

Financial Challenges That Impede Increasing the Productivity of SMEs in Arab Region

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Abstract: This paper examines the development of Small & Medium Enterprises (SMEs) in Arab Region through the financial challenges and opportunities that increase or impede Arab SMEs' developmental strategies (adopted by both governments and private banking sectors)

Some important facts are presented. A comprehensive international literature review was undertaken. A questionnaire was developed for small and medium size enterprises owners and top managers to access the status of their enterprises and also to examine SMEs' developmental strategies adopted by SMEs decision makers. Regressions analysis was employed for the data. Results of a pre-study survey done by World Bank and Arab Banks Union were used for comparing. Findings here prove that crucial constraints faced by small entrepreneurs are the huge lack of finance, conforming to WB-ABU survey results; this study confirmed a clear positive correlation between banks credit facilities and the progress of SMEs in developing countries. Lack of finance, lack of clear strategies, lack of skilled HR, and low technological capabilities are proved by surveyed CEOs as main challenges for their SMEs developments. Finally, the government has been the most important supporting financial agency for SMEs in the region economies. However, evidence of the effectiveness of government and banking programs to support SME development is mixed and not so encouraging. After analyzing the current SMEs' developmental strategies (adopted by both governments and banking sectors) the study suggested some future strategies for SMEs' development in Arab region countries.

JEL Classifications: D21, F23, M16, O31

Keywords: SMEs; Financial institutions; Developing country; Arab Region

1. Introduction

Small and medium sized enterprises, or SMEs, are widely recognized as being the major contributors to economic growth, job creation and economic activity in most developed nation countries. As such, encouraging the growth and success of SMEs is vital to the success of the Arab countries and their industries.

1.1 Problem Introduction

Due to their increasing importance to production growth and vital relation with various productive sectors in society, small and medium enterprises (SMEs) have become one of the key instruments to face economic and social problems and achieve development objectives in most industrial and developing countries.

1.2 Importance of the Issue

In Arab Region SMEs is the main engine of economy growth and play a very important role in job opportunities creation. SMEs contribute to economic development by creating employment for rural and urban population, providing flexibility and innovation through entrepreneurship and increase international trade by diversifying economic activity. Their role in income generation and economic growth for Arab countries is critical. SMEs are strategically important in many the world and particularly in developing countries, In Arab region SME sector consists of more than 90% of all firms outside the agricultural sector in the region (Union of Arab Banks Statistics 2009). For example, and according to the same statistics bulletin, SMEs constitute more than 95% of all non-agricultural private enterprises in Egypt and account for nearly three-quarters of new employment generation. For Kuwait, this sector constitutes approximately 90% of the private workforce, including labour and imported an estimated 45% of the labour force, employment and national rates of less than 1%, in Lebanon, more than 95% of the total enterprises, contribute about 90% of the jobs. In the UAE, SMEs accounted about 94.3% of the economic projects in the country, and employ about 62% of the workforce and contribute around 75% of the GDP of the state. In addition, they account for 96% of the GDP in Yemen in 2005, and about 77%, 59%, 25% in Algeria, Palestine and Saudi Arabia, respectively, during the same year.

SMEs are the primary vehicles by which new entrepreneurs provide the economy with a continuous supply of ideas, skills, and innovations (CACCI 2003). All over the world, it is largely argued that Government should promote and support SMEs on the grounds that they make substantial contributions to productivity growth and consequently, competitiveness and aggregate economic growth. In addition, SMEs are believed to be especially effective job creators and enjoy the reputation of being sources of income, providing training opportunities as well as important basic services for disadvantaged people (UNIDO 2006).

1.3 Purpose of This Paper

The purpose of the paper is, twofold: first it investigates into the constraints that SMEs face in Arab region countries. Second, to reflect the important role that can be played by SMEs in the development of Arab region States, I think it's important to identify the problems facing these countries. Then illustrate the importance of these projects for the Arab States. And then indicate what can be done to address these problems through the development of the SMEs and suggests how government and financial institutions can help to remove the constraints to SMEs development. The study, therefore, serve to all the stakeholders for improving the various aspects of SME development in Arab region particularly and in developing countries in general.

1.4 Paper Contribution

The study found that main constraints faced by small entrepreneurs are the huge lack of finance, conforming with pre-study findings this study confirmed a clear positive correlation between banks credit facilities and the progress of SMEs in developing countries. The study found also that SMEs are of high importance to developing countries especially in Arab region because they account for more than 90 percent of all firms outside the agricultural sector. lack of finance, lack of skilled HR, and low technological capabilities are proved by surveyed CEOs as main challenges for their unit developments. Finally, the government has been the most important supporting financial agency for SMEs in region economies. However, evidence of the effectiveness of government and banking programs to support SME development is mixed and not so encouraging. After analyzing the current SMEs' developmental strategies (adopted by both governments and banking sectors) the study suggested some future strategies for SMEs' development in Arab region countries.

