

SMALL AND MEDIUM ENTERPRISES GROWTH IN PAKISTAN A STUDY ON THE SUKKUR REGION

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Abstract

This study investigates the factors influencing the growth of Small and Medium Enterprises (SMEs) in the Sukkur region of Sindh, Pakistan. While SMEs constitute a significant portion of Pakistan's economy, research on their growth, particularly in underdeveloped regions, remains limited. Drawing from a sample of 205 SMEs in Sukkur, Khairpur, and Larkana, this research identifies key determinants of SME growth such as firm age, gender of ownership, business type, export activity, technical know-how, and geographic location. Using Ordinary Least Squares (OLS) regression analysis, the study finds that factors like age, urban location, technical knowledge, and male ownership significantly impact growth. While exporting positively influences growth in older firms, it shows a negative association in younger firms, possibly due to limited networks and resources. The study confirms the partial applicability of Gibrat's Law and highlights the unique challenges and opportunities faced by SMEs in developing regions. The findings provide policy insights for promoting SME development in Pakistan and contribute to the broader discourse on enterprise growth in emerging economies.

INTRODUCTION

The problem and its settings are to find the factors that are contributing in the growth of SMEs (Small and Medium Enterprises) and its barriers to growth.

The premise of the study is behind the glitz and glamour of the big business empires the main driver of economy resides in the shape of Small and medium Enterprises (SMEs). This notion is supported by the fact that SMEs constitute nearly 90% of all Pakistani enterprises, while absorbing 80% of the non-agricultural labor force in addition to contributing 40% in annual Pakistani GDP. (SMEDA- state of SME's in Pakistan website). Small Scale Enterprises including enterprises conducting business informally

are thought to act as a solution for a number of undeveloped world ailments, including unemployment, less growth, inequality and lack of development.

The gap in the literature is that more research is done on developed countries instead of developing countries which is the research objective which can't be fulfilled in the base article. However in Pakistan only one study have done on this topic. So in order to fill those gaps we will check from our study what are the factors that affect growth of SMEs in Pakistan specially in Sindh Province. The broad problem area is that entrepreneurship is an indispensable

characteristic of developed countries. In Pakistan's Journey from developing to developed country SME's role is also pivotal in creation of entrepreneurial culture as it requires less input and is relatively easy to build and manage and helps Pakistani people to rely less on others help. From its very beginnings Pakistan have been fighting with the problem of trade balance. SME's also can help in this regard as it uses mostly indigenous raw materials. In backward regions of the country like our geographical area (Pakistan) of study SME's role is much magnified and important than in developed areas as SME sector dominates here with regard to employment and serving the need of the population. SME's play an important role in assisting government in employment generation and reduces the burden on government. Their unit cost of person employment is low as compared to large enterprises. SME sector also plays a critical role in development of the country through eradication of inequality by virtue of fair and equitable distribution of wealth by regional dispersion of economic activities and by increasing rate of rural industrialization by connecting it with the more developed urban sector.

The contribution of the study will be very useful for the SME sector and government and is a path opener for later studies to explore and progress more. Our study may also help researchers doing research in other less developed or developing areas of Pakistan.

The target population of our study covers Sukkur Region in Sindh province. The registered businesses in Chamber of Commerce and in SMEDA will be our target sample. And for convenience and non probability sampling we choose Sukkur region.

Introduction of the sector Sukkur is the third big city in the Sindh Province. Whereas SMEs' are the main drivers for uplifting the Sukkur Market to boom. In Pakistan, Sukkur is at third in terms of Real Estate Business. There are the other businesses operating like restaurants, automobile spare parts, clothing, etc which serves sukkur market. That's the reason we pick the Sukkur region for our study in order to check what factors affecting the growth of SMEs.

Literature Review

History: After world war II the economies of Asian region benefited because SMEs' growth potential were high which boost the economy and which establish the role of SMEs' in the contribution of economy (Smeda). In 1964, the Ministerial Cabinet approve a financing scheme to promote small industries, as proposed by the National Economic Development Council. A loan

offices were established for small industries under the supervision of the Department of Industrial Promotion, Ministry of Industry, to provide financial support to small manufacturing businesses. The office was later named the Small Industries Finance Office (SIFO). SIFO's operations were facing difficulties due to lack of fund, which was dependent totally on government budget, and lack of government support for funds.

