

# WORKING PAPER

# Growth of Micro, Small and Medium enterprises (MSMEs) in MENA countries: constraints and success factors

# Rim Ben Ayed Mouelhi and Monia Ghazali EMNES Working Paper Nº 5 / March 2018

## Abstract

This study attempts to contribute to a better understanding of the main constraints/ boosters for MSME growth in selected countries of the MENA region (Tunisia, Egypt, Morocco and Jordan). A multinomial logit model is used to investigate the impact of a three-fold classification of firm growth determinants (company characteristics, manager characteristics and business environment characteristics). The Database is provided by the World Bank Enterprise Surveys (MENA ES). Results give statistically robust evidence that innovative firms are more likely to grow. Therefore, the implementation of efficient and well governed systems of innovation is a priority in MENA region

Keywords: MSMEs growth, constraints, boosters, innovation.

**Rim Ben Ayed Mouelhi** is Professor, ISCAE, University of Manouba. E-mail: <u>mouelhirim3@gmail.com</u> **Monia Ghazali** is Assistant Professor, ESSECT, University of Tunis. E-mail: <u>moniaghazali@yahoo.fr</u>

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#### Introduction<sup>1</sup>

One of the most stylised facts emphasised in the EMNES study (2017) regarding the private sector development in the selected MENA region countries (Tunisia, Egypt, Morocco and Jordan) is that micro and very small firms are overwhelming in numbers, though they make the smallest contribution to job creation, as well as limited upward mobility, (The World Bank-Tunisia Development Policy Review, (2015); the World Bank Group business climate report on MENA region, (2016)). Micro and small firms do not seem to grow. They are the least productive and the least innovative, since they do not have the appropriate financial, human and logistical resources. In Tunisia, for example, micro firms represent 98% of firms, however, they generate only 16% of employment. Meanwhile, the share of small and medium firms within the total number of private firms is relatively small (around 1%). Yet, SMEs absorb about 42% of total employment.

To sum up, the private sectors in the MENA countries are characterized by the "missing Middle" phenomenon. The development of small and medium businesses through the support of micro firms' growth can foster the dynamic of job creation and contribute to poverty alleviation.

The literature on the MENA region private sector is relatively scarce. The purpose of this working paper is to empirically identify the main constraints/ boosters for MSME growth in selected countries of the MENA region (Tunisia, Egypt, Morocco and Jordan). We project to use a theoretical and empirical analysis to spot the key growth factors. Firms are distinguished according to their growth rate. We consider three categories: fast growing enterprises (average growth rate >=20%) often referred to as "Gazelles", firms with a moderate growth rate (between 10% and 20%) and low-growth firms (<10%). The aim is to capture the main differences and to learn from the experience of those MSMEs who were able to grow.

However, beyond the conventional constraints met by MSME companies related to the business environment (administrative procedures, taxes, infrastructure, access to finance) and the characteristics of firms (age, size, activity, innovation activities...), we aim to focus on factors related to management competence, entrepreneurial experience and managerial skills that are critical to the growth of small businesses, yet insufficiently investigated to date in the literature. Furthermore, we attempt to assess the innovation impact on MSME growth given that innovative firms have a greater probability of surviving and to grow over the long term (Harrison, 2008).

The Database is provided by the World Bank Enterprise Surveys (MENA ES). It includes firmlevel data collected through interviews of business owners and top managers. The data covers a broad range of firm characteristics, as well as some characteristics of leaders and business environment issues, including access to finance, corruption, infrastructure, competition, innovation and performance measures. The Enterprise Survey data is available for the four selected countries (Tunisia, Egypt, Morocco and Jordan). The firms' sample covers around 4469 firms, after cleansing.

The results of the empirical investigation will enable us to set a number of recommendations and priorities to support the growth of micro and small firms in the respective countries, in order to build a functioning private sector and to enhance job creation.

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The first section of this study presents a literature review regarding the determinants of MSME growth. Section 2 draws a brief overview of the stylised facts on the MENA private sector. Section 3 is dedicated to the empirical strategy. Section 4 presents the main results and recommendations.

#### Section 1: Determinants of MSMEs growth:

This section involves a literature review regarding the determinants of MSME performance for growth. A wide range of studies, as Hampel et al. (2014), emphasise the constraints and success factors impacting the upgrading of MSMEs. The "onion model" of Reeg (2013) synthesises a combination of these internal and external factors: entrepreneur characteristics, personal and professional networks, enterprise characteristics and business environment.

