sources of finance presented above can be regarded as formal finance because they either occur within formal institutions or are subject to regulation. Hanedar, Altunbas, & Bazzana (2014: pg. 65) note that financial transactions with informal sources are transactions that "occur outside official financial institutions and are not regulated by governmental authorities". Informal sources of finance include loans and capital from family, friends, moneylenders, employees, and the entrepreneur or business owner (Abdulsaleh & Worthington, 2013; Nguyen, 2013; Xiao, 2011). However, studies have shown that informal finance attenuates the growth of SMEs. Ayyagari, Demirgüç-Kunt, & Maksimovic's (2008) study of Chinese firms, which included a huge sample of SMEs, found that formal finance was strongly associated with firm growth. In contrast, Abubakr's (2009) study of SMEs in Brazil showed that informal finance has a negative effect on the growth of SMEs. The study by Khan (2015) of SMEs in Pakistan also had similar findings. Despite the negative effect of informal finance on growth found in extant studies, many SMEs are constrained to use informal finance (Hanedar, Altunbas, & Bazzana, 2014; Khan, 2015). Formal sources, such as banks, consider SMEs as risky (Nguyen, 2013).

Business Angel Finance

Angel finance is a special form of informal finance in which wealthy individuals and investments groups provide funds for early stage businesses either as equity or debt (Abdulsaleh & Worthington, 2013; Lopes & Costa, 2017; Shane, 2012). Business angels differ from other informal sources because they do not have to be known or close to the SME owners and usually can provide networking, and managerial expertise in addition to the funds to SMEs (Abdulsaleh & Worthington, 2013; Ramadani, 2012). Berger & Udell (1998) found that angel finance was the second biggest source of finance for small and medium businesses in the United States. From studies by Stedler & Peters (2003), in which more than 230 business angels were interviewed, and Shane (2012), the business angel ecosystem is also fast growing in US, Europe, and most of the developed western world. Much of extant literature suggest that business angel finance is best suited for SMEs in their seed and start-up stages (Berger & Udell, 19998; Lopes & Costa, 2017; Ramadani, 2012; Stedler & Peters, 2003)

Some sources of finance, such as bank finance, angel finance, venture capital, factoring, leasing and trade credit, are more traditionally used by SMEs than others, such as crowd-funding and other technology-enabled peer-to-peer funding platforms. Small and medium businesses also get funding from retained earnings (Abdulsaleh & Worthington, 2013), and from government and regional institutions in the form of grants, loan guarantees, and subsidies (Romero-Martınez, Ortiz-de-Urbina-Criado, & Soriano, 2010; Wagenvoort ,2003). For a few small and medium businesses that are quoted on stock exchanges, equity capital from the public can be a major source of finance for growth (Amadou, 2016; Dwyer & Kotey, 2015; Harwood & Konidaris, 2015; Revest & Sapio, 2013; Sestanovic; 2015).

The Influence of the Legal and Business Environment

SMEs are sometimes constrained by their legal and business environment in their choice of finance. Factoring, for example, requires a conducive institutional environment. The study by Hanedar, Altunbas, & Bazzana (2014) revealed that sometimes even when formal sources of finance are available, some SMEs still prefer to use informal sources because of the complexities involved in using formal sources. In addition, informal credit is higher in countries where legal procedures are long or cumbersome. Shen et al (2009) found that the level of law enforcement affect banks' willingness to lend to SMEs. Thus, although there is no specific literature stream tracing the effects of contextual factors on SME financing, the influence of the legal and business environment surfaces subtly in the literature. The legal framework and formal institutions necessary to support some sources of finance are simply absent in some countries (Beck, Demirguc-Kunt, & Peria, 2011; Berger & Udell, 2006; Dong & Men, 2014). Besides, the sharp contrast between the sources of finance available to SMES in developed and developing countries implicitly suggest that formal institutions and business environment are in general, fundamental to the availability of funding sources to SMEs.

SMEs Characteristics and Access to Funding

A dominant feature of extant studies on SME funding is the focus on the effect of several characteristics of SMEs, and their owners, on their financial behavior and ability to access funds for business operations and growth. These characteristics are often related to various sources of finance to reveal patterns in the financial behavior of SMEs. The most common characteristics studied in the literature include legal form, geographical location, asset structure, firm age, and owners' characteristics.

Most SMEs are unlisted thus hampering access to equity (Wagenvoort, 2003). Although some countries have made attempts to establish alternative stock exchanges specifically for SMEs, they have encountered challenges and most SMEs are still largely unable to list on the exchanges (Harwood & Konidaris, 2015; Revest & Sapio, 2013; Sestanovic, 2015). Consequently, research into the differences between quoted and unquoted SMEs is still nascent. Being quoted or unquoted is sometimes considered a feature of SMEs. However, how SME characteristics affect funding and financial behavior, as presented in this section, apply mainly to unlisted small and medium businesses.