1.5 Outline of This Paper

The remainder of this paper is structured as follows. Section 2 summarizes recent empirical evidences on SMEs' financial constraints and patterns. Section 3 discusses the challenges and opportunities of SMEs development, the need, importance and benefits to SMEs. Section 4 presents the research methodology used in the study. Section 5 focuses on the data and the empirical results of the study. Finally, section 6 concludes.

2. Literature Review

SMEs are different from large organizations in several characteristics like resource limitations (financial, human and technological), informal strategies, and flexible structures (Hudson, Smart, and Bourne 2001; Qian and Li 2003). But there is no single definition of SMEs among officials of the multilateral development institutions, each thinking within the context of the official definition of his or her own institution, as represented below in table 1 by the maximum size criteria for SMEs: As a consequence, SMEs have higher failure rate than large enterprises.

2.1 Definition and Importance of SMEs in the Arab Region Economy

Many Arab countries have recognized the importance of small and medium-sized enterprises (SMEs), and have formulated policies to encourage, support, and fund there. The benefits of SMEs to any economy are easily noticeable, they include: contribution to an economy in terms of creation of jobs, development of skilled and semi-skilled workers, and developing and adapting appropriate technological approaches. This section discusses the developmental role of small and medium-sized enterprises (SMEs) in the Arab countries.

Table1. A Less Imperfect Way of Defining Small Medium Enterprises in Developing Countries

Institution	Maximum # of Employees	Max. Revenues or Turnovers (\$)	Maximum Assets (\$)
World Bank	300	15,000,000	15,000,000
IMF-IADB	100	3,000,000	(none)
African Development Bank	50	(none)	(none)
Asian Development Bank	No official definition. Uses only definitions of individual national governments.		
UNDP	200	(none)	(none)

Source: Tom Gibson, H. J. van der Vaart, Defining SMEs. September 2008, p5.

SMEs constitute a very heavy portion of Arab region economies as their contribution in GDP is 35%. According to the Union of Arab Bank Statistics, there are more than 10 millions establishments in the region that fall under the category of SMEs. 90% of the micro and small establishments accounts for 80% of all non-agricultural sector employment. All these statistics clearly indicates the vital role of SMEs in the economic growth of Arab countries.

However, SMEs due to their size face problems that make them vulnerable and prevent them from attaining growth. These problems are particularly significant in the areas access to financing, bank loans, human resources development, business regulations and restrictions and technological capability. In presence of such problems, many SMEs are unable to meet the challenges created due to liberalization and globalization of markets.

In Arab Region countries the full potential of the SME sector has yet to be tapped due to the existence of a number of financial constraints hampering the development of the sector.

The Literature here identified three main constraints in SMEs growth in Arab region countries: (1) lack of finance; (2) low human resource capabilities; and (3) technological capabilities.

2.2 Lack of Financial Lending

There has been relatively little research on the supply side of financial constraints to SMEs in Arab region. Notable exceptions are Beck, Demirguc-Kunt, and Peria (2008 and 2009), and De la Torre, Peria, and Schmukler (2010), which provided the first measures of the extent of bank lending to SMEs, lending volumes are still not very impressive. The share of SME lending in total lending is only 8 percent, of which 2 percent in the Arab GCC (Gulf Cooperation Council) countries, and 13 percent in the Arab non-GCC countries. The low share of SME lending in the GCC reflects largely the characteristics of concentrated oil economies. The share of SME lending in the non-GCC is higher, but still lower than the shares of SME lending in developing and developed countries (Beck, Demirguc-Kunt, and Peria (2008), and OECD (2010). Several previous studies recognized lack of finance support as a major constraint in SMEs development in developing countries (Ayyagari, Demirguc-Kunt and Maksimovic 2006; Beck et al. 2006; Cook and Nixon 2000; Minton 2006; Tambunan 2008; Zia 2007). Lin (2007) described that over 98% of SMEs have no access to formal financing. Shen et al.(2009) identified that SMEs in China obtain only 12% of their capital from bank loans, while their peers obtain 21% in Malaysia and 24% in Indonesia. Lacking appropriate financing channels has become the main hurdle for the development of SMEs. Lin argued that as SMEs are often labor-intensive enterprises, their ability to absorb labor costs are reduced when they face credit constraints. Bari, Cheema and Haque (2005) described lack of finance as major constraint in SMEs development in Pakistan and India. Also SMEs in Arab countries are facing greater credit constraints and have limited access to bank loans. Therefore, the need is to establish small and medium-sized banks through to deal with the difficulty of accessing bank credit for SMEs.