- The entrepreneur characteristics and networks matter substantially in enterprise upgrading. Recently, Reeg (2013) and Hampel et al. (2014) have clearly shown that factors related to the competence of the entrepreneur and its human and social capital are critical to the growth of businesses. These factors are rarely mentioned by leaders when they are interviewed about the constraints to growth. However, the profile of business leaders, their entrepreneurial experience, their managerial skills, their attitudes, their ability to take risks, their knowledge of different sectors and their social capital and networks are crucial in research, as it might capture growth opportunities. A well-developed network can even facilitate the access to finance (Eifert, Gelb and Ramachandran (2005), Mouelhi (2001)).
- *Firm's characteristics:* the age and size of the firm, as well as its location, the sector in which it operates, its human resources and skills, its absorption capacity and the ability to innovate are considered by several studies to be crucial for a firm's growth and prosperity. According to Jovanovic (1982), the oldest companies develop more slowly because their managers have already reached their most effective operational capacity. Most of the time, they have also reached their optimum productivity.

The size of the company might also be a critical factor. Small-sized companies are often lacking the resources to invest in new equipment, to innovate or to develop R&D activities, which negatively impact their ability to grow (Rothwell et Dodgson, 1991). However, companies well-endowed with skilled and competent labour, and investing in training and human resources development, are more likely to grow.

The owner's gender might also have an impact on a firm's growth. As indicated by Liedholm (2001), women owners would be more risk averse and probably less concerned by the firm's growth than male owners.

The degree of foreign cooperation and the technological absorption capacity of the firm are also important for its growth. Participating in export markets and developing partnerships with foreign investors provide firms with opportunities to open up to international best practices. It also fosters learning, improves efficiency and productivity and offers growth opportunities for the firm.

Furthermore, companies in urban zones grow more quickly than their rural counterparts, according to Liedholm (2001). They benefit from externalities of urban areas and large scale markets.

• *The innovation effort*: Several studies have addressed the relationship between innovation and firm growth without reaching a consensus. Many theoretical studies (Aghion et al. 2005,

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Harrison and al 2008, Hall et al 2008) have concluded there is a positive relationship between innovation and growth. Empirical studies have delivered mixed results. Some researches emphasise the absence of a relationship between innovation and firm growth while others conclude that it is a positive association. One possible explanation of such a discrepancy is the different measures and various innovation components (product innovation, process innovation...) considered, as well as the data and econometric methods used. One should also keep in mind that the impact of innovation on growth could be low or absent in the shortterm, as it needs maturity and time to turn into firm growth. Furthermore, the relationship between firm growth and innovation could be bi-directional. Innovation is a key driver of growth. Yet, high-growth firms have more resources and capacity to innovate (Mason and al, 2009).

That being said, there is almost a consensus on the fact that innovative firms have more probability of surviving and of growing in the long term. There is also a consensus on the positive impact of product innovations on growth. Product innovations have a positive impact on firm employment as they lead to an increase in new products sales and to market extension (Harrison et al (2008), Bianchini et al (2014)).

However, the impact of the innovation process on employment growth is variable and inconclusive. Onn one hand, the innovation process might improve the production process. It is expected to exert a positive impact on productivity via a more efficient use of factors, which could lead to a reduction in employment requirements and to a labour shrinkage. 2.On the other hand, a compensation effect might take place: the innovation process leads to a decrease in production costs, and thus, in product price which translate into an increase in product demand and sales.

• *The business environment*: many studies show that the quality of the business environment is a determinant for MSME growth. Obstacles to firm growth range from political instability, difficult access to finance, regulation rigidity and heavy administrative procedures to corruption practices and unfair competition from the informal sector (Eifert and al (2005), MENA report 2017).

#### Section 2: Data description

We use firm level data provided by the World Bank Enterprise Survey. Face to face interviews have been carried out with business owners and top managers in 2013 across 8 MENA countries<sup>3</sup>. The MENA ES offers a representative sample of the non-agricultural, formal private sector. Firms included in the survey have at least five employees and operate in the manufacturing or services sectors<sup>4</sup>. According to the World Bank Report (2016), the survey has used random sampling, itemised by firm size, sector of activity, and regional location within each economy, as well as weights which guarantees a statistical representation of the private sector for each country. Data covers a broad range of firm characteristics, including innovation as well as performance measures, leadership characteristics and business environment issues, such as access to finance, corruption, infrastructure, informal sector, competition etc...