Legal incorporation of an SME sends signals formality and credibility to banks and other financial institutions (Cassar, 2004). Legally incorporated SMEs may thus be able to access funds from formal and external sources (Abdulsaleh & Worthington, 2013). However, incorporation as such does not remove the funding gap. Generally, research on the effect of location on firm finance has found that access and patterns of financing may differ between firms located in cities and rural areas (Nguyen, 2007; Yaldiz, 2011; Gine, 2011). However, studies by Hanedar, Altunbas, & Bazzana (2014) and Nguyen & Luu (2013) on the effects of location on SME funding found no significant effects. Owning fixed assets increases access to debt and bank finance for SMEs (Abdulsaleh & Worthington, 2013). However, the effects of firm age and owners' characteristics or reputation remain the most studied in extant literature on SME funding.

Firm Age

Several reasons account for the proposition that the age of small and medium businesses affect their financing. First, young SMEs are seen as lacking experience (Berger & Udell, 1998; Zhang, 2008). Two, the mortality rates for young SMEs is very high (Cao, 2012). In Europe, for example, 50% of all SMEs fail within five years (Abdesselam, Bonnet, & Le Pape, 2004; Cao, 2012). Consequently, banks and other formal financial institutions consider SMEs as riskier than larger firms. Furthermore, in a global study of over 10,000 firms by Beck et al., (2006), firm age was found to be one of the major determinants of financial constraints.

Older firms have better access to external finance (Quartey, 2003; Watson, 2006) and debt because they are more successful in accessing credit than younger firms (Berger & Udell, 1998; Kumari & Trivedi, 2019; Watson, 2006). Although Abdullah & Manan (2011) found a weak relationship between age of SMEs and access to formal finance, most studies found a positive correlation. Younger SMEs make more use of informal sources of finance such as loans from family and friends of owner(s) than older SMEs (Abdullah & Manan 2011; Berger & Udell, 1998; Chavis, Klapper, & love, 2011; Hanedar, Altunbas, & Bazzana, 2014; Shen et al, 2009). Ogawa, Sterken & Tokutsu (2013) also found that younger SMEs make use of trade credit more than their older counterparts. This fact is supported by Berger & Udell (2006). Summarily, the consensus in the literature is therefore that young SMEs generally have weaker access to finance and their financing patterns are very different from older SMEs.

Owner(s) and Manager(s) Characteristics

Undoubtedly, in most SMEs, ownership and control is tightly coupled. Owners of small and medium businesses therefore have a huge influence on the funding decisions and behaviours of the businesses. It is thus not surprising that their personal characteristics also come to bear on funding decisions and access. Sometimes, formal financial institutions consider the net worth of owners before granting credit to SMEs (Kumari & Trivedi, forthcoming 2019). Three main owner-manager characteristics have been studied extensively in the literature: gender, age, and education level.

There is contradictory evidence on the "gender effect" of SMEs and funds access in the literature. A number of studies (e.g. Coleman, 2007; Mijid, 2009; Watson, 2006) have found evidence that SMEs owned by females receive lower levels of external funding, especially from banks and financial institutions. Quartey et al (2017) studied West African countries and also found a gender effect, but only in Mali. Transaction costs on loans were also found to be generally higher for female owned SMEs (Coleman, 2007). Female owned SMEs also find it difficult to access venture capital (Shava, 2018). However, Watson, Newby, & Mahuka (2009) in their study found that banks do not really discriminate against SMEs owned by females. Watson & colleagues (2009) suggest that other factors, such as the low propensity to take risks by females, might have been in play in earlier studies that have found a gender effect in the ability of SMEs to access finance. Shava (2018) also concludes that any gender effect on SMEs funding might be due to the risk appetite of females. Other studies also suggest that the gender effect, if any, may result from differences in preferences between male and female entrepreneurs (Abdulsaleh & Worthington, 2013). Hanedar, Altunbas, & Bazzana, (2014), for example, found that SMEs with female owners use less informal source than those with male owners.

Unlike the inconclusive evidence from studies on effects of gender on SME funding, findings from research on the effect of owner-manager age has been consistent. Age of owners and managers of SMEs has a significant effect on their patterns of financing. In a very recent study, Kumari & Trivedi (forthcoming, 2019) found that younger SME owners were granted more credit than older SME owners in India. Younger SME owners and managers use more external sources of funds than older owners and managers (Vos et al, 2007; Abdulsaleh & Worthington, 2013).

SMEs owner's education level is also positively associated with various sources of finance (Nguyen & Luu, 2013; Moritz, Block, & Heinz, 2016). Educated owners and managers make more use of debt financing (Coleman, 2007). This is probably because they have a better understanding of the risks associated with debt financing. In a study of thousands of firms, Bate (1990) found that owners of small businesses with a college education were able to access funds from the bank than others without a college degree.

Capital Structure and Theoretical Lenses

Extant theoretical lenses in SME finance literature attempt to either explain the financial behavioral patterns of SMEs or their capital structure. The financial growth cycle theory (Berger & Udell, 1998) theorize that the financial behavioural patterns of small businesses is a function of their size, age, and information availability. Basically, they hypothesize that as small businesses grow and gain experience, their informational opacity contracts because of increased historical data, and their financial needs and options change (Berger & Udell, 1998). The choices and patterns of financing of SMEs change over time as they age and go through various stages in their growth cycle. At the initial start-up phase, small businesses tend to use insider finance from owners, family, and friends, and move to using angel finance and venture capital as they grow. Access to public equity, commercial paper, and other securitized debt, only occur at advanced stages of growth (Berger & Udell, 1998). Direct testing of the theory by Fluck et al (1998), Gregory et al (2005) and Mac an Bhaird & Lucey (2011) have found at least some partial support for the theory.

