Decision (March 2015) 42(1):3–10
DOI 10.1007/s40622-014-0071-z

RESEARCH PAPER

Impact of sources of finance on the growth of SMEs: evidence from Pakistan

Salman Khan

Published online: 11 January 2015

Abstract In this paper, we examine the impact of different types of funding sources on the growth of small and medium enterprises (SMEs) in a developing economy using Pakistan as a case study. We use Enterprise Survey Data of 78 SMEs in Pakistan over 3 years, i.e., 2002, 2007, and 2010. The results show that the banks play positive role toward the growth of SMEs over the sample period. In contrast, the informal sources negatively influence the growth of SMEs between 2002 and 2007 and the effects dissipate between 2007 and 2010 indicating the positive impact of government policies. The paper recommends further initiatives to reduce the impediments encountered by SMEs while accessing finance from banks.

Keywords Small and medium enterprises · Access to finance · Financial institutions · Entrepreneurship

JEL classification D53 · O16 · G2 · L26

Introduction

It is well known that the small and medium enterprise (SME) sector plays a central role in the growth of an economy. The SME sector of an economy is not only pivotal in employment generation, poverty alleviation and equitable distribution of income, development of private enterprises, and the rural sector but is also a major contributor to the gross domestic product. For transitioning countries, like Pakistan, SMEs are known to catalyze the structural change that translates into macro-economic developments and therefore support sustainable growth.

Pakistan is an SME economy and it heavily relies on SMEs for jobs, export earnings, industrial productivity, foreign investments, and its overall economic prosperity (Kongolo 2010). The statistics[1] indicate that 99 % (3 million) enterprises in Pakistan are SMEs. Out of these 3 million SMEs, 96 % are solely owned. In Pakistan, the SME sector employs 78 % (State Bank of Pakistan 2010) of industrial labor force and it is therefore responsible for skills development, training of unskilled labor, and fostering an entrepreneurial culture that eventually translates into cost cutting innovations. SME sector is known to contribute 30 % (Herani and Qureshi 2011) to the gross domestic product (GDP) in developing nations like Pakistan and about 50 %[2] in developed nations. When

S. Khan (✉)
Suleman Dawood School of Business, Lahore University of Management Sciences, D.H.A, Lahore 54792, Pakistan
e-mail: sal.k@hotmail.com; salman.khan@lums.edu.pk

[1] Unleashing the Potential of the SME Sector with a Focus on Productivity Improvements, Pakistan Development Forum 2006. http://siteresources.worldbank.org/PAKISTANEXTN/Resources/293051-1147261112833/Session-3-2.pdf (accessed on 1 March 2013)

[2] Growing the global economy through SMEs. Edinburgh Group by Kingston Business Group (accessed on 29 September 2013)

compared to the other developing countries, the SME sector in Pakistan has yet to achieve its optimal productivity and contribute to economic activity. This sector faces number of constraints which hinder its growth and productivity. Access to finance is a prominent factor among these barriers (Bari et al. 2005). SMEs in Pakistan have access to (i) formal sources which include the banks and nonbanks financial institution (ii) the retained earnings/internal funds/equity, and (iii) the informal sources which include friends and family, credit from supplier and advances from customers and others.

The formal finance in Pakistan includes strong banking sector, whereas NBFC sector is relatively new and even in decline. The banks remain the main pillar of Pakistan's formal financial structure and holds 87.1 %, Development Finance Institutions hold 1.5 %, and Micro Finance Institutions hold 0.3 % of total financial sector assets compared to negligible asset holdings of NBFCs such as Leasing Companies (0.3 %), Modarabas (0.3 %)[3], etc.

Among others, an important issue registered by researchers is that large part of SME sector comprises of enterprises which are relatively young and have an informal setup and therefore it is difficult for them to raise adequate funds at a cheaper cost. This is due to the fact that these enterprises are unable to meet the compliance requirements or provide adequate collateral. Such constraints position this sector a high risk, cost borrower. Therefore, banks display a more reserved lending behavior toward SMEs indirectly forcing them to opt for other sources of finance.

A statistical glimpse shows that the percentage of SMEs which have obtained formal credit from the banking sector in Pakistan is 7 % compared to 33 % in India and 32 % in Bangladesh[4]. Furthermore, the overall SME share in the advances portfolio of the entire banking sector has declined from 17.5 % in 2005 to 10.2 % in 2009 (State Bank of Pakistan 2010). This indicates that SMEs largely rely either on other sources like informal sources of finance or utilize their retained earnings/internal funds.

