

Conference Paper

Changing Patterns of Entrepreneurship in Lebanon

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Abstract

Despite some significant enterprise initiatives, relatively little is known about the level, pattern and distribution of entrepreneurship in Lebanon. Whilst Lebanon is typically regarded as entrepreneurial, and there is no shortage of Lebanese role models, there is a shortage of hard evidence about who are the entrepreneurs, and how the level of entrepreneurship varies by gender, across age groups, by level of educational attainment and by location. This paper will address these issues head-on, providing comprehensive survey data on the pattern of entrepreneurship across Lebanon and how that pattern is changing over time. However the paper will go beyond simply describing the level of entrepreneurship – it will also offer some evidence-based conjecture as to why that pattern is changing, and how policies may be adapted to encourage further growth. The research instrument for this evidence is the annual GEM survey of 2000+ adults in Lebanon, asking about their entrepreneurial activities, as well as their perceptions and demographics. In the past decade, Lebanon has participated in GEM in three years, (2009, 2015 & 2016), allowing patterns and trends to be established. The level of total early stage entrepreneurial activity, (TEA, or those actively starting or running a new business), increased from 15% in 2009 to 30% in 2015, before falling to 21% in 2016. However these averages are very blunt measures, which the detail of GEM allows to be unpicked. There are reasons to expect the level of TEA to have increased fastest in young people, given the emphasis on enterprise education and growth in entrepreneurial finance for hi-technology start-ups. There is some evidence for this – between 2009 and 2015, TEA for 18-24 year olds increased from 10% to 27%, before falling to 19% in 2016 – still almost twice the level of 2009. However, TEA for 45-54 year olds almost trebled between 2009 and 2015, (from 11% to 31%), before falling to 15% in 2016. In 2009, 45-54 year olds had been more entrepreneurial than 18-24 year olds. By 2016 this had reversed, with the younger age group being almost a third more likely to be starting or running a new business than the older age group. This paper will explore a number of key relationships with entrepreneurship, testing changes for their statistical significance and using results to develop evidence-based recommendations for the development of early-stage entrepreneurship in Lebanon.

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1. Introduction

Despite some significant enterprise initiatives, relatively little is known about the level, pattern and distribution of entrepreneurship in Lebanon. Whilst Lebanon is typically regarded as entrepreneurial, and there is no shortage of Lebanese role models at home and abroad, there is a lack of hard evidence about who are the entrepreneurs, and how the level of entrepreneurship varies across age groups, by level of educational attainment and by location. This article will address these issues head-on, providing comprehensive survey data on the pattern of entrepreneurship across Lebanon and how that pattern is changing over time, including setting this into a MENA context. However, this article will go beyond simply describing the level of entrepreneurship; interesting though this is, it will also offer some evidence-based conjecture as to why that pattern is changing and how policies may be adapted to encourage further growth in entrepreneurship. In doing so, this article will seek to address a number of important research questions:

R1: Given that entrepreneurship is important, how entrepreneurial is Lebanon, and how is the level of entrepreneurship changing over time?

R2: Starting a business is a process, rather than an event. How is entrepreneurship in Lebanon divided between the processes of actively starting a new business, running a new business and running an established business?

R3: Is Lebanon more (or less) entrepreneurial than her neighbors in MENA?

R4: Given the potential economic development significance of high-growth expectation entrepreneurship, how is high-growth expectation enterprise developing in Lebanon?

R5: Given the increasing importance of young people (as a share of population), are young people in Lebanon becoming more or less entrepreneurial?

R6. How does the level of entrepreneurship in Lebanon vary by the level of educational attainment – can increasing education offer the prospect of more high-growth entrepreneurship?

This article will explore these key relationships within entrepreneurship, testing changes for their statistical significance and using results to develop evidence-based recommendations for the development of early-stage entrepreneurship in Lebanon.