Although some theories of capital structure[5], adopted from corporate finance, have been used to explain the capital structure of SMEs, only two of them dominate SME finance literature. The first is Myers' (1984) pecking order theory. According to this theory, due to information asymmetry, firms will choose financing options that minimize dilution of control and consequently choose internal sources before debt, and equity (Myers, 1984; Cressy & Olofsson, 1997). Firms therefore have preference for internal equity to debt, and prefer debt to external equity (Dwyer & Kotey, 2015). Empirical support for pecking order theory explaining the capital structure of SMEs has been mixed. While Frank & Goyal (2003) found no support, Chen, Jung, & Chen, (2011), Lopez-Gracia & Sogorb-Mira (2008), and Shyam-Sunder & Myers (1999) have found full support for the theory.

Unlike pecking order theory that assumes that there is no optimum capital structure, the second theory, trade-off theory assumes that there is an optimum capital structure that balances equity and debt (Chen, Jung, & Chen, 2011). First proposed by Modigliani & Miller (1958), it is one of the first finance theories on capital structure of firms. Trade-off theory proposes that firms consider the trade-off between equity and debt in order to have the most beneficial capital structure (Idrissa, 2016). Firms will therefore prefer debt to equity because of tax advantages and will strive to trade equity with debt when possible (Chen, Jung, & Chen, 2011; Idrissa, 2016; Lopez-Gracia & Sogorb-Mira, 2008). Although empirical tests have found full support for trade-off theory amongst SMEs (e.g. Gracia & Sogorb-Mira, 2008; Shyam-Sunder & Myers, 1999), studies that have simultaneously tested both trade-off and pecking order theory

[5] *Other theories of capital structure such as Tobin Q theory and Agency theory, based on Jensen & Meckling, (1976) agency theory, have also been mentioned in some studies but these have not been tested empirically with data on SMEs.*

suggest that the financial structure of SMEs is better explained by pecking order theory (Chen, Jung, & Chen, 2011; Lopez-Gracia & Sogorb-Mira, 2008; Shyam-Sunder & Myers, 1999).

A Research Agenda

Insights from extant literature provides a better understanding of the funding environment of SMEs. However, much is still to be understood about SME financing. Methodologically, most extant empirical studies have been quantitative and have made use of extensive surveys designed to suit particular studies or derived from data bases. A few have made use of the mixed-method approach (e.g. Watson, Newby, & Mahuka, 2009; Xiao & North, 2012). Li, (2011), Dwyer & Kotey (2015) Ruiz & Perez (2017) are notable exceptions that have used qualitative methods. Indeed, Ruiz & Perez (2017) provided a case study on the funding of the internationalization of a Spanish SME while Li (2011) and Dwyer & Kotey (2015) made use of interviews. Consequently, detailed and in-depth firm studies are conspicuously missing from the literature.

The utility of quantitative studies lies mainly in their ability to provide a general overview and identify broad trends. However, they fail to provide the depth and details of specific cases, especially cases that differ from the norm which can aid in theory building (Eisenhardt & Graebner, 2007). General theoretical postulations may not hold in all contexts. Even within the same contexts, what applies to one firm may not apply to another. Consequently, qualitative studies can assist understand the nuances in theories. In addition, , there is need to understand the view point of the entrepreneur who in most cases is the owner-manager of the small and medium business using detailed qualitative studies. Qualitative methods may enable future research understand the entrepreneurial perspective in SME funding. Relatedly, large firms face financing constraints that are distinct from small firms.

However, a lot can be gleaned from studies of large firms that have grown from small or medium firms, and qualitative methods are best suited for these kind of studies.

Extant literature tends to be filled with extensive descriptive research. Apart from Berger & Udell's (1998) financial growth cycle theory, few theoretical models and frameworks are applied in SME finance studies. Theoretical models and frameworks are needed to better understand the influence of the legal and business environment on SME finance. Some matters remain unresolved. For example, how do the formal and informal institutional arrangements of countries affect the use of some sources of finance such as factoring, leasing, and the emerging technology-enabled sources such as crowdfunding? Little is known about the performance effects of some sources of finance on SMEs such as factoring, leasing, and technology-enabled sources. There is still much to be understood about SME choices of specific sources of finance in some contexts. Furthermore, and very importantly, what regulatory frameworks are conditional to technology-enabled sources of finance? Why and how might these new sources of finance alter the financial ecosystem for SMEs? What forms of regulations would support certain funding options? How do these emerging sources of finance differ between developed and developing countries? Nehme's (2018) study of regulating crowdfunding is a step in that direction but clearly, more studies are needed to resolve the high level of uncertainity on funding for SMEs.

The contradictory evidence on the effect of gender needs resolving. Relatedly, there are very few studies on gender of owner-managers of SMEs and financing (Watson, 2006 and Demirguc-kunt et al, 2013 are exceptions). Future research will do well to investigate the existence of a gender effect on SME financing and suggest possible solutions. Interestingly, the few studies on the gender effect have been conducted in developed countries. Researchers in developing countries, where gender discrimination is traditionally more rampant, will make a significant contribution to the field by engaging with the gender effect, and compare results with extant studies.