Although the banking infrastructure is developed in Pakistan, there are number of reasons why SMEs mostly rely on sources like informal finance. It involves lengthy documentation, collateral, borrowing costs, and other requirements. From an SME perspective, a small business loan from commercial banks involves an average of 27 steps and 9 client meetings (World Bank 2009) which makes them a time-consuming process. On the other hand, informal finance consists of friends and family, landlords, commissioning agents, farm machinery holders, input dealers, committees, and other noninstitutional sources. The informal sector is easy to understand, operates with low service requirements, and entrepreneur can access loan in a little time with little or no documentation. This type of borrowing usually happens within social networks and the lender knows the borrower (Altunbas et al. 2011). The downside is that informal finance is very expensive form of financing. Just for comparison, the average interest rates that prevailed in the informal and formal sector in 2005 can help in signifying the difference between both; lending in cash by wealthy farmers was charged at 85 %, moneylenders charged 55.2 %, farm input dealers charged 25.81 %, whereas the formal sector charged 19 % (World Bank 2009).

The SME policy (2007) by SMEDA highlights the importance of SMEs to the economy of Pakistan and addresses four core issues that need to be addressed in order to provide an impetus for the sector's growth. One of the core issues discussed in the policy is access to finance. This paper ascertains the effectiveness of the steps taken by the government to improve access to finance and its influence on the growth of the SME sector.

Literature review

The business environment can significantly influence the growth of businesses (Delmar and Wikilund 2008) and foster entrepreneurship and innovation. A well-developed financial infrastructure is considered a key component of the business environment because it has a considerable impact on the functioning of an economy and poverty alleviation (Levine 2005). As

[3] Report of NonBank Financial Sector Reform Committee for Public Comments, Way Forward for Pakistan's NBF Sector", 2012. Securities Exchange Commission of Pakistan. http://forum.secp.gov.pk/NBF-ReformCommitteeReport (accessed 15 September 2013)

[4] Best Practices and Policy Insights. Developing a Sustainable SME Banking Franchise in Pakistan, 2011- IFC, World Bank Group. Author: Andrew McCartney. Website: http://www.sbp.org.pk/departments/smefd/.../5-IFC-Global-regional-SME (accessed on 15 March 2013)

highlighted by Levine, broad access to financial services indirectly affect the resource allocation and income distribution of an economy (simply due to a geographic distribution and networking of banks and financial institutions). Fewer numbers of banks or the absence of foreign banks means limited credit activity and competitiveness which binds poor households especially in the rural areas from utilizing financial services. In Pakistan, the financial services outreach in the SME sector is about 36 % (SMEs percentage that holds a bank account) compared to 95 % in India.

The financial infrastructure is a complicated web of various interrelated aspects like the information cosmos, overall economic activity, legal environment, bankruptcy and tax laws, and government enforcement regulations. The financial and legal infrastructures of a country help in reducing the observed difference of financing obstacles faced by small versus large firms. Supported by a study by Sleuwaegen and Goedhuys (2002), small firms grew faster in Germany than in Cote d' Ivoire because the latter lacked a robust legal and financial structures. Similarly, Beck et al. (2005) studied this relationship between the furniture (contains more small firms) and spinning sectors (contains larger firms) of Canada versus India. The furniture industry grew by 1.4 % faster than the spinning sector in Canada as compared to same industrial figures in India. Well-developed institutions and a stable economy have a multifaceted influence on the readiness of banks to lend. For example, well-endorsed and protected property rights significantly increase the chances of external finance for smaller firms than larger firms.

Also much discussed impact of a well-rooted financial sector is the Schumpeterian process of creative destruction. As explained by Rajan and Zingales (2003), new firms entering should have ready access to external finance so that there are investment opportunities beyond the rich and well connected. Hence a thriving financial system supports in sustaining democracy and a stable economy and can act as a promoter of firm creation. Access to finance is also impactful on technological progress and generation of ideas in the economy. Simply because this knowledge of readily available credit boosts the creative thinking process of individuals (King and Levine 1993).