Consequently, the Small Industry Finance Corporation Act was enacted in 1991, transforming SIFO into the Small Industry Finance Corporation (SIFC), the motive of this is to provide support to small and medium enterprises. SME Bank's these banks are created for the support of small and medium enterprises for their expansion of business and operation, for that purpose banks provides them loans, guaranteed different scheme which supports SMEs' to expand their business related operation" (Khan, 2010)". Relavent Landmark Studies: As in the base article concluded in the research of Indian SME's that female entrepreneurs faces more difficulty in finding of raw materials for their business processes and also proposed that female entrepreneurs lacked in social interaction with comparison to male entrepreneurs." (Alex, 2011)". In addressing specific gender needs of women entrepreneurs, efforts must be sensitive to firms having potential, as well as aspirations for attaining growth." (Marina, 2006)". Exports are not just important for any country but are also source of expansion and learning for SME's. Exporting results in increase in productivity for SME's." (Johannes, 2005)". However, exporting firms are more productive as compared to others, but it is not necessary that act of exporting will improve productivity." (Joachim, 2007)". Taking assets as a size of the firms, Manufacturing firms have positive growth rate than in larger firms. "(Morris, 2000)". While on the contrary service firms size has no growth relationship with the firms while manufacturing firms may have it. "(Audretsch, 2004)".

Those firms which have government as their main customer tend to survive and grow more." (Henrik, 2009)". Age and size of SME's are mostly present in studies on SME growth; many researchers have studied and provided their view about how they affect growth. In this domain one important law is known as Gibrat's law," the size of a firm and its growth rate are independent". It fails in case of small, newly established manufacturing concerns." (David, 1999)", and is also contradicted by "(Jan-Bentzen, 2011)". While size and

age factors of firms are proposed to increase firms' ability to survive" (Takehiko-Yasuda, 2005)". When studying old and new SME's Age and size pose restriction on the growth of new SMEs, while being unimportant in case of old SMEs growth" (Paulo-Mac, 2011)". While, larger firms size grow larger and small firms remain small due to may be risk aversion and this may cause to not find any middle size firm" (James-R-Tybout, 2000)". Interms of location geographical positioning is important for firms by virtue of proximity to their customers and suppliers. In making location decision cost of building and making plant ready to function is relatively less important when compared to labor costs." (Yang-Li, 2002)". In small firms the gap regarding supply of finance may cause business owners to take financial decision, the findings showed that profitability most significantly determines growth" (John-Wastosen, 2006)". Interms of Technology SME's finds young managers think and plan for long term as compared to older ones, support for careful selective investment in information technology (IT), might prove helpful" (James-Forman, 2006)".

Pertanent Theories: The study focused on the Development and growth of the SME's during the Crisis period in Indonesia and find positive results that SMEs' and better than larger firms during Crisis, SME's are more flexible than larger firms "(Albert-Berry, 2001)". The relationship between export orientation and innovation performance is positive in SMEs' firms and it found that exporters involved both in product innovation and process innovation orientation" (Sharmistha, 1990)". They have a view that ownership style, industry of the firm and legal identity of the firm were one of the most important variables in relation to firm's growth" (Davidsson, 2002)".

Conclusion of previous Studies: is that according to Gibrat's Law which suggests that firms growth is independent of firms size, we come to know from the research of "(Sven-Olov, 2011)" of Swedish firms that Gibrat's Law does hold for small firms but not for the larger firms. Because small firms seek to grow more in

- Age
- Type of Ownership
- Owner's Gender
- Power source
- Business type

their initial stages to achieve MES (minimum efficient scale) to make them able to survive in the market. Apart from manufacturing firms. There may be having relationship between size and growth of the manufacturing firm but it is not having any relation with the firms providing services "(Audretsch, 2004)". As in the research of Indian SME's that female entrepreneurs faces more difficulty in finding of raw materials for their business processes and also proposed that female entrepreneurs lacked in social interaction with comparison to male entrepreneurs "(Alex, 2011)". Due to having cultural resemblances with India and Pakistan we hypothesized that female entrepreneurs also faced such situations in our study too.

Urbanized SME's found to be more successful than rural SME's, as "(Alex, 2011)" also find that vicinity of firms have great influence on the growth of the firms. Firms working in urban areas have more opportunities than rural ones which makes them able to grow faster than rural ones.

Lots of factors influence the growth of firms and looking separately every factor may lead to biased but they found about exporting of products which having a direct impact towards firm growth and make firms to grow more "(Jane-W.Lu, 2006)" with "(Joachim W. , 2007)". This research makes us enable to assume if SME's selling their products or providing services to other countries achieve higher growth than those who are not doing so.

Gap in Literature: Previous studies and in base article there is gap in literature that most of the studies have done on developed countries, no any research has been done on developing countries specially in Pakistan.

