



The Supply of High Quality Entrepreneurs in Developing Countries: Evidence from Nigeria

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This project evaluated entrepreneurial interest among university undergraduates in Nigeria and the role of compulsory entrepreneurship education in forging this interest. Most undergraduates in Nigeria would like to start their own business but only a handful of them currently do so. Compulsory entrepreneurship education stimulates entrepreneurial interest but does not necessarily reinforce it.

Background

Quantifying entrepreneurial interest, especially among the youth, is important for development policy: it is key to set the stage for government interventions that will strengthen the national entrepreneurship system. This is particularly relevant for a country like Nigeria where unemployment is a major problem. For instance, in the second quarter of 2015, about 1 in 4 working-age persons was unemployed¹. Entrepreneurship offers a solution to the problem of unemployment especially if highly-educated entrepreneurs - whom we refer to as high-quality given their propensity to start growth oriented firms and provide better management - are nurtured. The literature supports the idea that educational institutions, particularly universities, are a major source of high-quality entrepreneurs.

This project aimed at quantifying the potential high-quality entrepreneurs in Nigeria's tertiary institutions and examining how they are affected by exposure to compulsory entrepreneurship education.

Data and methodology

The analysis is based on a pooled cross-sectional dataset from two large surveys carried out in 2007 and 2011 on entrepreneurial attitude among undergraduates in Nigerian universities, polytechnics and technical colleges of education. A national policy provided a pseudo-natural experiment to examine the role of compulsory entrepreneurship education in the formation of entrepreneurial interest. The National Universities Commission (NUC) mandated all Nigerian universities to introduce compulsory entrepreneurship courses and to establish Entrepreneurship Development Centres. The policy was introduced in 2006 but time of implementation varied across universities, with many yet to implement the policy as at the time of the second survey in 2011. We exploited the difference in time of compliance in a difference-in-difference² (DiD) analysis where survey participants were assigned to treatment group if their university already complied with the NUC policy, and to control group otherwise. In this way, in the absence of confounding factors that do not affect the two groups homogeneously, the difference in

¹ Data from National Bureau of Statistics (NBS) (2015). Unemployment/ Under-Employment Watch, Q2 2015. Abuja: National Bureau of Statistics.

² The difference-in-difference is an econometric technique that exploits the heterogeneous effect of a policy in a population that leads to only one group of people (treated) being affected, leaving another group (control) not influenced. The idea is to use the outcome's (entrepreneurial interest) trend in the control group as a counterfactual to mimic what the treated group's trend would have been in the absence of the policy. It therefore relies on the so-called common trend assumption: the results can be deemed valid if there are not external factors that may affect the control group without influencing the treated group, or vice-versa.



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entrepreneurial interest between the treatment group and the control group can be attributed to the role played by the compulsory entrepreneurship education.

Main results

The dataset contains information that allows us to evaluate the rate of entrepreneurial interest and practice among Nigerian undergraduates. The results (Table 1) show that most of them (around 84%) would like to start their own business. The level of entrepreneurial interest is also high. Yet, just over a quarter of the undergraduates already own a business although majority of those who already own a business are the founders of the business. Taken together, these figures suggest a large potential supply of high-quality entrepreneurs in Nigeria. However, most of these potential entrepreneurs are not currently gaining any hands-on experience.

Figure 1 shows that entrepreneurial education significantly increases the probability that an undergraduate will show interest in entrepreneurship. This stimulating effect of entrepreneurship education is a desirable one especially in the context of high unemployment as in Nigeria. A more desirable effect would be that entrepreneurship education reinforces interest in entrepreneurship. This is what the analysis reported in Figure 2 focused on. For the subsample of those already interested in starting their own business, entrepreneurship education has a negligible effect on their level of interest. At first glance, this result seems to suggest that where entrepreneurship interest already exists, compulsory entrepreneurship education is of little use. However, this interpretation is not necessarily correct since the project did not take the content of the entrepreneurship education into account. The more correct interpretation would be that curriculum matters: the entrepreneurship education content that stimulates entrepreneurial interest is inadequate for reinforcing it.

Table 1: Entrepreneurial interest and practice among Nigerian undergraduates

Variable	2007 (%)	2011 (%)
Entrepreneurial interest	N = 5,791 83.6	N = 17,740 84.3
Level of entrepreneurial interest	N = 4,934	N = 15,001
High	46.4	64.9
Moderate	48.1	32.7
Low	5.5	2.4
Present engagement in business	N = 5,898 26.9	N = 19,267 27.8
Level of involvement in the business	N = 1,692	N = 5,200
Initiator	52.5	80.3
Partner	47.5	19.7

Figure 1: Predicted probability of entrepreneurial interest over time in treated and control samples