The Global Entrepreneurship Monitor project is a long-term international research collaboration between national teams who administer the same questionnaire, (the Adult Population Survey or APS), asking about entrepreneurial activities, as well as perceptions and demographics, to representative samples at least 2000 individuals in each country. This then generates data about levels of entrepreneurial activity that is comparable across countries and through time. The 2016 GEM Consortium included national teams from 65 countries, covering 69 percent of the world population and 85 percent of the global GDP (GEM Global Report, 2016).

In the past decade, Lebanon has participated in GEM in three separate years (2009, 2015 & 2016), allowing some patterns and trends to be established. The level of Total early-stage Entrepreneurial Activity (TEA, or those actively starting or running a new business) in Lebanon increased from 15 percent in 2009 to 30 percent in 2015, before falling to 21 percent in 2016. Hence, to answer *R1*, Lebanon had become more entrepreneurial in the early years of the last decade; although, levels fell in the difficult period of 2015–2016. However, these averages are very composite measures, which the detail of GEM allows to be unpicked.

2. Levels of Entrepreneurial Activity in Lebanon

The GEM APS asks individuals very direct questions about whether they are personally involved in starting or running a new business, and, if yes, what they have done about it. Actions could have involved market research, looking for premises, seeking finance, etc. The point is that to be counted as an early-stage entrepreneur, the individual must have done more than just thinking about starting a business – they must have been actively engaged in some form or other. The Nascent Entrepreneur is defined as someone actively engaged in starting a new business, but who has not yet paid wages or salaries (including to themselves) for three months or more. The New Business Owner, meanwhile, has been paying wages or salaries for more than 3 months but less than 42 months. Those paying salaries for 42 months or more are classified as Established Business owners.

Table 1 shows the level of TEA in Lebanon for the three survey years, making it clear that some stages of the entrepreneurial pipeline (from Nascent to New to Established business) have been considerably more volatile than others.

TABLE 1: The Development of Levels of TEA in Lebanon in the past decade (% of working-age population). (Large sample sizes imply that statistical significance can be calculated for differences in proportions with $Z = (p1 - p2) / \sqrt{p(1 - p)(\frac{1}{n1} + \frac{1}{n2})}$, where $p = (p1 + p2) / 2$. *Levels that were significantly different from the 2015 level)

	2009	2015	2016
Nascent Entrepreneurs	6.71*	10.78	9.52
New Business Owners	8.82*	20.39	12.07*
TEA (TEA is slightly less than the sum of Nascent Entrepreneurs and New Business Owners to avoid double-counting)	14.98*	30.15	21.15*
Established Business Owners	16.00	17.96	20.10*

Source: GEM National Reports.

While the level of TEA has varied considerably over time, this can be seen as largely the result of fluctuations in New Business ownership, which increased from 8.8 to 20.4 percent between 2009 and 2015, before falling back to 12.1 percent in 2016. Nascent entrepreneurship increased from 6.7 percent in 2009 to 10.8 percent in 2015, and then fell slightly to 9.5 percent in 2016. Established Business ownership has increased steadily over the data years, reaching a level of more than one in five adults in Lebanon in 2016. To address R2, levels of new business ownership have been more volatile than either nascent entrepreneurship or established business ownership.

Table 2 puts these results into a Middle East and North Africa context, by comparing levels of early-stage entrepreneurial activity for all participating GEM countries in the region in the eight years since 2009. Note that in 2009, high levels of GEM participation in MENA countries were the consequence of International Development Research Centre sponsorship of GEM in the region [6].

Table 2 shows a very rich, but highly variable, picture of changing levels of entrepreneurial activity across MENA in the past decade. Levels of early-stage entrepreneurial activity have been very consistent in Iran, to a lesser extent in Tunisia, have increased in Israel, Egypt and Saudi Arabia, and have fallen sharply in Algeria, Morocco, Qatar and the United Arab Emirates.

Certainly, Table 2 dispels the notion that MENA countries are not entrepreneurial or that enterprise has been declining in the region. In 2009, when GEM-participating countries were 84 percent of the total MENA population, the population-weighted MENA's average level of TEA was 10.1 percent. By 2016, when GEM-participating countries were again 84 percent of the total MENA population, and after the turmoil of the global financial crisis, coupled with the Arab Spring, the average level of TEA in the MENA region had fallen slightly to 9.2 percent.