<sup>&</sup>lt;sup>2</sup>This is infrequent according to Harrison et al (2008).

<sup>&</sup>lt;sup>3</sup> Djibouti, Egypt, Jordan, Lebanon, Morocco, Tunisia, West Bank and Gaza and Yemen. <sup>4</sup>Further details about The MENA Enterprise Survey are provided by the World Bank Report (2016).

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For the purpose of this study, we have extracted a sample of 4469 firms belonging to the countries of interest. Table 1 provides some descriptive statistics related to the data in use. The largest sub-sample is observed in Egypt. Firms are mainly operating in the manufacturing sector. Furthermore, one can observe that small firms comprise by far the largest category (about 60%) which is representative of the private sector structure in MENA countries.

We compute the average annual labour growth rates between 2009 and 2012 using the available data. As shown in table 1, around 67% of firms have been downsizing, shrinking their number of employees. This is most notable in Tunisia and Egypt due to political, social and economic instability related to the popular uprisings. The so called "gazelles", i.e. firms with an average annual growth rate exceeding 20%, represent only 5.5% of total firms.

	Tunisia	Morocco	Egypt	Jordan	Total
Firms number	592	407	2897	573	4469
Size in 2009					
Small (less than 50)	59%	61%	55%	60%	57%
Medium(50 to 200)	26%	23%	19%	17%	20%
Large(above 200)	15%	16%	26%	23%	23%
Sectors					
Manufacturing	56%	51%	71%	66%	67%
Services	34%	29%	24%	20%	25%
Retail	10%	20%	5%	14%	8%
Labour growth					
Less than o	57%	47%	77%	45%	67%
0 to 0.2	35%	44%	19%	47%	27.5%
above 0.2	8%	9%	4%	8%	5.5%

**Table 1: Sample Description** 

Source: Authors computations using the MENA ES database

### Section 3: Stylised facts on MSMEs in the MENA countries

1) Micro firms: the major category, the creator of least jobs

In Tunisia, according to the EMNES study (2017), firm size distribution is biased towards micro firms (98% of total firms), which only absorb 16% of total employment (see figure 1). In turn, large firms employing more than 200 workers account for only 0.1% of all firms, but absorb 42% of total employment. Overall, medium or large firms with more than 50 workers, account for more than 50% of total employment.

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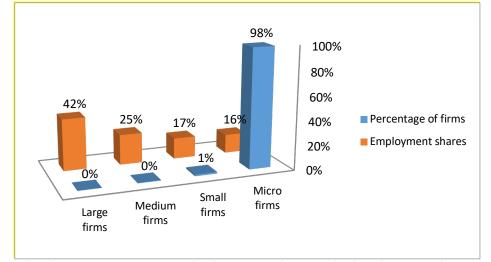


Figure 1: Employment shares of Tunisian firms in 2014 (sorted by size)

Source: Authors' computation using RNE database. Micro firms employ less than 10 workers. Small firms employ between 10 and 50 workers. Medium firms account for between 50 and 200 workers. Large firms account for more than 200 workers.

In Jordan, the EMNES study (2017) points out that 89% of private sector establishments are micro enterprises and contribute to 36% of employment in the private sector, 9% of the firms can be considered small and employ a share of 16%, while medium firms represent 1% of total firms but create 12% of total jobs. Large companies represent 0.5% of the total establishment but generate 36% of jobs.

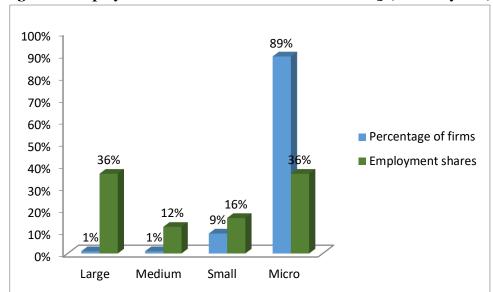


Figure 2: Employment share of Jordanian firms in 2013 (sorted by size)

Source: data from DoS, Employment Survey, 2004. Micro firms employ less than 5 workers. Small firms employ between 5 and 49 workers. Medium firms account for between 50 and 100 workers. Large firms account for more than 100 workers.