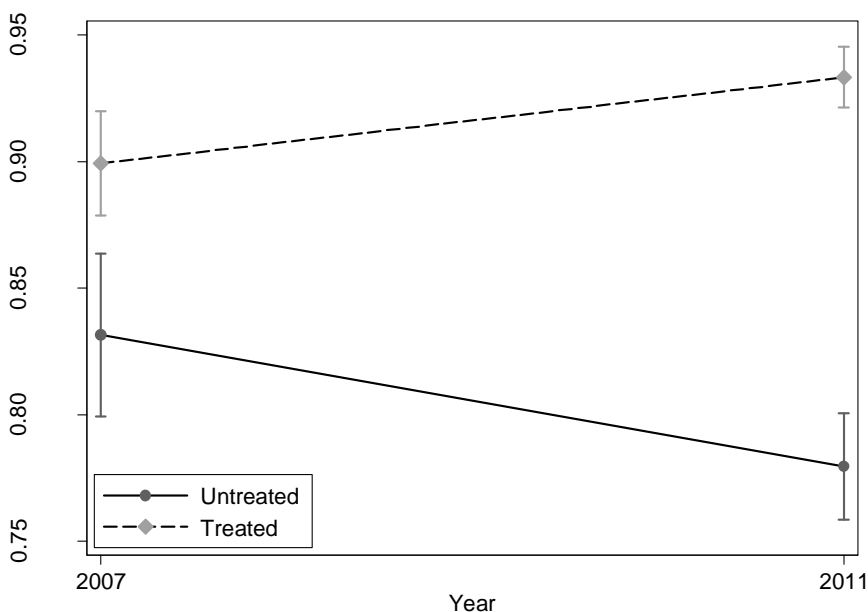
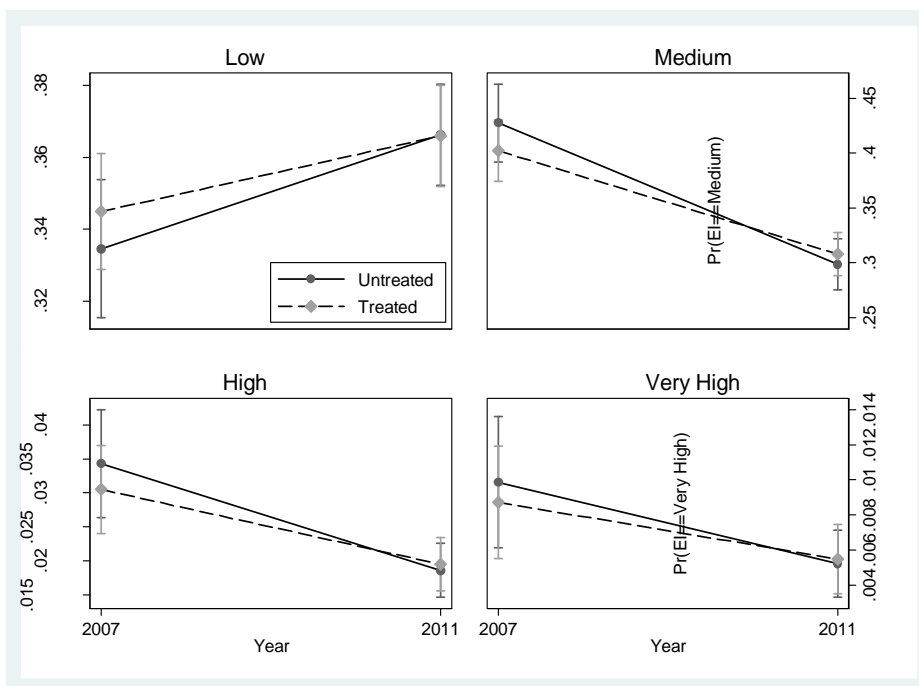


Figure 2: Predicted levels of entrepreneurial interest over time in treated and control samples



Implications for policy

- High entrepreneurial interest among undergraduates presents an opportunity for development if a facilitative atmosphere is created to foster entrepreneurial practice among students. University-based incubators and science parks as well as competitive start-up grants are useful in this regard. Student's final year projects, for instance in the engineering and creative arts disciplines, could be harnessed as launchpads for new enterprises.



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- Entrepreneurship education curricula need to be adaptive and more responsive to the target audience. Going by the results of this project, different content may be required for different groups of undergraduates depending on their current attitude towards entrepreneurship.

Moving Forward...

Early identification and nurturing of entrepreneurs remains a powerful development tool. Moreover, determining an effective way to stimulate and reinforce the desire for self-employment among highly educated young persons is essential if developing nations like Nigeria are to make any convincing progress in overcoming high unemployment. This requires more rigorous research that builds on the kind of questions addressed in this project. This research has been extended with an additional survey to enable analyses over a longer time horizon. Some issues remain for future research. There is the need to take curriculum content into account in the analysis in order to determine whether the non-significant effect of entrepreneurship education on level of entrepreneurial interest is indeed a function of what is being taught. In addition, longitudinal data, that is data that ranges for long periods of time, is required for a more thorough assessment of the impact of entrepreneurship education on entrepreneurial interest.