Despite the emergence of data bases on businesses, such as the World Bank enterprise survey, comparative studies are still very rare. This is understandable given the context specific nature of SMEs and their financing. The definition of a small and medium business is still very unclear in the literature. Moreover, an SME in one context may be a large firm in another context. However, comparative studies may shed light on contextual differences.

Studies have investigated SME financing either from the demand side, mainly through trying to relate SME characteristics to sources of finance, or from the supply side, by trying to understand the various sources of finance available. Future studies could investigate research questions simultaneously from both perspectives, especially through in-depth case studies. This promises not only to bridge perspectives but also aid in providing more comprehensive understanding of the different contexts studied.

Finally, more studies on bank finance to SMEs are needed to understand the most effective model, mechanisms, and types of formal financial institutions best suited to serve the needs of small and medium businesses. Although a relationship banking model has been advocated in some quarters as the most effective for SMEs, emerging evidence in some studies and empirical evidence from Africa suggest otherwise. The use of relationship banking in most of Africa has neither increased access to bank finance nor reduced the transaction cost of bank financing for SMEs. Consequently, there is need for future research to develop new models and also empirically investigate how SMEs may be better served by banks.

Summary and Conclusion

Small and medium businesses are important for both developed and developing economies. However, they face many sustained funding constraints. This paper has presented a picture of extant literature on SME financing and suggested a research agenda. Summarily, the paper has called for in-depth qualitative research linked to real life SME funding experiences, and comparative research by network of scholars engaged in different contexts with different contextual conditions. The expectation is that findings from future research will aid in policy formulation and in easing the financing constraints of small and medium businesses.

References

Abdesselam R, Bonnet J, Le Pape N (2004). An explanation of the life span of new French enterprises. *Small Business Economics*, 23, 237-254

Abdullah, M. A. & Manan, S. K. A. (2011). Small and medium enterprises and their financing patterns: Evidence from Malaysia. *Journal of Economic Cooperation and Development*, 32(2), 1-18.

Abdulsaleh, A. M. & Worthington, A. C. (2013). Small and medium-sized enterprises financing: A review of literature. *International Journal of Business and Management*, 8(14), 36-54.

Abor, J. (2007) "Debt policy and performance of SMEs: Evidence from Ghanaian and South African firms", The Journal of Risk Finance, Vol. 8 Issue: 4, pp.364-379, https://doi.org/10.1108/15265940710777315

Abubakr, S., (2009) "Formality of Financial Sources and Firm Growth: Empirical Evidence from Brazilian SMEs 1999-2005", Journal of Academic Research in Economics, Vol1, No. 2, 131-144.

Amadou, N. R. S. (2016). Enhancing SME financing in Africa: The role of nonbanks. Conference paper presented at ECOWAS Regional conference, Finance for all: Promoting Financial incluđion in West Africa, Dakar, Senegal.

Ayyagari, M., Beck, T., and Demirgüç-Kunt, A., (2007). Small and Medium Enterprises across the Globe. *Small Business Economics* 29, 415-434.

Ayyagari, M., Demirguc-Kunt, A., Maksimovic, V., (2005). How important are financing constraints? The role of finance in the business environment. World Bank Mimeo.

Ayyagari, M., Demirgüç-Kunt, A. and Maksimovic, V. (2008) "Formal versus informal finance: Evidence from China", World Bank Working Papers Series 4465.

Azeem, A. & Chughtai, A. R. (2013). Constraints in financing of SMEs: A conceptual paper in the perspective of Pakistan. *International Journal of Research in Commerce & Management*, 4(3), 143-146

Badulescu, D. (2010). SMEs financing: The extent of need and the responses of different credit structures. *Theoretical and Applied Economics*, 7(548), 25-36.

Baker, M., & Collins, M. (2010). English commercial banks and organizational inertia: The financing of SMEs, 1944-1960. *Enterprise & Society*, 11(1), 65-69.

Bakker, M. H. R., Klapper, L., & Udell, G. F. (2004). Financing small and medium enterprises with factoring: Global growth and its potential in Eastern Europe. World Bank Monograph, Washington DC.

Beck. T. H. L. (2007). Financing constraints of SMEs in developing countries: Evidence, determinants and solutions. In Financing innovation-oriented businesses to promote entrepreneurship Unknown Publisher.

Beck, T. & Cull, R. (2014). SME finance in Africa. *Journal of African Economies*, 23(5), 583-613.

Beck, T. & Demirguc-Kunt, A. (2006). Small and medium-sized enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30, 2931-2943.

Beck, T., Demirgüç-Kunt, A., Laeven, L., Maksimovic, V., (2006). The determinants of financing obstacles. *Journal of International Money and Finance* 25(6):932-952.

Beck, T., Demirgüç-Kunt, A. & Peria, M. S. M. (2011). Bank financing for SMEs: Evidence across countries and bank ownership types. *Journal of Financial Services Research*, 39(1-2), 35-54.

Berger, A. N. & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking & Finance,* 22, 613-673.

Berger, A. N. & Udell, G. F. (2006). A more complete conceptual framework for SME finance. *Journal of Banking & Finance*, 30(11), 2945-2966.

Berisha, G. & Pula, J. S. (2015). Defining small and medium enterprises: A critical review. *Academic Journal of Business, Administration, Law, and Social Sciences*, 1(1), 17-28.