In Egypt, the EMNES study (2017) emphasises that micro enterprises employing one to four employees constitute approximately 91% of all firms. Small and medium ones, employing between five and a hundred people, account for around 8%, while large enterprises represent less than 1%.

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According to the ERF Research Report (2016)<sup>5</sup>, micro firms employing less than ten workers constitute 97.7% of the MSE sector (employing less than 50 employees) in Morocco which, in turn, represents 99.6% of the non-agriculture private sector.

Although it is somewhat harsh to rely on comparable statistics for the four MENA countries, one could point out that the share of SMEs is small compared to micro firms, however they contribute significantly to employment. Overall, promoting the upgrading and expansion of micro firms would boost the SMEs sector and generate spill-over effects to the economy as a whole.

2) Limited upward mobility: SMEs do not grow

According to the employment transition matrix related to the four MENA countries of interest (see Table 2), 91% of firms considered as small in 2009, remained small in 2012. None of the firms that had been categorised as small in 2009 became large in 2012. Furthermore, only 4.5% of the firms that had been medium-sized in 2009 expanded in 2012, growing into large companies. However, 36% of large firms in 2009 shrunk, becoming medium or small-sized. Hence, the dynamism of firms is limited in the MENA region, probably due to distorted competition and discrimination in firms' access to government support, where there is a bias towards the selection and learning processes underlying firms' growth (ERF Research Report (2016)).

	Size in 2012			
Size in 2009	Large	Medium	Small	Total
Large	927	215	320	1462
	63.4%	14.7%	21.9%	100%
Medium	69	1225	200	1494
	4.6%	82%	13.4%	100%
Small	6	132	1375	1513
	0.4%	8.7M	90.9%	100%
Total	1002	1572	1895	4.469
	22.4	35.1	42.4	100

# Table 2: Employment transition matrix4 MENA countries, 2009-2012

#### Source: Authors' computations using the MENA ES database

3) Obstacles to MSME Development in MENA countries:

According to figure 3, political instability is the major obstacle to MSME development, disclosed by firm managers in both Tunisia (50%) and Egypt (48%), due to the climate of uncertainty and political unrest following the popular uprisings. It is also among the top three cited obstacles in Jordan (12%), as a consequence of regional instability. However, in Morocco, corruption is viewed as the main business environment constraint, by 19% of firms. In Jordan, the largest issue faced by firms is related to tax rates (17% of respondents).

Access to finance is one of the top constraints jointly pointed out by managers in the four countries of interest. While the World Bank Report (2016) draws attention to the large size of financial

<sup>&</sup>lt;sup>5</sup> ERF Research Report (2016), « Dynamisme de la Micro et Petite Entreprise au Maroc», Research Report Series No 0419

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and banking sectors in the MENA region, it emphasises issues such as biased bank lending towards large firms and high collateral standards. Getting credit is a common issue pointed out by the latest World Bank's Doing Business Report (2017) in Morocco, Tunisia and Jordan and, to a lesser extent, in Egypt (see Table 3). Informality and the inadequate workforce are commonly highlighted by both Morocco and Tunisia as important constraints to MSME growth, while unreliable electricity supply is one of the top concerns of Egyptian firms, as confirmed by Doing Business Report (2017). The same report ranked Egypt and Jordan badly (respectively 122<sup>nd</sup> and 118<sup>th</sup> among 190 countries) with regard to the ease of doing business - far behind Morocco (68<sup>th</sup>) and Tunisia (77<sup>th</sup>). However, new entrepreneurs are facing greater challenges when starting a business in both Jordan and Tunisia (103<sup>rd</sup> and 106<sup>th</sup> out of 190<sup>th</sup>).

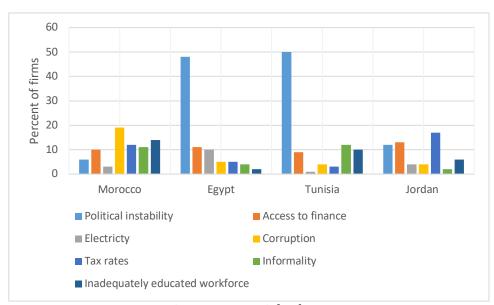


Figure 3: Obstacles to MSME growth in MENA countries

Source: MENA ES database

Table 3. MENA countries ranking among 190 countries (2017)