Ayyagari et al. (2005) conducted a firm level survey across 80 countries to investigate the impact of various constraints on firm growth. The results showed that finance is the most robust obstacle among the listed variables and it had a direct impact on businesses. Ease of obtaining credit is also an important criterion among bench marks, for example, ease of doing business which is set by International Finance Corporation (IFC) to rank economic activity of a country.[5]

There is a plethora of evidence that shows that SMEs face more financing constraints compared to larger corporations (Berger and Udell 1998) and therefore these firms fulfill a smaller share of their financial requirements from formal sources like venture capitalists or banks. A study conducted by Beck et al. (2008) reflects on the financing patterns employed by SMEs in developing nations. Less than 10 % small firms finance their investment from banks compared to 20 % by larger firms. Larger firms hold the same advantage when soliciting trade credit and development finance (Beck 2007). Two studies that signify the role of subsidized credit on SME growth of sales in India and Pakistan were conducted by Banerjee and Duflo (2004), Zia (2007), respectively. Both confirm that credit constrained firms have reduced or improved sales once their application for subsidized credit is rejected or approved, respectively. This means that post entry growth of an SME can be stalled in the absence of external finance, eventually affecting the life of the enterprise (Philippe et al. 2007).

The uneven distribution of credit rationing is accredited to constraints on both the supply and demand side of the credit market. On the supply side, weak SME pro policies, under developed financial and legal infrastructure (Demirguc-Kunt and Maksimovac 1998), lengthy burgeoning banking procedures, high interest margins, lack of credit are among top components that bar SMEs from routing to banks. On the demand side, lack of financial information, poor record maintenance, lack of management and firm characteristics (Beck et al. 2006a, b) like age, ownership type, and size are factors identified by empirical studies that can act as financing obstacles. The global downturn has widened the demand and supply gap in the SME credit market which either signals shrinking SME sector or bank's growing reluctance. The disequilibrium is accredited similarly to banks risk aversion and SMEs inability to meet the banking

[5] World Bank, IFC, 2011. http://www.doingbusiness.org/rankings (accessed on 26 April 2013).

requirements (State Bank of Pakistan 2010). For several reasons cited in a report by United Nations Conference on Trade and Development (UNCTAD 2002) like high administrative or transaction costs, risky SME portfolio, and information asymmetry, the banks show very little willingness to allocate resources or offer innovative products meant to facilitate SMEs borrowing and are more biased toward lending to corporate firms. Therefore, accessibility also relates to an SME being part of a credible network and or having connections with a bank that reduces the risk premium.

According to Beck et al. (2006a, b), policy interventions in developed or developing economies are imperative to the growth of small businesses. Even after various government interventions targeted to drive the SME credit sector, it is still largely untapped. Various government bodies across the globe have tried to improve the credit/cash flow to SMEs by introducing subsidized credit programs, interest ceilings, and policy-based credit allocations. Research findings vary across nations, Berger and Udell (2004) and according to Beck and Honohan (2007), there is no standard government approach or predesigned intervention packages that can be applied across all countries. Policy makers and governing bodies need to adopt a country-specific approach while deciding the intervention role of the Government.

Data structure and descriptive statistics

Considerable differences exist in research and among practitioners regarding the definition of SME.[6] For the purpose of this paper, we use the World Bank definition of SME which stands as a global benchmark. It states that the enterprises with employees up to 10 persons, total assets up to USD 10,000, and total annual sales up to USD 100,000 are classified as micro; enterprises with employees up to 50 person, total assets, and annual sales up to USD 3 million are classified as small; and enterprises with up to 300 employees, total assets and total sales up to USD 15 million are classified as medium (Ayyagari et al. 2005).

The panel data of SMEs in Pakistan have been obtained from Enterprise Survey, World Bank[7] and it samples from the universe of registered businesses from nonagriculture private sector. The survey was conducted in 2002, 2007, and 2010. The panel data for the year 2002 and 2007 contained a sample size of 402 firms. The survey conducted in 2010 contained 440 firms with only 78 firms common to the survey conducted in the year 2002 and 2007. In order to deal with the small sample size which was further reduced due to missing data, we conducted the analysis on two separate levels. The first level is defined by the panel data analysis for 3 years, i.e., 2002, 2007, and 2010 with a total 234 (78×3) observations. On the second level, we conducted a panel data analysis on two sub levels, i.e., (i) 2002 and 2007 with 804 (402×2) total observation and (ii) 2007 and 2010 with 156 total (78×2) observations. The analysis in this manner takes a more general view of the hypothesis due to a large sample. The appropriate linear regression, correlation, and variance impact factors are conducted in order to deal with the collinearity issue.