Bouslama, G. (2014). Banl's organizational characteristics and SME lending: New reading through organizational architecture theory. *Journal of Accounting & Finance*, 14(3), 39-51.

Brown, R. & Lee, N. (2014). Funding issues confronting high growth SMEs in the UK. ICAS, Edinburgh, UK. ISBN 9781909883055.

Bungey, J. (2017). Plugging Africa's SME funding gap: Is Africa different in terms of our financial needs? Finweek.

Cao, Y. (2012). A survival analysis of small and medium enterprises (SMEs) in central China and their determinants. *African Journal of Business Management*, 6(10), 3834-3850.

Carpenter, R.E. and Petersen, B.C. (2002), "Is the growth of small firms constrained by internal finance?" The Review of Economics and Statistics, 84(2), 298-309.

Cassar, G. (2004). The Financing of Business Start-Ups. Journal of Business Venturing, 19(2), 261-283.

Chavis, L. W., Klapper, L. F., & love, I. (2011). "The Impact of the Business Environment on Young Firm Financing." The World Bank Economic Review, 25 (3), 486–507.

Chen, L. J., Jung., C., & Chen, S. Y. (2011). How the pecking order theory explain capital structure. *The Journal of International Management Studies*, 6, 92-100.

Coleman, S. (2007). The Role of Human and Financial Capital in the Profitability and Growth of Women-Owned Small Firms. Journal of Small Business Management, 45(3), 303-319.

Collier, P. (2009). Rethinking finance for Africa's small firms. *Private Sector & Development*, *Proparco's Magazine* ,1, 3-4.

Cressy, R., 2002. Funding gaps: A Symposium, *The Economic Journal*, **11**(2), 1-27.

Cumming, D. (2006). Adverse Selection and Capital Structure: Evidence from Venture Capital. *Entrepreneurship Theory and Practice, 30*(2), 155-183.

Czarnitzki, D. (2006). Research and development in small and medium-sized enterprises: The role of financial constraints and public funding. *Scottish Journal of Political Economy*, 53(3), 335-357.

Czternasty, W., & Mikołajczak, P. (2013). Financing of SME using nonrecourse factoring– legal, economic and tax aspects. *Management*, *17*, 358-370.

De la Torre, A., Peria, M. S. M., & Schmukler, S. L. (2008). Bank involvement with Smes: Beyond relationship lending. World Bank Policy Research Working Paper Series, (4649).

De Moor, L., Wieczorek-Kosmala, M & Blach, J. (2016). SME debt financing gap: the case of Poland. *Transformations in Business & Economics*, 16(3), 274-291.

De Vries, H. & Cameron, A (2003). Factoring facts and the SME client: Why aren't CAs pointing their clients in this direction? *Chartered Accountants Journal*, 34-35.

DeYoung, R. 2002. New Bank Start-Ups : Entrepreneurs Funding Other Entrepreneurs. *Journal of Entrepreneurial Finance and Business Ventures* 7, 61–76.

Dimovska, E. (2013). Evaluation of SME financing in Macedonia from the “supply side” perspective. *Center for Economic Analysis*, 5-15.

Dong, Y. & Men, C. (2014). SME financing in emerging markets: Firm characteristics, banking structure and institutions. *Emerging Markets Finance & Trade*, 50(1), 120-149.

Duggan, T. (2013). The rise of corporate peer-to-peer funding- From global finance meltdown to global finance revolution, in just three years. *Credit Control*, 48-50.

Dwyer, B. & Kotey, B. (2015). Financing SME growth: The role of national stock exchange of Australia and Business Advisors. *Australian Accounting Review*, 73(25-2), 114-123.

Eisenhardt, K. M. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25-32.

Abiodun Eniola, A., & Entebang, H. (2015). Small and medium business management-financial sources and difficulties. *International Letters of Social and Humanistic Sciences*, 58, 49-57.

Eniola, A. A. & Entebang, H. (2015b). SME firm performance-Financial Innovation and challenges. *Procedia- Social and Behavioural Sciences*, 195, 334-342.

Fluck, Z., Holtz-Eakin, D. and Rosen, H. S. (1998), “Where does the money come from? The financing of small entrepreneurial enterprises”, Occasional paper no. 191, Metropolitan studies program series, Center for Policy Research, Maxwell School of Citizenship and Public Affairs, Syracuse University, Syracuse.

Fowowe, B. Access to finance and firm performance: Evidence from Africa countries. *Review of Development Finance*, 7, 6-17.

Frank, M. Z. & Goyal, V. K. (2003). Testing the pecking order theory of capital structure. *Journal of Financial Economics*, 67, 217-248.

Gregory, B. T., Rutherford, M. W., Oswald, S. and Gardiner, L. (2005), "An empirical investigation of the growth cycle theory of small firm financing", *Journal of Small Business Management,* Vol. 43 No. 4**,** pp. 382-392.

Hakenes, H., I. Hasan, P. Molyneux, and R. Xie. 2014. Small Banks and Local Economic Development. *Review of Finance,* 19(2), 653-683.

Hallberg, K., 2001. A Market-Oriented Strategy for Small and Medium-Scale Enterprises. International Finance Corporation Discussion Paper 40.