2.3 Skilled Human Resource Insufficiency

Educated workers are not only more productive, but they have more learning and innovative abilities (Batra and Tan 2003). Those SMEs which have more capable workers are likely to be more efficient (Hewitt and Wield 1992; Lucas 1993). Several studies recognized low human resource capabilities as major constraint in SMEs development in developing countries (Batra and Tan 2003; Lee 2001; McElwee and Warren 2000). Thus a firm's efficiency is also dependent upon the abilities and how-know of the human capital of its employees.

Human resources in Arab SMEs generally are weak in terms of their knowledge and skills of market analysis, marketing and product innovation as well as business planning and financial management. Therefore, the need is to develop capacity building programs to improve the entrepreneurial and business management skills of human resources in SMEs and enhance the effectiveness of SMEs. Entrepreneurial competencies may, therefore, be developed by education, know-how and training (Gibb 1986; Romjin 1989). Firms with a literate and well-educated workforce are thus likely to be more efficient because of their greater capability to absorb and effectively utilize new technology (Hewitt and Wield 1992; Lucas 1993). The figure1 shows the rates of employments in Arab countries in the year 2005/2006 and estimates that youth unemployment rates vary from a high of about 46 per cent in Algeria to a low of 6.3 per cent in the UAE.

2.4 Technological Infrastructure

Among the principal constraints for SMEs development in Arab Region is the huge lack of E-Technology capabilities, which is the key for developing core competency in industry. Technological innovation is regarded as a tool for strengthening the competitiveness of a nation

(Sikka 1999). SMEs can largely improve their production abilities and profitability by improving employees' technological capabilities. Employees' technological capabilities can be improved in several ways like R&D initiatives, technology and know-how agreements with foreign and domestic firms, international contacts with foreign firms, and production experience or learning-by-doing (Griliches 1984; Keesing and Lall 1992; Mairesse and Sassenou 1991; Pack 1992; Pitt and Lee 1981; Tan and Batra 1995; Westphal et al. 1979). New technologies are rapidly emerging, technologies improves efficiency and enables greater production. Technological innovations are a source of profit for enterprises (Dean 1980; Drucker 1985). The potential benefits of modern technology and technological capabilities to SMEs are well known. According to Morse, Fowler and Lawrence (2007) technological capabilities benefit SMEs in several ways. Technologies enhance SME efficiency, reduce costs, and broaden market reach, both locally and globally. Many studies: (Lee 2001; Romijn 2001; Yusuf et al. 2003) recognized Low Technological Capabilities as major constraint in SMEs development in developing countries. Unfortunately, absence of technological capabilities hinders and discourages SMEs from fully grabbing the benefits of new technologies, including, among others, lack of knowledge, resources and training. Public and private sector cooperation can play a critical role in addressing these concerns.

3. Challenges and Opportunities of SMEs Development in Arab Region

3.1 The Importance of SMEs for the Arab Countries

SMEs have been considered the engine of growth, innovation and job creation in both developed and developing economies. Almost every company we know of began as SMEs. Google was begun by a couple of young kids who thought they had a good idea. Facebook, Microsoft, Vodafone, etc.

The SME sector is a very diverse group, ranging from the local corner shop to sophisticated hi-tech start-ups. This finding again underlines the importance of new firms which grow.

According to National bank of Dubai, The Nature of Small and Medium Size Enterprises in Arab region countries, more than 90% of all firms outside the agricultural sector are SMEs and microenterprises, generating a significant portion of GDP. For example, in Morocco, 93% of industrial firms are SMEs and account for 38% of production, 33% of investment, 30% of exports and 46% of employment. In Bangladesh, enterprises of less than 100 employees account for 99% of firms and 58% of employment. Similarly, in Ecuador, 99% of all private companies have less than 50 employees and account for 55% of employment⁴. Not all these SMEs and micro enterprises are in the formal sector; some occupy the unofficial labor market, which varies in size from an estimated 4%-6% in developed countries to over 50% in developing nations. (National bank of Dubai, The Nature of Small and Medium Size Enterprises in GCC's Industrial Sector, Economic report, UAE, June 2007,P5).