TABLE 2: TEA (%) across the MENA region, 2009–2016.

	2009	2010	2011	2012	2013	2014	2015	2016
Algeria	16.68		9.26	8.75	4.89			
Egypt		7.02		7.82			7.39	14.30
Iran	12.08	12.31	14.54	10.79	12.32	16.02	12.93	12.79
Israel	6.07	5.02		6.53	10.04		11.82	11.31
Jordan	10.24							8.20
Lebanon	14.98						30.15	21.15
Libya					11.15			
Morocco	15.74						4.44	5.56
Qatar						16.38		7.85
Saudi	4.66	9.40						11.44
Syria	8.46							
Tunisia	9.43	6.12		4.78			10.13	
UAE	13.25		6.19					5.66
West Bank	8.59	10.37		9.84				
Yemen	24.01							

Source: GEM Global Reports, 2009–2016.

Table 2 also shows that by the mid 2010s, Lebanon was by far the most entrepreneurial of the GEM-participating countries in MENA, which, as noted earlier, represented 84 percent of the total MENA population. Pairwise comparisons show that the level of early-stage entrepreneurial activity in Lebanon in 2009 was not significantly different from those of Algeria, Morocco or the United Arab Emirates, but by 2015 and 2016, the level of early-stage entrepreneurial activity was significantly higher in Lebanon than in any other GEM-participating MENA country. In terms of *R3*, in 2009, Lebanon was amongst the four most enterprising countries in MENA. By 2015–2016, levels of early-stage entrepreneurial activity in Lebanon were substantially greater than any other participating MENA country.

3. Job Expectations and Entrepreneurial Activity in Lebanon

The number of jobs an early-stage entrepreneur expects to employ in the medium term can be an important indicator of that enterprise's potential impact on the economy. High -job growth expectation entrepreneurs are important for two, closely related, reasons. First, high job expectation enterprise can make a major contribution to an economy's jobs growth—evidence has shown that high-growth start-ups were

responsible for up to 50 percent of all recent jobs growth in the United States [1]. Second, other evidence has found a close relationship between high-job expectation new enterprise and the subsequent expansion of an economy's Gross Domestic Product, [2]. Of course these job expectations may reflect the sector distribution of start-ups, as well as the ambitions of the owner, or even the availability of entrepreneurial finance, since GEM data has demonstrated that high-job expectation start-ups (those expecting six or more jobs in 5 years' time) may require two or three times the funding capital of other start-ups (those expecting zero to five jobs in 5 years' time; [3]).

In the GEM APS, those actively engaged in starting or running a new business are asked about their job expectations, or how many people they expected their business to employ in five years' time. Table 3 shows the changing pattern of job expectations for early-stage entrepreneurs in Lebanon.

TABLE 3: Job expectations of early-stage entrepreneurs in Lebanon (as % of TEA), 2009–2016.

Expected Jobs in 5 years' time	2009	2015	2016
None	24.9	41.9	52.4
1-5	57.9	47.0	39.9
6+	17.7	11.2	7.7

Source: GEM National Reports.

By 2016, the majority of early-stage entrepreneurs in Lebanon expected to employ no-one but themselves in five years' time, whereas in 2009, less than a quarter had the same no-job growth expectations. Meanwhile, the share of high-job expectation entrepreneurs has fallen from just over one in six to less than one in twelve. Addressing R4, both the level and share of high-job growth expectation of early-stage entrepreneurial activity has fallen in Lebanon over time. By 2016, just 1.6 percent of the adult Lebanese population were actively starting or running a high-job growth expectation new business.