Table 1 contains the variables adopted from the survey and used in our investigation. It details over the different sources of credit which represents our set of independent variables—whether the company's financial needs are being financed by internal funds (represents internal funds/retained earnings/equity), formal finance (represents private bank loans and NBFCs), and informal finance (represents family and friends, credit from supplier/customers, or from other informal sources). Log of sales is dependent variable representing firm growth.

Table 2 shows the descriptive analysis of the variables.

Panel data analysis

The results from the panel data regression are given in Table 3. As discussed in the previous section, we have

[6] The United Nations define the SME with respect to the organizational factors like size of capital investment, employee strength, the turnover, the management style, location, and market share. SBP uses the definition that places upper limits of 250 persons (manufacturing) and 50 persons (trade/services) along with constraints on upper limits with respect to total assets at cost, i.e., up to Rs 50 million for a trade/services concern, up to Rs 100.

[7] http://www.enterprisesurveys.org/Data/ExploreEconomies/2007/pakistan. Data for year 2010 have not been published for general public as yet.

Table 1 Survey variables

Dependent variable	Representing variable	Variable title[a]
	Log (annual sales)	Log (sales)
Independent variables		
Source of credit	Financed by internal funds	Internal_funds
	Borrowed from banks	Banks
	Borrowed from friends and family	Family_friends
	Borrowed from NBFC	NBFC
	Advances from customers or credit from suppliers	On_credit
	Borrowed from other informal sources	Other informal_sources

[a] The Enterprise Survey Code is as following(in the order given in the Table 1)-D2(dependent), K5a,K5b,k5d,K5e,K5f,K5g

Table 2 Descriptive statistics

	Log (Sales)	Internal_funds	Banks	Family_friends	NBFC	On_credit	Other Informal_sources
Panel data (2002, 2007, 2010)							
Mean	18.3	8.491	−7.85	−7.054	−16.269	−8.218	−7.994
SD	2.181	100.16	186.702	92.644	184.19	92.153	92.147
Panel data (2002, 2007)							
Mean	18.046	11.321	−18.512	−10.652	−24.346	−12.782	−12.062
SD	2.042	122.312	227.063	113.401	225.390	112.523	112.743
Panel data (2007, 2010)							
Mean	18.607	21.064	11.160	N.A	0.776	0.455	0.071
SD	2.35	39.156	28.804	N.A	8.381	6.450	1.760

Table 3 Panel data analysis

Independent variables	Panel data (2002, 2007, 2010)		Panel data (2002, 2007)		Panel data (2007, 2010)	
	Coefficients values	SE	Coefficients values	SE	Coefficients values	SE
Internal_funds	.0048	.0033	.0087	.0034*	−.0015	.0038
Banks	.0115	.0050*	.0166	.0050*	.0103	.0060
Friends and family	−.0197	.0140				
NBFC	−.0103	.0100	.0041	.0075	−.0298	.0159*
Credit from suppliers and customers			−.0032	.0079	.0149	.0207
Other informal_sources	.0133	.0241	−.0462	.0134*		
Constant	18.11	.2180*	16.75	.2755*	18.47	.2823*
Model	Random effects					
Model specifications						
No. of obs	199		205		123	
No. of groups	78		178		76	
R-sq.: within (fixed effect)	0.0608		0.0973		0.1050	
Between effect	0.0418		0.1186		0.0331	
Random effect	0.0484		0.0986		0.0448	

* Significant at 5 % level

conducted the panel data analysis on two levels which resulted in following models (i) the between effect model for the panel data of 2002, 2007, and 2010; (ii) the random effects model for panel data of 2002, 2007; and (iii) the fixed effects model for 2007, 2010. The results of our analysis are explained below separately for each variable.

Formal finance

The analysis shows that the coefficients of **banks** are significant at 5 % confidence level throughout the three panel datasets. The results signify that banks are consistently contributing toward the growth of SME and can be regarded as instrumental in the growth of SME sector. Even though a small portion of SMEs in Pakistan are fueling their growth through bank credit, the numbers of these firms are significantly higher compared to firms which depend on other sources of financing. This phenomenon can be attributed to structured bank loan process in place such as standardized loan conditions and subsidized interest payments.