Hanedar, E.Y., Altunbas, Y. & Bazzana, F. (2014). Why do SMEs use informal credit? A comparison between countries. *Journal of Financial Management, Markets, and Institutions*, 2(1), 65-86.

Harrison, R. T. & Baldock, R. (2015). Financing SME growth in the UK: Meeting the challenges the global financial crisis. *Venture Capital*, 17(1-2), 1-6.

Harwood, A. & Konidaris, T. (2015). SME exchanges in emerging market economies: A stocktaking of development practices. World Bank Publications. https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-7160

Hassan, I., Jackowicz, K., Kowalewski, O., & Kozlowski, L. (2017). Do local banking structures matter for SME financing and performance? New evidence from an emerging economy? *Journal of Banking & Finance*, 79, 142-158.

Hernandez-Canovas, G. & Martinez-Solano, P. (2010). Relationship lending and SME financing in the continental European bank-based system. *Small Business Economics*, 34, 465-482.

Idrissa, N. (2016). Levels of lease awareness among managers vis-à-vis Small and Medium Enterprises (SMEs) involvement in lease financing in Rwanda- A survey of selected SMEs in Kigali. Journal of Emerging Issues in Economics, Finance, and Banking, 5(2), 1889-1911.

Ivanovic, S., Baresa, S., & Bogdan, S. (2011). Factoring: Alternative model of financing. *UTMS Journal of Economics, 2*, 189–206. Doi:10.1108/eb057350

Jensen, M.C. & Meckling, W. H. (1976). Theory of the firm: Managerial behavior agency costs and ownership structure. *Journal of Financial Economics*, 3, 305 -360.

Jones-Evans, D. (2015). Access to finance to SMEs at a regional level – The case of France Wales. *Venture Capital*, 17(1-2), 27-41.

Kauffmann, C. (2005). Financing SMEs in Africa. *OECD Policy Insights*, 7, 1-4

Kampumure, J. (2009). *Leasing competence, lease structure and perceived performance of SMEs in Uganda, Kampala*, Kampala: Makerere University,

Kersten, R., Harms, J., Liket, K. & Maas, K. (2017). Small firms, large impact? A systematic review of the SME finance literature. *World Development*, 97, 330-348.

Khan, S. (2015). Impact of sources of finance on the growth of SMEs: Evidence from Pakistan. *Decision*, 42(1), 3-10.

Klapper, L. (2006). The role of factoring for financing small and medium enterprises. *Journal of Banking & Finance*, 30(11), 3111-3130.

Klapper, L., Sarria-Allende, V., & Sulla, V. (2002). Small and Medium-Size Enterprise Financing in Eastern Europe. World Bank Publications. http://dx.doi.org/10.1596/1813-9450-2933.

Kraemer-Eis, H. & Lang, F. (2012). The importance of leasing for SME finance. EIF Working Paper 2012/15.

Kumar, S. & Rao, P. (2015). A conceptual framework for identifying financing preferences of SMEs. *Small Enterprise Research*, 22(1), 99-112.

Kumari, R. P. S., & Trivedi, P. (forthcoming 2019). Determinants of SME credit in Mumbai – Empirical analysis on factors. *The Journal of Developing Areas*, 53(2), 193-203.

Lasfer, M. A., & Levis, M. (1998). The determinants of the leasing decision small and large companies. *European Financial Management*, 4(2), 15-184.

Lawless, M., O'Connell, B., & O'Toole, C. (2015). Financial structure and diversification of European firms. *Applied Economics*, 47(23), 2379-2398.

Li, X. (2011). Financing high-tech SMEs in China: A three-stage model of business development. *Entrepreneurship & Regional Development*, 23(3-4), 217-234.

Lopes, A. & Costa, C. (2017). Alternative sources of funding for SMEs in the Portuguese market. *The IEB International Journal of Finance*, 15, 138-161.

Lopez-Gracia, J. & Sogorb-Mira, F. (2008). Testing trade-off and pecking order theories financing SMEs. *Small Business Economics*, 31, 117-136.

Mac An Bhaird, C. & Lucey, B. M. (2011). An empirical investigation of the financial growth cycle. *Journal of Small Business and Enterprise Development*, 18(4), 715-731.

Mensah, S. (2004). A review of SME financing scheme in Ghana. Accra: UNIDO.

Mercieca, S., Schaeck, K., & Wolfe, S. (2009). Bank market structure, competition, and SME financing relationships in European regions. *Journal of Financial Services Research*, 36,137-155.

Mijid, N. (2009). Gender, Race, and Credit Rationing of Small Businesses: Empirical Evidence from the 2003 Survey of Small Business Finances. PhD thesis, Colorado State University.

Modigliani F. and Miller M.H. (1958). The cost of capital, corporation finance and the theory of investment", *American economic Review*, 48(3), 261-297.

Moritz, A., Block, J. H., & Heinz, A. (2016). Financing patterns of European SMEs- an empirical taxonomy. *Venture Capital*, 18(2), 115-148.

Nehme, M. (2018). Regulating crowd equity funding – they why and the how. *Journal of Law and Society,* 45(1), 116-135.

Nguyen, N. & Luu, N. (2013). Determinants of financing pattern and access to formal-informal credit: The case of small and medium sized enterprises in Vietnam. *Journal of Management Research*, 5(2), 240-258.