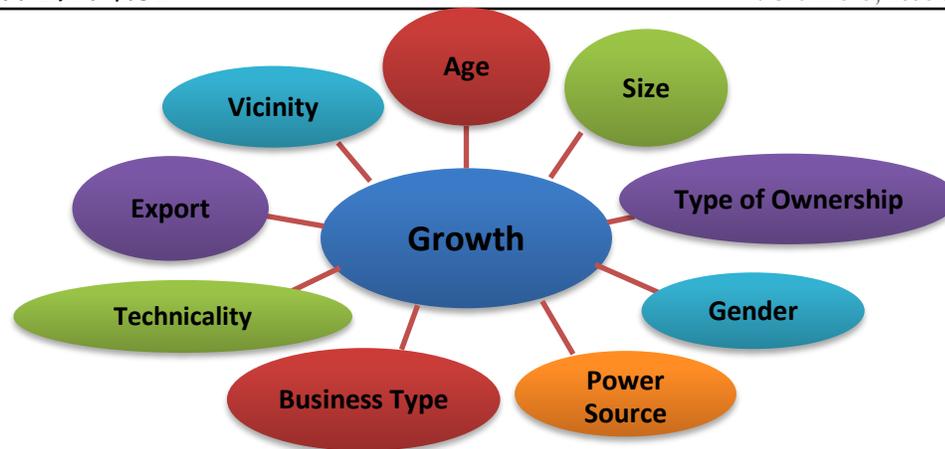
Methodologies: The previous studies use quantitative approach to find out and prove their arguments by collecting data, convert it into numerical form, find results and draw conclusion.

Variables:

After extensive review of the literature we have confide in the following variable

- Technicality
- Export
- Vicinity
- Industry type

Based on the above variables the theoretical framework developed as followed



SMEs' growth is the blend of many variables like age, size, type of ownership, owner's gender, Business type, technicality, export and vicinity are independent variables and growth is dependent variable.

Hypothesis

- 1) Age and Size have a negative relationship
- 2) Gibrat's Law Does not hold
- 3) Exports positively affects on Firms Growth
- 4) Women owned firm grow less than Man Owned Firms
- 5) Technicality affects positively on firm
- 6) Location affects positively on firm
- 7) Power Source affects positively n firms' growth
- 8)

Data

In this research paper we will study SMEs' growth in Pakistan. In order to do so, we will develop a questionnaire to collect data on the indicated variables. The population of this study will be SMEs operating in Pakistan. The sample will be the SMEs operating in the Sukkur region. The sample size will be between 100-250 firms. Non Probability sampling will be used for because the firms which are convenient and which give accurate information through personal reference we pick those. Questionnaires will be developed and distributed in Sukkur region SMEs', data will be collected and analyzed. The data sources will be both primary through a questionnaire. Because no research has been done in Sindh province on SMEs.

Methodology

Our study revolves around the small sample of SMEs from the districts of Sukkur, kahirpur and Larkana. Data collection for the study was much difficult for this area of Pakistan due to several reasons; first is lack of awareness amongst business owners and management regarding the benefits of proper accounts management and benefits that they could ripe through the identification of major factors that influence their growth, adoption of new technologies and change the business environment as per the customer demands, fear of being caught in avoiding taxes and the use of child labor also feared out many potential respondents. All this could also lead to the fabricated data provided by respondents. Besides of all the situations the sample of 205 firms has been collected. For any SME to be included in our study it had to fulfill these three conditions: (i) SME must be present in districts of Sukkur, Khairpur or Larkana. (ii) SME must have equal to or more than 5 employees, (iii) SME must be in business to provide data for at least 3 financial years. Any SME lacking on any one of the above mentioned conditions were eliminated. Data collection method used was a mix of questionnaire and interview as one of the researcher had to be present to explain the questions and address to queries of the respondents. Data collected from 18 firms on the basis of an interview were removed from the dataset.

Estimation

To estimate the effects Ordinary Least Squares regression was used to estimate the effects of the dependent variables on SME growth. In

estimation continuous as well as dummy variables were used.