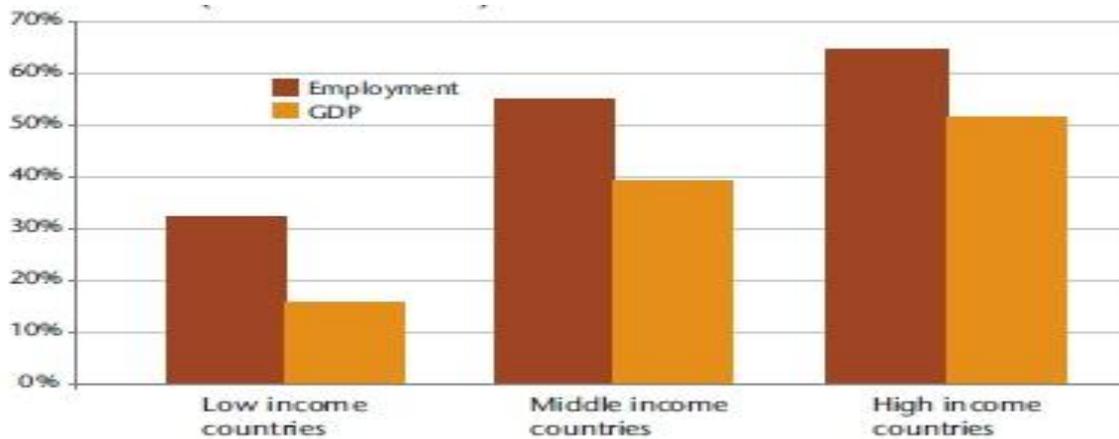


Figure 1. SME contribution to employment and GDP

Source: World Business Council for Sustainable Development (WBCSD), .Promoting SMEs for Sustainable Development, WBCSD, July 2007, p2

3.2 Overall Extent of SME financing in Arab Countries

Governments due to the current internationalization of economics and politics are indulged in more interaction with business world (Yanez, Magnier and Ramirez 2008). However, many developing countries governments are currently not committing themselves to this approach. The average share of SME financing in Arab region is low – less than 8 percent of total lending – but there are significant differences between the two main sub-regions and individual countries, as shown in Table 2 and Figure 2. The average share of SME lending in the GCC is only 2 percent, while the share of SME lending in the non-GCC region is 13 percent. This is a significantly higher figure, although still lower than those reported by Beck, Demircuc-Kunt and Martinez Peria (2008), for both developing and developed countries, and also lower than the average share of five OECD countries (OECD 2010).

Table 2. Weighted Actual and Target SME financial Lending selected High, Medium and Less income Arab countries

Country	Target for SME financial lending	No. of financing Banks	Acutely financed SMEs	No. of banks
Egypt	24.72	7	5.22	9
Qatar	15.14	7	0.49	5
Mauritania	9.66	3	0.20	3
Arab GCC	12.47	38	2.02	33
Arab No-GCC	26.71	61	13.16	65

Source: World Bank Statistics Middle East and North Africa Region 2009

In other developing countries, sustainable growth of SMEs can be achieved through financing facilities, where the government delivers the minimum standard of quality for products and services; the private sector brings skills and core competencies, while government, donors and businesses jointly bring funding and other resources. Such collaborations can be especially productive in promoting poverty alleviation through micro-finance, enhancing SMEs growth through partnerships as has been the case with poverty eradication plans in Egypt and Jordan.

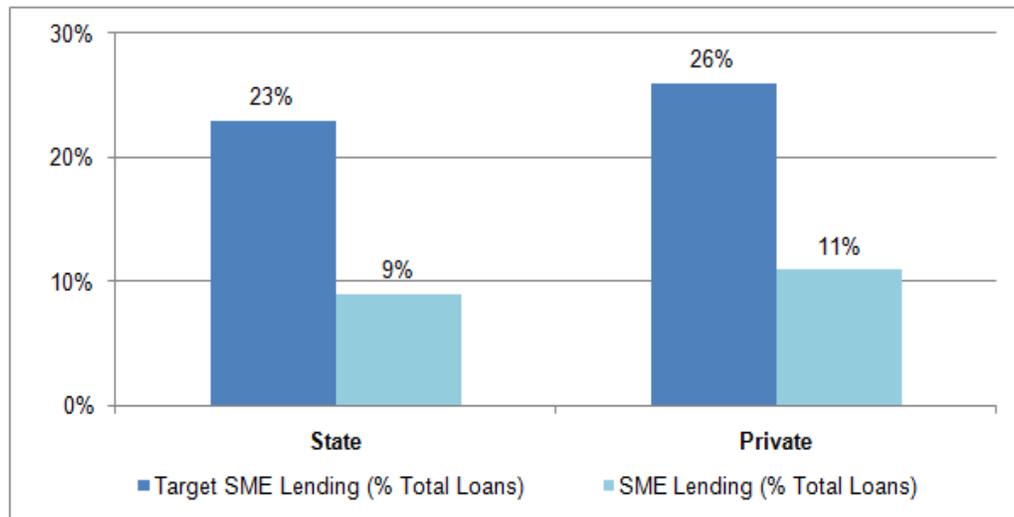


Figure 2. SME financial Loans/Total Loans (%) and SME Lending Targets: governments vs. Private
Source: World Bank Enterprise Surveys (2006-2009)

The Government Financing Support (GFS) to SMEs is the most efficient and effective mechanism in number of ways. GFS create a sense of co-responsibility and co-ownership for the promotion of small enterprises. Through GFS, the advantages of the private sector - dynamism, access to finance, knowledge of technologies, managerial efficiency and entrepreneurial spirit – are combined with the social responsibility, network of contacts, environmental awareness, local knowledge, and job generation concerns of the public sector. GFS is initiated for the formation of business research centers and industrial parks, or other institutes to provide human, financial and technical help for small enterprises. Such institutions are usually financed and operated by both public and private sector.