4. Age, Education and Entrepreneurial Activity in Lebanon

Age and education can be important demographic influences on the decision to start a new business, especially important in a region where half of the population are aged less than 25. The relationship between age and start-ups is a complex one, since older people are more likely to consider that they have the skills, experience and capabilities to start a business, and may have better ability to spot business opportunities, whilst younger people may have less to give up in starting a business, since they are less

likely to have a job, or have lower opportunity costs in terms of salary and career development foregone.

There are reasons to expect the level of TEA in Lebanon to have increased fastest in young people, given the emphasis on enterprise education and the growth in entrepreneurial finance for hi-technology start-ups. There is some evidence for this—between 2009 and 2015, TEA for 18-24-year old in Lebanon increased from 10 to 27 percent before falling to 19 percent in 2016—still almost twice the level of 2009. However, TEA for 45-54-year old almost trebled between 2009 and 2015 (from 11 to 31%) before halving to 15 percent in 2016. In 2009, 45-54-year old were more entrepreneurial than 18-24-year old. By 2016, this had completely reversed, with the younger age group almost a third more likely to be starting or running a new business than the older age group.

Table 4 sets out the nature of this complex relationship, and how this is changing in Lebanon over time. The period 2009-2015 was one of the substantial entrepreneurial development, with the likelihood of being involved in starting a business increasing for all age groups in Lebanon, but much more rapidly for the youngest (18-24-year old, nearly three times more likely) and oldest groups (45-54-year old, again nearly three times more likely and 55-64-year old, nearly four times more likely), although adults in the middle-age range (35-44 year old) remained those most likely to be involved in start-ups in both years.

TABLE 4: Levels of TEA (%) by age range, Lebanon, 2009-2016.

Age Range	2009	2015	2016
18-24	9.8	26.7	18.7
25-34	18.9	31.9	27.6
35-44	19.2	35.2	28.2
45-54	11.5	31.4	14.8
55-64	5.4	25.6	12.0

Source: GEM National Reports.

By 2015, more than a quarter of the adult population in every age group were actively involved in starting or running a new business. Thus, entrepreneurial activity in Lebanon in 2015 was essentially ageless; of the adjacent age groups in 2015, only the 45-54-year old had a level of early-stage entrepreneurial activity that was significantly different from an adjacent age group (the 55-64-year old). In 2009, of the adjacent age groups, only the 25-34 years and the 35-44 years had levels of early-stage entrepreneurial activity that were **not** significantly different from each other.

The pattern was re-emerging by 2016, when of adjacent age groups, only the 25-34- and 35-44-year old and the 45-54- and 55-64-year old had levels of early-stage entrepreneurial activity that were **not** significantly different from each other.

Looking across the years, comparing 2009 to 2016, all age groups had experienced a significant increase in the level of early-stage entrepreneurial activity except the 45-54-year old, whereas comparing 2015 to 2016, all age groups had experienced a significant fall in early-stage entrepreneurial activity except the 25-34-year old. What is striking about the fall in levels of entrepreneurship in Lebanon between 2015 and 2016 is that it was mostly concentrated in the older age groups, more than halving for those over 45, whereas the reduction in those aged under 44 was much less. Hence, levels of entrepreneurship amongst young people held up much better in the difficult period of 2015-2016 than it had amongst older groups. To address *R5*, there is then some evidence that entrepreneurship in Lebanon is becoming more focused on younger people. In 2016, well over a quarter of adults aged 25-44 years were actively engaged in starting or running a new business, compared to less than one in seven of those aged over 45.

As with age and entrepreneurship, the relationship between levels of educational attainment and levels of entrepreneurship is necessarily complex. Those with no or low levels of educational attainment may be more likely to engage in necessity or subsistence entrepreneurship, whilst those with degrees or higher may be more likely to spot good business opportunities and have the resources to pursue them. Table 5 sets out the relationship between levels of human capital in Lebanon, as measured by educational attainment, and the rate of early-stage entrepreneurial activity and provides some mild evidence for each of these notions.

TABLE 5: Educational attainment and levels of TEA (in %), Lebanon, 2009-2016.