	Egypt	Jordan	Morocco	Tunisia
Ease of doing business	122	118	68	77
Starting a business	39	106	40	103
Dealing with construction	64	109	18	59
permits				
Getting electricity	88	48	57	40
Registering property	109	96	87	92
Getting credit	82	185	101	101
Protecting investors	114	165	87	118
Paying taxes	162	79	41	106
Trading abroad	168	50	63	92
Enforcing contracts	162	124	57	76
Closing a business	109	142	131	58

Source: World Bank's Doing Business Report (2017)

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#### Section 4: Empirical analysis

The purpose of this section is to assess the determinants of MSME growth in the MENA region. The dependent variable "Growth" is a multinomial variable with three outcomes. It takes the value of 1 if the firm registered a growth rate exceeding 20%, rating it in the "gazelles" category. It takes the value of 2 with a growth rate of between 10% and 20%. If the firm has grown by less than 10% per year on average during the last 3 years, the dependent variable takes the value of 3. In order to compute the annual average growth rate  $g^6$  of MSMEs, we consider data regarding the number of employees in 2009 and 2012 as follows:

```
Growth = 1 \quad if \quad g \ge 20\%
Growth = 2 \quad if \quad 10\% \le g < 20\%
Growth = 3 \quad if \quad g < 10\%
```

We attempt to explain the propensity of a firm to grow by using a multinomial model with a broad set of explanatory variables, derived from a literature overview and available in the ES database. Table 4, below, sums up the main variables considered in the model.

Dependent variable					
Growth	Multinomial variable	<ol> <li>if the firm has grown by at least 20% per year on average during the last 3 years.</li> <li>if the firm has had a growth rate of between 10% and 20%.</li> <li>if the firm has grown by less than 10%.</li> </ol>			
Explanatory variables					
Manager characteristics	Manager characteristics				
Top manager female	Binary variable	<b>1</b> : if the manager is a woman <b>0</b> : otherwise			
Top manager experience	Quantitative variable	Manager's years of experience in the same sector			
Owner Manager	Binary variable	<ul><li>1: if the manager is also owner of the firm</li><li>0: otherwise</li></ul>			

#### **Table 4. Variables description**

<sup>6</sup> g= 
$$\left[ \left( \frac{Workers_{2012}}{Workers_{2009}} \right)^{1/3} - 1 \right]$$

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Firm characteristics		
Firm size	Quantitative variable	Number of formal workers by the end of fiscal year 2009.
Firm age	Quantitative variable	Firm age in 2009
Government participation	Quantitative variable	The share of capital held by the state
Foreign participation	Quantitative variable	The share of capital held by private foreign individuals, companies or organisations
Innovation	Binary variable	<ul> <li>1: If the firm has created or significantly improved a product/service and/or if the firm has adopted or significantly improved its management practices and/or if the firm has adopted or significantly improved a new marketing strategy and/or if the firm has created or significantly improved logistics and distribution methods and/or if the firm has created or significantly improved the production processes over the period 2009-2012</li> <li>O: Otherwise</li> </ul>
Productivity <sub>(t-3)</sub>	Quantitative variable	Total annual sales 2009/ Number of formal workers by the end of fiscal year 2009
Sales	Quantitative variable	Total annual sales
<b>Business Environment</b>		
Major obstacle finance	Binary variable	<ul><li>1: if financing access is considered as a major obstacle</li><li>0: otherwise</li></ul>
Major obstacle political instability	Binary variable	<b>1:</b> if political instability is considered as a major obstacle <b>0:</b> otherwise
Major obstacle workforce	Binary variable	1: if inadequately educated workforce is considered as a major obstacle 0: otherwise
Major obstacle licence	Binary variable	1: if getting business licence and permits is considered as a major obstacle 0: otherwise
Capital City	Binary variable	<ul><li>1: if the city is the official capital city</li><li>0: otherwise</li></ul>

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#### Section 5: Estimation results