SME contribution in terms of tax revenues is also extremely important in Arab region countries. These taxes strengthen government's capacity to provide administrative services such as education, health, medical care, and welfare for societal development.

In order to respond to international competitive environment which becomes more severe in today's economic globalization, the competitiveness of local Arab SMEs needs to be improved. This improvement is not possible only through the right GFS's efforts. Governments in the region countries also need to contribute and help SMEs in private sector to improve and achieve their competitiveness objectives.

GFS provides support for SMEs capacity development in Arab region as well in other developing countries and assistance that brings about competitiveness, intending for economic growth that benefits not only the entrepreneurial group but also the entire society of a developing country.

Many of the developing countries have not developed policies and systems to foster the SMEs development. The lack of technical skills and management know-how on a business- level has impeded the birth and growth of businesses. To overcome these obstacles, formulation of SME development policies and capacity development of persons in the public as well as private sector who formulate and implement the policies appropriately are essential.

3.3 Strategic Approach to SME Banking

In line with WB survey's findings 2010, most of banks in Arab Countries are already engaged in financing the SME sector, despite the low share of lending in many of these banks. 87 percent of banks in the GCC already have SMEs as clients, and the same percentage already has a separate unit to manage the SME business. The percentage of non-GCC banks that already has SMEs as clients is even higher at 96 percent, This is expected, given the relatively higher importance of SMEs in non-GCC economies, and the higher average share of SME lending among non-GCC banks. What seems surprising is the lower share of non-GCC banks with a dedicated SME unit. So it is clear that the benefits of financing support to SMEs development are numerous, especially for the Arab countries, what may include: - Improves access to finance, - Availability of modern technology, - Reduce the cost of product development, - Faster product development, - Facilitation of marketing policies, - Increases accountability and incentivizes performance.

Other important and inter-related factors include the saturation of the market for large corporate and the need to diversify the financial loan portfolio. The prospects of generating business through cross-selling are rated as important or very important by a large share of GCC and non-GCC banks alike. Interestingly, government programs are rated as relatively less important, especially in the GCC. Government programs are generally more important among non-GCC banks, although a closer look at the questionnaire reveals significant differences across non-GCC countries.

4. Hypothesis Development and Research Methodology

This section provides an econometric analysis of the dataset to explore further the factors that contribute to SME financing in Arab region. More specifically, we want to test further the differences between regions and ownership structures while controlling for other factors. We also want to examine whether large banks play an important role in SME finance (Berger and Udell, 2006; de la Torre et al., 2008 and Beck et al., 2009), and whether banks are engaged in relationship lending (Berger et al., 1995, 2001; Berger and Udell, 1996; Sengupta, 2007). Finally, we want to assess the impact of financial infrastructure and special interventions such as partial credit guarantee schemes on overall SME financing and the share of SME investment loans.

4.1 Study Design and Research Model

To examine these different hypotheses, pre-study estimated the following regression model:

$$Y_{it} = \alpha_0 + \alpha_1 Loans_{it} + \alpha_2 GCC_{it} + \alpha_3 State_{it} + \alpha_4 Relation_{it} + \alpha_5 Cover_{it} + \alpha_6 Legal_{it} + \alpha_7 Guar_{it} + e_{it}$$

where *i* refers to the bank and *t* refers to time. The dependent variable *Y* stands for either SME loans as a percentage of total loans or investment loans as a percentage of SME loans. Loans refer to total volume of loans for a bank and controls for the size of the bank. GCC is a dummy that takes the value 1 if the bank operates in the GCC region and 0 otherwise. State is a dummy that equals 1 if the bank is state-owned and 0 otherwise.

4.2 Research Methodology

On the basis of literature review, the tentative model is represented in Equation (1) indicates the relationships between different SMEs development through financing factors between the government and private sector banks. It supposes that there are positive relationships between improving availability of finance, improving technological capabilities, improving human resource capabilities in the GCC and Non-GCC Arab Countries. Moreover, it reveals that partnerships between government and private banks have positive influences on SMEs growth and development.