The **NBFC** is significant in the panel dataset of 2007 and 2010 at 5 % confidence level. The NBFC sector in Pakistan is relatively new and has a limited outreach which translates into high cost of borrowing and together with unstructured systems it affects SMEs growth negatively. According to a recent report published by SECP in 2012, players in the NBFC sector have either declined or have become stagnant at nascent stages over the past decade. Furthermore, NBFCs need to be strengthened in order to support SMEs through services like project financing, issue guarantees, provide corporate advisory, etc.

Informal sources

Funds from friends and family and credit from supplier/customers are insignificant in playing any positive role in SME growth in Pakistan. The pattern is consistent in all the three panel datasets. The '**other informal sources'** is only significant between 2002 and 2007 at 5 % confidence level. It includes money lenders, landlords, input dealers, etc. These are seen to influence SMEs negatively in greater magnitude compared to the positive influence of banks and internal funds (see Table 3). This also indicates a higher reliance of firms on informal sources. The negative impact of informal financial sources can be partly attributed to lack of standardized terms and conditions and high interest rates in the informal financial sector. This influence disappears during 2007–2010 due to multicollinearity issue.

Internal Funds are significant during 2002–2007 at 5 % confidence level and have a positive influence on SME growth. The result is encouraging showing that internal funds played a positive role in fueling the SME expansion.

Policy implications

The SME literature provides a sound platform in order to evaluate the policy implications. It is widely known and already discussed that the lack of access to finance represents a major limitation which can pose significant constraints on the growth of the firm, its technology upgradation, market expansion, improvement in its management capabilities, and productivity (Levitsky 1996).

In case of Pakistan, the results suggest that the SME growth primarily relies on commercial banks, informal sources as well as internally generated cashflows. The reason for commercial banks success is due to capital market imperfections which resulted in these financial institutions being more skilled at servicing the financial needs of SMEs, which is to certain extent contrary to (Hawtrey 1997). However, in the absence of nonbank capital market as well as NBFC, the virtual monopoly of commercial banks and informal sources (money lenders) causes increase in the costs of borrowing for the SME. In case of commercial banks, they generally have high SME loan assessment costs given the lack of accurate and reliable information on SME condition and performance and unpersuasive business plans. As a result, SMEs generally pay higher interest rates as well as more stringent requirements for collateral (Lattimore et al. 1998) which causes hindrance to the SME growth.

When compared to the negative impact of informal source of funding to bank credit, it is recommended that the government needs to further incentivize banks to increase their SME portfolios. SME banks should diversify their product range (customization) allowing SMEs to obtain the loan according to their requirements. The government should also encourage active competition in the financial sector which will eventually benefit the SME (Hawtrey 1997).

In addition, commercial banks ought to learn the features of the loan process in the informal sector to attract SMEs given the informal finance characteristics such as geographic proximity, no documentation, speedy disbursement, etc. One approach could be to develop the semi-formal institution like informal savings and credit associations. These models that integrate the best practices of both systems formal and informal are actively operational in many countries (Bagachwa 1995).

The alternatives to debt financing involve financing the SME through retained earnings or injecting fresh equity. The size of the SME and its high dependence on the internally generated cashflows does not allow the firm to use these funds in SME expansion. The fresh equity injection in the SME is costly given the high costs in terms of listing and continuous disclosure effectively yields the strategy as inefficient. The government needs either (i) restructure/reform the major capital markets to be accessible to SMEs given their low cost/less disclosure constraints or (ii) organize a new platform (specialized over the counter market) where the SME's can access low cost equity.

Conclusion

In this paper, we investigate the contribution of various forms of financing on the growth of SMEs. We use Enterprise Survey and World Bank data. We conducted panel data analysis on two levels (i) for the years 2002–2007–2010 and (ii) 2002–2007 and 2007–2010 separately. Our analysis indicates that banks have positive impact on SME sector's growth. Our findings suggest that the informal sources for funding have negative impact on SME growth given these are not significant in all the sample periods. Internal funds or retained earnings positively influence SME growth in 2002–2007. In contrast to banks, the NBFCs does not play influential role in the growth of SMEs.

The paper recommends that the government should focus on banks by streamlining the financing process in the formal financial sector according to the needs of SMEs. Moreover, the government should closely align the formal credit system to the informal credit system in order to appropriately incentivize the entrepreneurs in terms of process, i.e., customized products, documentation, processing time, collateral requirements, and customer outreach. This will encourage more SMEs to avail bank credit instead of relying on informal source of financing. Another approach discussed above in policy implications is to synergize the circulation of credit by formalizing the informal practices.