Table 5, below, displays the marginal effects derived from multinomial logit estimates of the determinants of MSME growth in the MENA region. We consider 3 categories of determinants: firm characteristics, manager characteristics and environment characteristics. Innovation is one of the core factors within the first category. Results suggest that firms implementing innovations related to production activities, management practices, marketing strategy, logistics and/or processes increase their probability of achieving a growth rate of between 10% and 20% by about 0,0771 points. All the marginal effects associated with the innovation variable are highly significant. This positive association between innovation and firm labour growth could stem from product, process and/or organizational innovation, as demonstrated by previous studies. Product innovation is expected to generate positive net effects by boosting demand for the firm's products and expanding its market position (Harrison et al., 2008; Lachenmaier and Rottmann, 2011). Process innovation has a labour displacement effect in the short term, due to greater efficiency in production. This could be compensated by an increase in product demand through a reduction in production costs, implying more competitive prices. Evangelista and Vezzani (2012) give evidence that organizational change (i.e. the adoption of new business practices, knowledge management systems etc) have an indirect positive impact on employment through the increase of sales revenues. Marketing innovation, as well as logistics innovation, is also considered as important elements of non-technological innovation (Damijan et al. (2014)) that might lead to job creation via growth of firms' sales<sup>7</sup>.

Results in table 6 also show that being a large firm reduces the probability of being a lowperforming firm in terms of labour growth, holding all other variables constant. Large and medium sized firms have more resources to invest, to innovate, to train employees and so, to expand. Using a rich panel data set of manufacturing firms in nine sub-Saharan African countries, Van biesebroeck (2005) gives empirical evidence confirming that large and medium sized firms are expanding their workforce and their added value more rapidly than smaller firms.

The age of the firm appears to be negatively related to the probability of showing high or moderate labour growth. The oldest companies develop more slowly because they have already reached their most effective operational size and their productive optimum. Besides, older firms might suffer from lower growth persistence related to issues preventing their strategies to adapt to changing business conditions, as well as increasing inertia and organisational rigidities (Coad et *al.* 2014).

Unsurprisingly, an increase in firm sales growth rate of 1% increases the probability of being a "gazelle" by 0.05 and the probability of generating a growth rate of between 10% and 20% by 0.25. This underlines the importance of identifying and accessing new markets.

An increase in labour productivity is able to reduce the probability of being a low-performing firm. However, the magnitude of the marginal effect is low.

An increase in government participation in company capital negatively affects the probability of generating a growth rate of over 10%. More generally, many studies point out a negative link when investigating the impact of government involvement on company performance. This might be explained by the bad quality of management and governance in public firms.

<sup>&</sup>lt;sup>7</sup> We have included a qualitative variable « Patent » taking 1 if the firm has been granted a patent during the last 3 years and 0 otherwise. However, it appears to be statistically non-significant.

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Regarding the effect of the set of management characteristics on our dependent multinomial

variable, only the owner-manager variable seems to play a statistically significant role. It appears to decrease the probability of being a low-performing firm. Management ownership is frequently documented in the literature as being significantly and positively related to firm performance. In fact, as the proportion of shares held by the top manager increases, he is expected to be more motivated to maximise the company's interests, rather than focusing on his personal interests, (Lei and Shunlin, 2008).

Within the third set of independent variables, being located in a capital city decreases the probability of generating a growth rate of below 10%. Firms located in a capital city benefit from externalities and large scale markets. They also benefit more than their counterparts located elsewhere from support programmes, coaching and networking (Liedholm 2001).

Furthermore, firms highlighting the political unrest obstacle as the biggest business constraint they face, , are less likely to become "gazelles". On the other hand, firms having trouble getting a licence are less likely to have a growth rate of between 10% and 20%. While the aforementioned constraints, especially political instability, are well emphasised in the descriptive analysis related to the four concerned MENA countries (see figure 3), it is questionable why the financial constraint does not have any statistically significant impact on the dependent multinomial variable.

The MENA ES survey measures firms' business constraints through top managers' selfassessment of the major obstacle encountered. One might suspect numerous pitfalls in such a measurement, particularly regarding the financing constraint. Ferrando and Mulier (2013) distinguish between data on firms' perceived financing constraints and a more objective data based on firms' actual applications to external financing, in order to ascertain "whether the firms that self-report to be financially constrained have different characteristics than financially unconstrained". They find that younger firms are more likely to perceive access to finance as being complicated and to position themselves outside of the loan-application process due to "fear of rejection". Perceived financial constraints, rather than actual constraints, increase significantly when firms have more short term debt. Further, the authors provide some evidence that firms with sufficient liquidity and lower leverage ratios are less likely to feel financially constrained.