For estimation we first use Ordinary Least Squares (OLS), where we relax the assumptions of independence and homoskedasticity and report two sets of standard errors: Huber/White robust standard errors and robust standard errors corrected for possible intra-bank correlation.

We realize the potential endogeneity of the partial credit guarantee variable the volume of outstanding guarantees reflects at least partly the demand for guarantees from banks financing to SMEs. Therefore, we also use Two State Least Squares (2SLS) and employ the lag of outstanding guarantees and the median statutory coverage ratios of the guarantee schemes as instrumental variables (IVs). The coverage ratio is the share of the financial loan which is guaranteed and is one of the key statutory rules of a guarantee scheme. Coverage ratios remained constant during the estimation period and it can be argued that they only affected SME lending through the operations of the guarantee scheme. These IVs seem reasonable and also satisfy the formal tests of instrument validity and relevance in most of the regressions.

4.3 Data Sources and Analysis

The data were collected via a survey approach by personally managing questionnaires to 300 owners and managers of different SMEs, in three deferent Arab countries: High Income Qatar State, Medium income Egypt, less income category; Mauritania, a random sample from SMEs located in those three countries. The list of firms was obtained from the related chambers of commerce. A follow-up visit was conducted to increase the response rate. After the second survey, 193 questionnaires were received, in which were 190 valid, with a response rate of 50% or above.

Each construct was consisted of four corresponding measures. The measures are adjusted and applied to the specific context of Arab region SMEs. The items of constructs are assessed with a 4-point Liker scale, with “1” being “very low” and “4” being “very high”. The questionnaire was pre-tested for validity to a panel of experts in the related field.

4.4 Measurement Unit

In present study, respondents were asked to indicate the extent of public and private sector partnerships required for growth and development of SMEs (including areas like finance, human resources, and technological resources), and the items of constructs are assessed with a Likert scale ranging from 1 to 4 with the following equivalences, “1: low”; “2: neutral”; “3: high”; “4: very high”. The higher score, the greater degree to Financing supports. The measurement scales used in this study are presented in Table 4.

4.5 The Sampling

Sample selected was a mix of micro, small and medium enterprises. Around 90% of respondents were male, with the largest group for genders falling within the 25-50 age range. All respondents were workers in Qatari, Egyptian and Mauritanian SMEs. All respondents were educated to degree level, with 40% having achieved a master degree. In addition, table 3 displays comprehensive profile of the respondents.

Table 3. 190 Respondents' Profiles details

All types of Business (Micro, Small & Medium) 190 (100%)						
Country			Gender		Education	
Qatar	Egypt	Mauritania	Male	Female	Master or Above	Graduation
38 (20%)	96 (51%)	56 (29%)	171 (90%)	19 (10%)	76 (40%)	114 (60%)

Meanwhile, other survey made by WB indicated that about 90% of banks that have a separate SME unit also have some rating system, but these rating models seem to vary greatly in their use of hard statistical data, and the development of statistical models is generally limited by the weaknesses in credit information. Moreover, it is noteworthy that very few banks have adopted automated application processing, maybe the best evidence that transactional lending is not well developed in Arab region yet. Therefore, while many SME units seem to be developing more sophisticated lending techniques, in most cases they are still conducting relationship lending, although in a more effective way.

5. The Analysis Results and Findings

The OLS results are reported in Appendix 1 while 2SLS results are reported in Appendix 2. The results in appendix indicated the share of SME loans in total loans is the dependent variable, and report the share of investment loans in SME loans as the dependent variable. The Finding show that if the SMEs are provided with the necessary supporting needs and abilities, like finance support technology and human resources, it would facilitate the SMEs in sustainable growth and development. Means and standard deviations for all the variables were calculated in order to get an idea about the direction of the respondents' perceptions. Table 5 indicates the mean values and standard deviations for the studied variables. A low standard deviation for all the variables indicates reliability of the data and less variation in respondents' perceptions. Also all mean values above three indicates the significance of the variables. Each of the SMEs financing factor's mean scores was used to produce a correlation and regression analysis corresponding to our hypothesis. The results were used to find that data either support hypothesis or not. A majority of the respondents agree that Government financing support have a major impact on every advancement or growth be it technology or otherwise. The SMEs' growth rate is lower, probably due to lack of finance, technological capabilities, human resource capabilities and lack of effective GFS in these areas as has been evident.

Table 4. Assessments, Mean and Standard Deviations

Variable Scope	Observations	Mean	Standard deviation
Improving Availability of financing SMEs	190	3.97	.786
Improving technological capabilities of SMEs	190	3.87	.710
Improving human resource capabilities of SMEs	190	3.68	.784

The results show also that the greater concern expressed by Arab Region banks about the quality of financial infrastructure is not surprising, considering that the region fares very poorly in this area. As shown in Table 6, the region has the lowest legal rights index among all the regions. Moreover, while the credit information index has improved in recent years, but the coverage of credit reporting systems is still very limited. Maddedu (2010) provides a detailed analysis of the quality of credit information systems in MENA, while Alvarez de la Campa (2010) and Uttamchandani (2010) examine the effectiveness of collateral and insolvency regimes.