References

Altunbas Y, Bazzana F, Yaldız E (2011) Determinants of informal credit use: a cross country study. Midwest Finance Association, 2

Ayyagari M, Beck T, Demirguc-Kunt A (2005) Small and medium enterprises across the globe. Policy Research Working Papers, World Bank

Bagachwa MSD (1995) A study of informal finance in Tanzania. Financial integration and development in sub saharan Africa. ODI working paper 79

Banerjee AV, Duflo E (2004) Do firms want to borrow more? testing credit constraints using a directed lending program. CEPR discussion paper 4681

Bari F, Cheema A, Haq E Ul (2005) SME development in Pakistan, analyzing the constraints to growth Pakistan resident mission working paper series 3. Asian Development Bank, October

Beck T (2007) Financing constraints of SMEs in developing countries: evidence, determinants and solutions. Tillburg University, Tilburg

Beck T and Honohan P (2007) Making finance work for Africa. World Bank

Beck T, Demirguc-Kunt A, Laeven L, Levine R (2005) Finance, firm size, and growth. World Bank Policy Research Working Paper 3485

Beck T, Demirguc-Kunt A, Laeven L, Maksimovac V (2006a) The determinants of financing obstacles. J Int Money Financ 25(6):932–952

Beck T, Kunt A, Laeven L, Maksimovac V (2006b) The determinants of financing obstacles. J Int Money Financ 25:932–952

Beck T, Demirguc-Kunt A, Peria M. (2008) Bank financing to SMEs around the world. World Bank Policy Research Working Paper 4785

Berger AN, Udell GF (1998) The economics of small business finance: the role of private equity and debt markets in the financial growth cycle. Finance and economics discussion series 1998-15, Board of Governors of the Federal Reserve System (U.S.)

Berger AN and Udell GF (2004) A more complete conceptual framework for SME finance. World bank conference on small and medium enterprises: overcoming growth constraints, MC 13–121

Delmar F, Wikilund J (2008) The effect of small business managers' growth and motivation on firm growth. Entrep Theory Pract 32(3):437–453

Demirguc-Kunt A, Maksimovac A (1998) Law, finance and firm growth. J Financ 53(6):2107–2137

Hawtrey KM (1997) "Finance for Australian SMEs: policy issues". Econ Papers 16(2):39–50

Herani G, Qureshi JM (2011) The role of small and medium size enterprises in the socio economic stability of Karachi. Indus J Manag Soc Sci 4(2):30–44

King R, Levine R (1993) Finance, entrepreneurship and growth: theory and evidence. J Monet Econ 32:513–542

Kongolo M (2010) Job creation versus job shedding and the role of SMEs in economic development. African J Bus Manag 4(11):2288–2295

Lattimore R, Madge A, Martin B, Mills J (1998) Design principles for small business programs and regulations. Staff Research Paper, Productivity Commission, Canberra

Levine R (2005) Finance and growth: theory and evidence. In: Aghion P, Durlauf SN (eds) Handbook of economic growth, 1st edn. Elsevier, Amsterdam, pp 865–934 Vol 1, Chap 12

Levitsky Jacob (1996) Support systems for SMEs in developing countries: a review, paper commissioned by the small and medium industries branch. United Nations Industrial Development Organization, Vienna

Philippe A, Fally T, Scarpetta S (2007) Credit constraints as a barrier to the entry and post entry growth of firm. World Bank Mimeo

Rajan R, Zingales L (2003) Saving capitalism from the capitalists. Crown Publishing Group, New York

Sleuwaegen L, Goedhuys M (2002) Growth of firms in developing countries, evidence from Cote d' Ivoire. J Dev Econ 68:117–135

State Bank of Pakistan (2010) 2nd Quarterly report, special section. In: the state of Pakistan's economy

UNCTAD (2002) Improving the competitiveness of SMEs through enhancing productive capacity

World Bank (2009) Bringing finance to Pakistan's poor, a study on access to finance by the underserved and small enterprises

Zia B (2007) Export incentives, financial constraints, and the (Mis) allocation of credit: micro-level evidence from subsidized export loans. J Financ Econ 87:498–527