Nistor, I. E. & Popescu, D. (2013). Romanian SMEs financing options: An empirical analysis. *Finance- Challenges of the Future*, 13(15), 12-21.

Ogawa, K., Sterken, E. & Tokutsu, I. (2013). The trade credit channel revisited: Evidence from micro data of Japanese firms. *Venture Capital*, 40, 101-118.

Ono, A., & Uesugi, I. (2014). SME financing in Japan during the global financial crisi: Evience from firm surveys. *International Review of Entrepreneurship,* 12(4), 191-218.

Padilla-Perez, R. & Ontanon, R. F. (2013). Commercial bank financing for micro-enterprises and SMEs in Mexcico. *CEPAL Review*, 111, 7-21.

Peria, M. S. M. (2009). Bank financing to SMEs: What are Africa's specificities? *Private Sector & Development*, *Proparco's Magazine,* 1, 5-7.

Predkiewicz, K. (2012). Is it possible to measure a funding gap? *Research Papers of the Wroclaw University of Economics,* No. 271.

Quartey, P. (2003). Financing small and medium enterprises (SMEs) in Ghana. *Journal of African Business*, 4(1), 37-55.

Quartey, P., Turkson, E., Abor, J. Y., & Iddrisu, A. M. (2017). Financing the growth of SMEs in Africa: What are the constraints to SME financing within ECOWAS? *Review of Development Finance*, 7, 18-28.

Rahman, A., Rahman, M. T., & Kljucnikov, A. (2016). Collateral and SME financing in Bangladesh: An analysis across bank size and bank ownership types. *Journal of International Studies*, 9(2), 112-126.

Ramadani, V. R. (2012). The importance of angel investors in financing the growth of small and medium sized enterprises. *International Journal of Academic Research in Business and Social Sciences,* 2(7), 306-322.

Revest, V., & Sapio, A. (2013). Does the alternative investment market nurture growth? A comparison between listed and private companies. *Industrial and Corporate Change*, 22(4), 953-979.

Romero-Martinez, A. M., Ortiz-de-Urbina-Criado, M., & Soriano, D. R. (2010). Evaluating European Union support for innovation in Spanish small and medium enterprises. *The Service Industries Journal*, 30(5), 671-683.

Ruiz, J. L. G., & Perez, P. F. (2017). Financing the industrialization of Spanish Industrial SMEs, 1980-2000: The case of the Grifols group. *Universia Business Review*, 14(3), 64-79.

Sacerdoti, E. (2009). Credit to the private sector in Sub-Saharan Africa: Developments and Issues. *Private Sector & Development*, *Proparco's Magazine*, 1, 8-12.

Salam, M. A. (2013). 'Effects of lease finance on performance of SMEs in Bangladesh', International *Journal of Science and Research*, Vol.2, pp 367-370.

Scholtens, B. (1999). "Analytical Issues in External Financing Alternatives for SBEs", *Small Business Economics*, 12(2), 137-148.

Sengupta, R (2007). Foreign entry and bank competition. Journal of Financial Economics, 84(2), 502–528.

Sestanovic, A. (2015). SME Stock Exchanges - Should They Have a Greater Role? Zagreb, Croatia: EFFECTUS -College of Finance and Law.

Shane, S. (2012). The Importance of Angel Investing in Financing the Growth of Entrepreneurial Ventures. *The Quarterly Journal of Finance, 2*(2). http://dx.doi.org/10.1142/S2010139212500097

Shava, H. (2018). Impact of gender on small and medium-sized entities' access to venture capital in South Africa. South African Journal of Economic and Management Sciences, 21(1) a1738. https://doi.org/10.4102/sajems.v21i1.1738

Shen, Y., Shen, M., Xu, Z., & Bai, Y. (2009). Bank size and small- and medium-sized enterprise (SME) lending: Evidence from China. *World development*, 37(4), 800-811.

Shyam-Sunder, L., & Myers, S. C. (1999). Testing static tradeoff against pecking order models of capital structure. *Journal of Financial Economics*, 51(2), 219-244.

SITC (2010) *Small and Medium-Sized Enterprises: Overview of Participation in U.S.* Exports. Washington, DC: US International Trade Commission, Investigation No. 332-508, Publication 4125.

Snyman, H. A., Kennon, D., Schutte, C. S. L., & Von Leipzig, K. (2014). A strategic framework to utilise venture capital funding to develop manufacturing SMEs in South Africa. *South African Journal of Industrial Engineering,* 25(2), 161-181.

Soufani, K. (2002). On the Determinants of Factoring as a Financing Choice: Evidence from the UK. *Journal of Economics and Business, 54*(2), 239-252. http://dx.doi.org/10.1016/S0148-6195(01)00064-9

Stedler, H., & Peters, H. H. (2003). Business Angels in Germany: An Empirical Study. *Venture Capital, 5*(3), 269-276.

Stiglitz, J.E., & A. Weiss. (1981). "Credit Rationing in Markets with Imperfect Information." *American Economic Review* 71, 3, 393–410.

Tadesse, A. (2009). A perspective on SME financing in Africa. *Private Sector & Development, Proparco's Magazine*, 1, 16-18.

Tomusange, R. L. (2015). Factoring as a financing alternative for African small and medium-sized enterprises. Walden Dissertations and Doctoral Studies Collection, Walden University.