Summary Statistics

Table 1

Summary Statistics	M	Standard	Minimum	Maximum
Employee strength	11.25434	6.588754	5	30
Owner's gender	0.971098	0.168017	0	1
Business Type (Merchandizing and service or manufacturing)	0.872832	0.334128	0	1
Ownership	0.936416	0.244718	0	1
Power source	0.121387	0.327525	0	1
Technical know how	0.364162	0.482591	0	1
Vicinity	0.855491	0.352625	0	1

Table 1 explores the descriptive statistics of firms' factors: the average growth of the firms is 5.34. Only those firms are selected for the study whose age are equal or more than 5 years, so the minimum age of any of the firm is 3 years while the maximum age as in the table shown is 47 years. Only 9.2% firms are exporting which is quite less because, so due to lack of awareness and not having international standard measures for products, firms are lacking in exporting and not growing in the pace with comparison to the firms that are exporting. All other firms excluded from the study whose employee strength is less than 5, so average employee strength from all of the firms is 11.25 while maximum employee strength level is 30.

Gender of the business owner affects the overall business performance, Alex Coad (original article

authors) proves in their study of India that although female owned firms grow less than male but if female owned firms are exporting their products then their growth rate would be more than male owned firms either exporting or not. In our study 97% firms comprised of male while remaining are female ones. 87% firms' nature of business is merchandising or service type which means they are not producing by themselves. More than 93% of all the firms are sole proprietorships. Due to more of the firms are either merchandising or service oriented firms, so the percentage knowledge of technicality is not much high i.e. only 37%. Safety and other security concerns like snatching, environmental concerns etc, more of the firms are located in urban areas.

Growth rate

$$SME\ growth = \alpha + \beta_1\ employee\ strength + \beta_2\ age + \beta_3\ gender + \beta_4\ Business\ type + \beta_5\ ownership + \beta_6\ Export + \beta_7\ power\ source + \beta_8\ Vicinity + \beta_9\ technical\ knowhow + \epsilon$$

regressions

source, ition of dix. We

The variables of interest in our study mainly consist of employee strength, age and dummies for

present the estimations for the whole sample in table 2 with appropriate significance level. In column one only measures the impact of only age on the growth. In column 2 we include all variables and in column 3 we include firms that are of age greater than10 (ten).We would discuss (Age x gender) (power source x business type) (power source x employee strength) (export x age) (age x vicinity)

the results in the sequence with age and employee strength first then gender then exporting, and then ownership.In our estimation, we included several interactions between continuous and dummy variables.

- (export x ownership)
- (age x power source)
- (age x business type)
- (age x technical know-how)
- (employee strength x export)

Results

Table 2

Variables	All Firms(1)	All Firms (2)	Old firms (age>10)
Log(age)	0.059400** (0.023610)	0.225096* (0.063019)	-0.085656*** (0.046650)
Ownership		0.024088 (0.080382)	0.075577 (0.73837)
Gender		0.225805*** (0.131904)	0.247875** (0.116713)
Business Type		0.334939** (0.142009)	0.203320* (0.067361)
Employee Strength	-0.003386 (0.002600)	0.001451 (0.003532)	0.003507 (0.0030624)
Export		-0.406311 (0.301503)	0.158558** (0.66899)
Power Source		0.670205** (0.301799)	-0.024384 (0.075635)
Vicinity		0.044704 (0.106951)	0.106294*** (0.057806)
Technical Knowhow		0.234975* (0.079002)	0.053064 (0.043051)
(Age x Gender)		-0.004137 (0.008559)	
(power source x business type)		-0.442371*** (0.238927)	
(power source x Employee strength)		-0.023208***	

		(0.013804)	
(export x age)		0.012269**	
		(0.006184)	
(age x vicinity)		0.001582***	
		(0.005921)	
(export x ownership)		0.168808	
		(0.171396)	
(age x power source)		-0.006204	

		(0.004839)	
(age x business type)		-0.008282	
		(0.006349)	
(age x technical knowhow)		-0.008880**	
		(0.003581)	
(employee strength x export)		0.012660	
		(0.013815)	
Constant	0.550770*	-0.372992***	0.304445
	(0.069291)	(0.222168)	(0.199136)
Observations	173	173	127
R2	0.032551	.258741	0.173216

Note: *denotes significant at 1%, ** shows significant at 5%, and *** shows significant at 10%

Gender

This variables takes value one if the owner is male and zero otherwise. The positive and large significant coefficient suggest that male driven SME's grow faster as compared to the female driven the reasons could be many including that in the geographic rejoin of study it is considered bad for females to do business and females are less educated, they have less opportunities to connect and have restrictions in communication and travel. Interaction of this variable with SME age results in negative coefficient suggesting that the combination is harming growth, but the coefficient is not statistically significant, suggesting

Age and Size (taken as employee strength)

From table 2 age has a positive impact on the growth when taken alone. Put simply the more old business, there is more expectation is that it will

presence of other more influencing variable interactions.