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Explanatory Variables	Growth >=20%	10%<=Growth<20%	Growth<10%
Firm Characteristics			
Innovation	0.0115*	0.0771***	-0.0885***
	(0.00680)	(0.0174)	(0.0184)
Sales growth rate	0.0499***	0.254***	-0.304***
	(0.0111)	(0.0518)	(0.0599)
Productivity (t-3)	2.41e-09*	4.94e-09	-7.35e-09
	(1.33e-09)	(6.30e-09)	(7.22e-09)
Ln (firm size)	0.00547**	0.0571***	-0.0626***
	(0.00277)	(0.00612)	(0.00666)
Ln (firm age)	-0.0317***	-0.0777***	0.109***
	(0.00550)	(0.0140)	(0.0149)
Foreign participation	-4.14e-05	6.15e-05	-2.01e-05
	(0.000129)	(0.000336)	(0.000361)
Government participation	-3.12e-05	-0.00367*	0.00370*
	(0.000632)	(0.00212)	(0.00209)
Manager characteristics			
Top manager female	-0.00597	0.0119	-0.00594
	(0.0139)	(0.0378)	(0.0406)
Top manager experience	-0.000187	-0.000230	0.000417
	(0.000347)	(0.000816)	(0.000864)
Owner Manager	0.00617	0.0451**	-0.0512**
	(0.00779)	(0.0196)	(0.0210)
Environment characteristics			
Licence major obstacle	0.00977	-0.0889**	0.0791
	(0.0206)	(0.0444)	(0.0491)
Finance major obstacle	0.00244	0.0257	-0.0281
·	(0.0106)	(0.0288)	(0.0305)

#### Table 5: Multinomial Regression Results - Marginal effects

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Political instability major obstacle	-0.0165**	0.00133	0.0151
	(0.00731)	(0.0197)	(0.0207)
Labour inadequacy major obstacle	0.00144	-0.0139	0.0125
	(0.0131)	(0.0381)	(0.0405)
Capital city	0.0162*	0.0799***	-0.0961***
	(0.00861)	(0.0206)	(0.0217)

Note: Sector and country dummies are included. Number of observations: 3158 Standard errors in parentheses\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

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### Conclusion and recommendations

This study attempts to contribute to a better understanding of the main constraints/ boosters for MSME growth in selected countries of the MENA region (Tunisia, Egypt, Morocco and Jordan). A multinomial logit model is used to investigate the impact of a three-fold classification of firm growth determinants (company characteristics, manager characteristics and business environment characteristics). The dependent multinomial variable "Growth" captures the annual average employment growth rate of MSMEs over 2009-2012.

Our findings suggest that innovation is a key factor for a firm's growth. This result is statistically robust. Innovative firms are more likely to grow. As noted above, the adoption of new technologies and processes allows the emergence of high-value added products with new markets perspectives. Therefore, the implementation of efficient and well governed systems of innovation is a priority in MENA region. A well-defined innovation strategy, directed to specified sectors and products, is crucial (Ghali, 2016). Greater synergy between the different actors in that process (firms, governments, research centers, agencies...) is needed. Governments should play a more active role to facilitate financing of innovation, particularly in MSMEs. Innovation costs are particularly high. Additional funding and incentives are also necessary to support the innovators. It is also important to steer the efforts and incentives towards more applied research and development projects.

Further, the empirical results suggest a positive and statistically significant relationship between employment growth and firm size, once we consider the age variable. This means that large firms are more likely to contribute to job creation. Several studies show that large companies are also the best performing, in terms of productivity and exports. Promoting the settlement of large companies, especially multinationals, by making sites in the MENA region more attractive is, hence, of major importance. Economic diplomacy has to play a more active role in the attraction of such companies. Political leaders are expected, inter alia to place priority on improving the business climate and removing regulatory and non-regulatory barriers.

It is also important to support the growth of small-sized firms. Specific training for managers is needed to develop strategic plans for their activities and to encourage and extend their professional network. The support structures should develop coaching led by experts and experienced business managers.

Another challenge to be highlighted: to assist small firms identifying new markets and developing their sales which, according to our results, are one of the most important factors of firms' growth. This should be the role of professional organisations, the governmental and non-governmental structures supporting entrepreneurship and MSMEs. African markets are very promising, as they display high-growth perspectives and potentials. Companies need support to gain access to these markets, including information and experience sharing, and networking.

Finally, as noted above, the quality of the business environment is a determinant for MSME growth. According to our results, political instability seems to be a significant obstacle to firms' growth (especially in Tunisia and Egypt after the revolutions). Local firms, as well as foreign ones, need more visibility and political stability to decide whether to invest or to expand.

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