

Screening Inexperienced Entrepreneurs: Experimental Evidence from Jordan

Proposal for the NBER Innovation Policy Research Grant

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1 Introduction

Entrepreneurship and self-employment are becoming increasingly important for overcoming unemployment spells (Audretsch and Thurik, 1998). In regions with high levels of unemployment, policy makers have begun to use policies that encourage entrepreneurship to address the lack of job opportunities (Audretsch, 2003). Currently, some countries in the Middle East is experiencing high rates of youth unemployment. For instance, in Lebanon, while the overall unemployment rate in 2007 was 9%, the unemployment rate for people in their early twenties was 20.7%. Similarly, in 2012 in Jordan, the unemployment rate among people in their early twenties was 27.8% (International Labor Organization, 2013). One way of overcoming some of this unemployment is through entrepreneurship, however, determining how to allocate capital among a set of young and inexperienced potential entrepreneurs is not straightforward.

The purpose of the study outlined here is to test whether screening for entrepreneurial ability through relatively short standardized SMS-based testing is effective. In particular, this study will use a randomized control trial to assess whether, relative to their costs, SMS-based testing for entrepreneurial ability is more effective than screening through interviews. In addition, this study will assess whether testing for cognitive abilities associated with entrepreneurship is more effective at identifying successful entrepreneurs than testing for knowledge of management and financial concepts.

This study is important for several reasons. First, understanding how to predict whether an entrepreneur will be successful or not is difficult but important (e.g. Shane and Cable, 2002). Second, understanding whether technology can contribute to reducing some of the costs associated with obtaining information on entrepreneurs is theoretically relevant (Akerlof, 1970). Third, understanding how to improve the allocation of government and private sector funds to entrepreneurs has important practical implications.

2 Description of the Study

2.1 Research Setting: g.Maarifa in Jordan

This study will be undertaken in partnership with g.Maarifa, an SMS-based screening and testing platform. g.Maarifa is currently being employed by a venture capital firm in Jordan to screen entrepreneurs who have applied for funding. The venture capital firm is particularly interested in funding unemployed Jordanian youth who are interesting in pursuing entrepreneurship, but who have little to no entrepreneurial experience. g.Maarifa is interested in testing the effectiveness of its product, and ways to make it more effective. I have signed an NDA and MOU with g.Maarifa to undertake this study.

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2.2 Experimental Design

To test for the effectiveness of SMS-based screening of entrepreneurial ability, I will perform an RCT on a subset of the entrepreneurs seeking funds from the VC firm working with g.Maarifa. The applicants in the studied subset will have no knowledge of the experiment. They will be divided into three groups. One group will be screened as the VC firm had been screening prior to introducing g.Maarifa's tests, i.e. through face-to-face interviews. Another group will be screened through an SMS test for cognitive characteristics, and the third group will be screened through an SMS test for knowledge of managerial and financial concepts. The top performers in each group will receive funding from the VC firm.

2.3 Analysis

The dependent variables in this study will be whether or not the funded ventures survived, dissolved or were sold, whether or not the funded ventures grew in terms of number of employees, and whether or not the funded ventures received subsequent investment. These data will be collected 6 months and a year after the ventures received capital. These outcomes will be compared across the three treatment groups to determine which method of screening was most effective. I will also test whether the three methods would have recommended the same ventures get funded, and whether any differences in effectiveness across the methods are accounted for by higher costs of implementation.

3 Allocation of Funds

The \$20,000 research grant will be allocated for this study as follows. Approximately \$10,000 will be spent on airfare, hotel, and travel expenses for a trip to Jordan to set up the experiment, and for a follow-up trip to Jordan halfway through the study. Approximately \$5,000 will be spent on RAs located in Jordan who will help track the progress of funded ventures over the period of the study. The remainder of the grant will be used for additional RA and travel expenses.

4 References

- AKERLOF, G. A. (1970): "The market for" lemons": Quality uncertainty and the market mechanism," *The quarterly journal of economics*, pp. 488–500.
- AUDRETSCH, D., AND A. R. THURIK (1998): "The Knowledge Society, Entrepreneurship, and Unemployment," .
- AUDRETSCH, D. B. (2003): "Entrepreneurship policy and the strategic management of places," *The emergence of entrepreneurship policy: Governance, start-ups, and growth in the US knowledge economy*, pp. 20–38.
- INTERNATIONAL LABOR ORGANIZATION (2013): *ILOSTAT Database, Unemployment rate by sex and age*.
- SHANE, S., AND D. CABLE (2002): "Network ties, reputation, and the financing of new ventures," *Management Science*, 48(3), 364–381.