Tonge, J. (2001). A review of small business literature part 1: Defining the small business. Center for Corporate and Public Affairs Manchester Metropolitan University Business School. Manchester, UK.

USITC. (2010). Small and medium-sized enterprises: Overview of participation in U.S exports. United States International Trade Commission (USITC) Publication 4125.

Vasilescu, L. G. (2010). Financing gap for SMEs and the mezzanine capital. *Ekonomska Istrazivanja,* 23(3), 57-67.

Vera, D., & Onji, K. (2010). Changes in the Banking System and Small Business Lending. *Small Business Economics, 34*(3), 293-308.

Vermoesen, V., Deloof, M., & Laveren, E. (2013). Long-term debt maturity and financing constraints of SMEs during the global financial crisis. *Small Business Economics*, 41, 433-448.

Wagenvoort, R. (2003). Are finance constraints hindering the growth of SMEs in Europe? EIB Papers, ISSN 0257-7755, European Investment Bank (EIB), Luxembourg, 8(2), 23-50.

Watson, J. (2006). External funding and firm growth: Comparing female- and male-controlled SMEs. *Venture Capital*, 8(1), 33-49.

Watson, J., Newby, R. & Mahuka, A. (2009). Gender and the SME "finance gap". *International Journal of Gender and Entrepreneurship*, 1(1), 42-56.

Wehinger, G. (2012). Bank deleveraging, the move from bank to market-based financing, and SME financing. *OECD Journal: Financial Market Trends*, 1, 65-79.

World Bank. (2018). World Bank Enterprise Surveys. Retrieved from http://www.enterprisesurveys.org/data/exploreeconomies

Xiao, L. (2011). Financing high-tech SMEs in China: A three-stage model of business development. *Entrepreneurship & Regional Development*, 23(3-4), 217-234.

Xiao, L., & North, D. (2012). Institutional transition and the financing of high-tech SMEs in China: A longitudinal perspective. *Venture Capital*, 14(4), 269-287.

Yano, G., & Shiraishi, M. (2012). Efficiency of Trade Credit Finance in China. *Comparative Economic Studies, 54*(1), 203-225. http://dx.doi.org/10.1057/ces.2011.30

Zhang G. (2008) 'The Choice of Formal or Informal Finance: Evidence from Chengdu, China', China Economic Review, 19 (4), pp. 659-678.

Table 1 **Definition of SMEs in Selected Countries and Regions**

S/N	Source/Study	Country/ Institution	Small			Medium		
			Number of employees	**Annual Turnover**	**Assets/Balance Sheet Value**	**Number of Employees**	**Annual Turnove r**	**Assets/ Balance Sheet Value**
1.	Abo & Quartey (2010)	South Africa	Fewer than 50 employees	Varies according to industry	Varies according to Industry	Fewer than 100 or 200 employees depending on industry	Varies according to industry	Varies according to industry
2.	@Harwood & Konidaris (2015)	Brazil	N/A	N/A	N/A	Industrial sector: Fewer than 500 Services: Fewer than 100	N/A	N/A
3.	Kumari & Trivedi (forthcoming, 2019)	India	N/A	N/A	*Manufacturing: less than Rs. 50 million **Service: Less than Rs. 20 million	N/A	N/A	*Manufacturing: less than Rs. 100 million **Service: Less than Rs. 50 million
4.	European Commission/ Berisha & Pula (2015)	Regional	Fewer than 50	Less than or equal to €10 million	Less than or equal to €10 million	Fewer than 250	Less than or equal to €50 million	Less than or equal to €43 million
5.	Dimovska (2013)	Macedonia	Fewer than 50	Less than or equal to €2 million	Less than or equal to €2 million	Fewer than 250	Less than or equal to €10 million	Less than or equal to €11 million

6.	Ogawa, Sterken & Tokutsu (2013)	Japan	N/A	N/A	N/A	Less than 300	N/A	N/A
7.	@Harwood and Konidaris (2015)	Poland	N/A	N/A	N/A	Fewer than 250	Less than $68m	N/A
8.	USITC (2010)***	United States	N/A	N/A	N/A	Fewer than 500	***Farms Less than $0.25m	N/A
9.	@Harwood and Konidaris (2015)	Taiwan	N/A	N/A	N/A	Fewer than 200	Less than $3.3m	N/A
10.	@Harwood and Konidaris (2015)	Turkey	N/A	N/A	N/A	Fewer than 250	Less than $12m	
11.	@Azeem & Chughtai (2013)	Pakistan	N/A	N/A	N/A	Fewer than 250	Less than Rs 250m	Less than Rs25m
12.	Lopes & Costa (2017)	Portugal	Fewer than 50	Less than or equal to €10m	Less than or equal to €10m	Fewer than 250	Less than or equal to €50m	Less than or equal to €43m
13.	World Bank Enterprise Survey (2018)	Global	5 to 19	N/A	N/A	20 to 99	N/A	N/A

N/A Not Applicable
**Value of Plant and Equipment*
***Value of Equipment*
****Definition is for SMEs, no separate definitions for small or medium. Not applicable for Manufacturing and non-export service firms. High value export service firms: less than or equal to $25million; other export service firms: less than or equal to $7million*
@Lumped up definition of SMEs; no separate definition provided for small businesses