Ownership

In our study we are also looking for impact of SME being a sole proprietorship or partnership on growth. Our results suggest negative effect of being a sole proprietorship SME but the coefficient is not statistically significant, for the older firms it becomes positive while still being statistically insignificant this might be due to that as firms grow old problems occur in partners.

grow at a faster pace. Positive and statistically significant coefficient on vicinity variable in older firms, propose that being in an urban setting has a positive impact on the SME in terms of growth.

When taken for older firms the variable age has negative role in growth.

When accounting for only age and employee strength for all firms employee strength is estimated to have a negative impact on SME growth but the coefficient is not significant employing that there may be other variables that are more predictive than it. When taken for all firms and old firms' employee strength has a positive impact on the SME growth.

Other variables

According to results export has negative impact in growth for all firms, but has positive impact for old firms, this might be due to that firms exporting earlier in their age have less links, knowledge of trade, and confidence of importers.

Being knowledgeable towards the technicalities in the business is beneficial for growth whether taken for all or for old firms, but he coefficient is only significant for all firms.

For all firms relying on government supplied electricity is beneficial for growth while being statistically significant, this might be due to that many businesses have Gas running generators and they haven't regularized it, so in fear of being penalized thy might have taken safe heaven in not declaring its ownership. When taken for old firms impact becomes negative but is statistically insignificant. The variable for business type is positive and statistically significant for all and old firms, suggesting that manufacturing SME grow slower, this may be due to that the electricity and fuel inflation has increased their costs and put a strain on production abilities.

Conclusion

Less developed regions of the country which is also developing have their own distinct needs, structure, facilities and opportunities for SME. Hence the strategies and tactics employed and needed differ from that of comparatively developed parts, like Karachi and Lahore.

The aim of this research is to help the SME sector of the sample districts and help the SME sector

and the government in uplifting the sector growth. Previously no study of this nature had been conducted in this area and there was very little information available.

Although there might be biasness in the data by virtue of makeup by the respondents, still taken as a first step this study is very useful for the SME sector and government and is a path opener for later studies to explore and progress more. Our study may also help researchers doing research in other less developed or developing areas of Pakistan.

Our study data and relevant interpretation of results point to a number of issues, including Size and Age, Gender, Ownership, Business Type, Exporting, And External Knowledge. Age is a positive factor towards SME growth.

Female firms are likely to have lower growth rates. Exporting has a positive effect on SME growth for SME with age 10 and above, but for all firms of our sample it has negative impact this may be due to that in all firms when we include new firms they faced less growth may be as they were unable to fight with the extensive strong network of old SME's already working in the sector (Almost all data for Exports came from date agriculture sector and in that sector old businesses have strong networks as they have strong relations and have bounded suppliers through debt burden and they have more bargain power then new SMEs). Proprietary firms face better growth on the whole then partnership firms. Manufacturing SME also face restrictions in growth due to increased pressure from Fuel cost rise, raw material inflation and wage appraisals.

Doing business in urban area and having technical knowhow has positive effect on SME growth. Relying on government based electricity is beneficial for SME growth as using own generators cause increase in production and managerial cost. Large firms can mitigate this by using more fuel efficient generators and by buying in large amount at fewer prices but SMEs can can't.

Appendix

Table 3

Variable Definitions	
Log Average growth	Log of Average of growth for three years (2008-09 2009-10 2010-11).
Age	Age of the firm as per the year 2012
Export	Dummy variable taking value of '1' if the SME exports.
Employee Strength	Number of employees employed by the SME at all levels.
Gender	Shows the gender of the SME owner. Dummy variable taking value of '1' if the owner is "Male".
Business Type	Dummy variable taking value of '1' if the SME is a "merchandising and service business" and '0' if it's a manufacturing business.
Ownership	Dummy variable taking value of '1' if the SME is Sole proprietorship.
Power source	Dummy variable taking value of '1' if the SME relies only upon services of electricity by HESCO or SEPCO and '0' if it makes its own electricity.
Technical Know how	Dummy variable taking value of '1' if the SME posses the technical knowhow..
Vicinity	Dummy variable taking value of '1' if the SME is in Urban and '0' if SME is in Rural.

TABLE-A DEFINITION OF SMEs — PAKISTAN (2005)

Size	Sector	Employment (Full time employees)	Productive Asset (Rs. Million)
Small	Manufacturing	≤ 50	30.0
	Service	≤ 50	20.0
	Trade	≤ 20	20.0
Medium	Manufacturing	51 – 250	30.0 to 100.0
	Service	51 – 250	20.0 to 50.0
	Trading	21 – 50	20.0 to 50.0

Note: Adopted by the SME Policy, 2005.

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