Table 5. Measures of Financial Infrastructure, MENA and other Regions

Region	Legal Rights Index	Coverage Public Credit Registry	Coverage Private Credit Bureau	Credit Information Index
Middle East & North Africa	3.5	3.5	2.6	2.6
GCC	3.8	4.2	6.4	2.9
Non-GCC	3.2	3.7	0.0	2.5
East Asia	5.3	8.9	14.6	3.7
Eastern Europe	6.8	2.4	14.1	3.5
Former Soviet Union	5.7	0.5	1.1	1.7
High income: Non-OECD	6.5	0.0	46.3	4.5
High income: OECD	6.8	8.1	58.1	4.9
Latin America	4.4	10.6	36.2	4.6
South Asia	5.7	0.5	2.0	2.9
Sub-Saharan Africa	5.2	1.0	6.9	1.5

OLS results show also that there are significant problems in the registration, enforcement, and selling of collateral, especially movable collateral. While a relative low share of banks reports serious problems with the registration of fixed collateral, a high share of banks reports that registries of movables remain very deficient. Enforcement of collateral is an even bigger problem, especially for movables, but also for fixed collateral in the case of non-GCC banks. Finally, an even larger share of banks reports problems in selling the seized collateral. Again this is true for both GCC and non-GCC banks, and applies both to fixed and movable collateral. The same pattern of responses applies to state and private banks, although it is also noticeable that a larger share of state banks complains about the collateral regime than private banks. These responses reveal that creditors perceive high risks in SME lending that can only be partially offset through greater reliance on relationship lending, or through the use of other lending techniques such as leasing and factoring, or even through access to a guarantee scheme.

6. Summary of Findings and Policy Implications

This paper reports the results of a survey of SME financing with unusually high coverage of government and private banks in Arab region, On the basis of a sample of 190 owners and managers of SMEs, this paper has empirically explored the relationships between GFS and growth and development of SMEs in Arab three countries: Qatar, Egypt and Mauritania, and the findings can be generated to all the region because those three countries represent respectively the High, Medium and low income region in the Arab league region.

The findings indicate that there are significant positive relationships between Government financial supports and private banks loan to SMEs from one side and between the growth performances of SMEs, of which financial partnership is the most significant. Despite the progress so far, it is being widely recognized that government sector and private banks need to capitalize on mutual strengths to accelerate the process of SMEs development and increase productivity so that the promised benefits reach all the stakeholders.

The paper shows that the average SME loan portfolio in Arab region is relatively small amounting to less than 8 percent of total loans. The survey also shows the wide differences in the

scale of SME financial lending between GCC and non-GCC countries (much smaller in the former group), as well as the scope for further SME lending in both sets of countries, revealed by the large difference between the long-run targets and the actual lending levels.

The inability of SMEs themselves to access adequate technological and managerial resources, together with the modest efforts of governments, indicate the need for government financial supports. Improving financial infrastructure should be the priority item in the policy agenda of Arab region countries. Government financing institutions and private banks report that deficiencies in financial infrastructure are one of the major obstacles for further SME lending, and the statistical analysis of the dataset largely confirms this survey result.

Improving financial infrastructure will entail expanding the range of movable assets that can be used as collateral, improving registries for movables, and improving enforcement and sales procedures for both fixed and movable assets. It also entails upgrading public credit registries, and more importantly, introducing private credit bureaus capable of significantly expanding coverage and the depth of credit information.

Based on the above analysis, some policy recommendations and implications are given as follows:

(a) Both Government and private banks should promoting access to finance through developing cooperation between public-private sectors financial institutions and introducing innovative financial instruments to reduce the risks and transaction costs of lending to SMEs. They should try to develop an overall conducive environment to entrepreneurship, innovation and SMEs growth.

(b) Government measures to promote SMEs should be carefully focused, aimed at making markets work efficiently and at providing incentives for the private banks to assume an active role in SME finance. Where necessary, banking systems should be reformed in line with market-based principles.

(c) Governments should play a critical role in promoting an enabling environment in which private banks can fulfill their SME finance targets prudently and responsibly. In the interim, state banks would be well advised to place a higher emphasis on risk management, so that the greater risks they are currently taking in extending SME finance arise from well informed decisions and are better monitored. Likewise, credit guarantee schemes can play an important role and can even be expanded in some countries, but most schemes can be improved in design and should start conducting comprehensive reviews that include evaluations of impact.