	2009	2015	2016
None	10.7	27.6	19.3
Some Secondary	13.2	30.1	23.3
Secondary Level	11.2	34.4	19.1
Postsecondary (degree)	21.8	30.6	19.9
Postgraduate	29.4	33.8	30.7

Source: GEM National Reports.

In each year, those with no educational attainment were less likely than the average to be starting or running a new business, although by 2015-2016, the difference had narrowed considerably. Meanwhile, those with postgraduate attainment have consistently been much more likely to be engaged in early-stage entrepreneurial activity—by

2016, the proportion of postgraduates starting or running a new business was nearly half as much again as the survey average. However, while graduates in 2009 were more likely to be starting or running a new business than the survey average, this difference had disappeared by 2015 and had become negative in 2016—that is, by 2016, those with graduate educational attainment were less likely than the survey average to be starting or running a new business.

To address *R6*, in terms of educational attainment, only increasing the level of postgraduate provision appears to offer unqualified opportunities for increasing the rate of early-stage entrepreneurial activity in Lebanon.

5. Summary and Conclusions

This article has presented a range of empirical evidence on the level of early-stage entrepreneurial activity in Lebanon, and how that level can be related to a range of key demographics. Participation in the international GEM Project has allowed this evidence to be accumulated, so that the complex emerging picture of Lebanese entrepreneurial activity can begin to be painted, and a host of important research questions can begin to be addressed. This emerging picture is mostly in silhouette so far; there is much work to do in filling in the details of the rich fabric of Lebanese enterprise. However, the existing level of detail has allowed a number of research questions to be addressed, if not yet fully answered. This article has shown that:

1. Lebanon has become more entrepreneurial in the early years of the last decade,
2. the levels of new business ownership have been more volatile than either nascent entrepreneurship or established business ownership,
3. by 2015–2016, levels of early-stage entrepreneurial activity in Lebanon were substantially higher than in any other participating MENA country;
4. however, both the level and share of high job growth expectation early-stage entrepreneurial activity has fallen in Lebanon over time,
5. entrepreneurship in Lebanon is becoming more focused on younger people, while
6. increasing the level of postgraduate provision appears to offer unqualified opportunities for increasing the rate of early-stage entrepreneurial activity in Lebanon.

Finally, Lebanon has introduced a policy of strong encouragement for the provision of equity investments for those starting high-technology new businesses [4]. Surveying numerous GEM-data-based studies, Bosma concluded that “*growth-orientated*

entrepreneurs tend to be relatively young, male, highly educated and rather wealthy in terms of household income" [5]. The next few years will show whether Lebanon can break this mold by encouraging more women, more lower-income and older people into high-technology start-ups, and by doing so, unleash the full entrepreneurial potential of the economy.

References

- [1] Decker, R., Haltiwanger, J., Jarmin, R., et al. (2014). The role of entrepreneurship in US job growth and economic dynamism. *Journal of Economic Perspectives*, vol. 28, no. 3, Summer, pp. 3-24.
- [2] Wong, P., Ho, Y., and Autio, E. (2005). Entrepreneurship and economic growth, evidence from GEM data. *Small Business Economics*, vol. 24, no. 3, pp. 335-350.
- [3] Daniels, C., Herrington, M., and Kew, P. (2015). Global Entrepreneurship Monitor, Special Report on Entrepreneurial Finance, GERA.
- [4] Hill, S., Ramadan, M., Akhrass, E., et al. (2017). Global Entrepreneurship Monitor 2016 National Report: Lebanon, UKLTH Beirut.
- [5] Bosma, N. (2013). The Global Entrepreneurship Monitor (GEM) and Its Impact on Entrepreneurial Research, Foundations and Trends in Entrepreneurship.
- [6] International Development Research Centre. (2010). Global Entrepreneurship Monitor: GEM-MENA Regional Report 2009, IRDC Cairo.
- [7] Reilly, C., Akhrass, E., Solorzano, M., et al. (2016). Global Entrepreneurship Monitor 2015 National Report: Lebanon, UKLTH Beirut.