(d) Micro-credit and micro-finance schemes play an important role in Arab Region countries and efforts should be made to boost their effectiveness and diffusion.

(e) Developing education sector to increase the availability of skillful human capital, which is essential for SMEs growth and prosperity. Further enhancing cooperation between public and private sector educational and research institutions will also help improving technological capabilities of SMEs.

(f) Develop an environment that supports the growth and dissemination of innovative technologies for and by SMEs to take advantage of the knowledge-based economy.

Finally, it is important to recognize that the potential for SME finance is also a function of the structure of the economy and the size of the SME sector. In the case of Arab non-GCC countries, there is huge potential for expanding SME finance, with large numbers of smaller enterprises underserved and low levels of bank competition to serve them. In the case of GCC countries, the size of the SME sector may remain more constrained by the nature of oil economies, but there is

also scope for further SME finance, especially if access to finance is also expanded for resident non-nationals. But if public- and private-sector actors are willing and able to take these steps, both may realize the potentially significant benefits of developing their local SMEs, including improved access to technological, human and financial resources. This will further improve the capacity of SMEs to solve problems that cannot be addressed by a single actor. Government financing supports to private banks also may contribute to the improvement of livelihoods for a major portion of small entrepreneurs, and other vulnerable individuals and households in the region countries.

Future research can be conducted to identify solutions to these problems, and more in-depth studies are needed to better understand the ground realities associated with GFS and private banks implementation in SME sector.

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Appendix 1. Descriptive Statistics of the Variables Used in Regression Analysis

Variable	No. of	Mean	Standard	Minimum	Maximum
SME Loans/Total Loans (%)	271	10.1	12.3	0.0	55.0
Investment Loans/SME Loans (%)	270	24.1	22.8	0.0	80.0
Log Total loans	339	20.8	2.4	13.8	24.7
Log Number of Branches	396	3.3	1.4	0.0	6.7
Maximum Coverage Registry or Bureau	381	8.0	9.8	0.0	36.0
Legal Rights Index	399	3.1	1.2	0.0	4.0
Time to Register Property	399	29.4	34.1	2.0	193.0
Time to Enforce a Contract	399	662.8	142.8	520.0	1010.0
Recovery rate for Closing a Business	348	31.0	15.1	10.0	63.0
Time to Close a Business	348	3.6	0.9	1.0	5.0
Partial Credit Guarantee % of GDP	399	0.1	0.2	0.0	0.9
Lag of Partial Credit Guarantee % of	266	0.1	0.2	0.0	0.9
Median Coverage of PCG Scheme	210	68.1	7.5	60.0	82.5

Appendix 2. Definition and Sources of variables used in Regression Analysis

Variable	Definition	Source
SME Loans	Total SME loans for a bank expressed as a percentage of total loans	UAB and World Bank SME Survey
Investment Loans	Total SME loans for investment purposes expressed as percentage of total SME loans	UAB and World Bank SME Survey
Log Total Loans	Logarithm of total loans for a bank	UAB and World Bank SME Survey and BankScope Database
GCC Dummy	Dummy variable that takes value 1 if a bank is in GCC region and 0 otherwise	World Bank
State Ownership Dummy	Dummy that takes value 1 if a bank is owned by government and 0 otherwise	UAB and World Bank SME Survey
Log Number of Branches	Logarithm of total number of branches for a bank	UAB and World Bank SME Survey and BankScope Database
Separate Unit for SME Clients	Dummy variable that takes value 1 if a bank has a separate unit for SMEs	UAB and World Bank SME Survey
Maximum Coverage Registry or Bureau	Highest coverage ratio of either the public registry or the private bureau and includes the number of individuals and firms listed with information on their borrowing history from past five years	World Bank's Doing Business
Legal Rights Index	The degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending. The index ranges	World Bank's Doing Business
Time to Register Property	Number of days that property lawyers, notaries or registry officials indicate is necessary to complete a procedure.	World Bank's Doing Business
Time to Enforce a Contract	Number of days counted from the moment the plaintiff decides to file the lawsuit in court until payment. This includes both the days when actions take place and the waiting periods between	World Bank's Doing Business
Recovery rate for Closing a Business	Recorded as cents on the dollar recouped by creditors through reorganization, liquidation or debt enforcement (foreclosure) proceedings	World Bank's Doing Business
Time to Close a Business	Number of years for creditors to recover their credit. The period of time measured is from the company's default until the payment of some or all of the money owed to the bank.	World Bank's Doing Business
Partial Credit Guarantee	Outstanding credit guarantees expressed as a percentage of GDP	Saadani, Arvai, and Rocha (2010)
Median Coverage of PCG Scheme	Median share of loan guaranteed	Saadani, Arvai, and Rocha (2010)