

THE SUPPLY OF HIGH QUALITY ENTREPRENEURS IN DEVELOPING COUNTRIES: EVIDENCE FROM NIGERIA

Adelowo, C.M., Egbetokun, A.A. and James, A.O.

National Centre for Technology Management, P.M.B. 012,
Obafemi Awolowo University, Ile-Ife, Nigeria

Abstract

Knowing why and when young persons want to be entrepreneurs is relevant for development policy in the face of high unemployment. This paper presents a descriptive assessment of entrepreneurial interest and activity among a large sample of Nigerian undergraduates. Eighty-four percent of the young Nigerians expressed interest in becoming self-employed but only 28% of them runs small businesses alongside schooling. Some of the most important correlates of entrepreneurial interest are gender, family entrepreneurial experience, entrepreneurial practice and entrepreneurial education. A further exploration of the impact of an entrepreneurship education policy suggests that exposure to entrepreneurship education increases the likelihood that a student will develop interest in entrepreneurship, but it does not affect the level of interest. These figures suggest the need to improve and expand entrepreneurial education in tertiary institutions as well as promote a favourable economic atmosphere that can encourage students' engagement in business while studying, especially the female students.

Keywords: Entrepreneurial interest, entrepreneurial practice, Nigeria, undergraduates

1. INTRODUCTION

The aim of this paper is to empirically assess the potential supply of high-quality entrepreneurs in a developing economy, using data on a large sample of Nigerian undergraduates. An interesting policy option to achieve economic growth through private enterprise was offered recently by La Porta and Shleifer (2008; 2014). The option is rather straightforward: expand the formal sector by increasing the supply of highly educated entrepreneurs in the economy. As Davidsson and Henrekson (2002, p. 81) noted, "There are strong reasons to believe that productive entrepreneurship is an essential explanatory factor of the economic performance of a country." The premise is that most informal firms do not cross over into the formal sector even in the face of regulatory changes and incentives (de Mel et al, 2013), therefore, policies targeted at stimulating demand for formalization among the less productive firms are suboptimal. Rather, it will be more productive to encourage the creation of more productive firms led by highly educated entrepreneurs, which can then expand the formal sector, reduce unemployment and ultimately drive economic growth.

The basic question that we raise, in light of the above, is: where will highly educated entrepreneurs come from? The answer seems obvious: from educational institutions particularly universities, polytechnics and colleges. In fact, at the macro level, the literature is coherent on the importance of educational institutions as one of the enabling factors for productive entrepreneurship (Reynolds et al, 2000; Wennekers et al, 2002). What is not obvious is the quantity of potential entrepreneurs that are available, and their motivational factors. Our analyses address this aspect by evaluating entrepreneurial interest and activity among young persons in tertiary institutions in Nigeria.

We use data from two large-scale surveys of Nigerian undergraduates which took place in 2007 and 2011. Our final sample includes well over 20,000 young persons who were undertaking studies in science, social science or engineering at the time of the study. An underlying reason for our interest in undergraduates of tertiary educational institutions is the notion that highly-educated individuals tend to start the most productive firms in most countries. The primary mechanism in this theory is that quality of manager's education is an important factor found to significantly influence management practice and better management is also found to improve productivity by 69% (Bloom et al, 2007; 2012a). In fact, Gennaioli et al (2013) document a 30% return to an extra year of manager's education as against only 6-7% return to an extra year of staff training. In the present paper we will not undertake a theoretical analysis or strict empirical examination of this notion. Rather, we will use the available data to carry out a supply-side analysis. Our intention is to quantify entrepreneurial interest and practice, and identify their correlates among young Nigerians. Based on our results, we hope to offer better understanding of the traits of potential high-quality entrepreneurs and to identify specific target areas for policy intervention. In particular, knowing why and when young persons want to be entrepreneurs is clearly interesting for policymaking.

The analyses are important especially in the Nigerian context, and indeed in most developing countries where unemployment is high and the average self-operated businesses are very small and unproductive. Reversing this situation has been the subject of several policy initiatives. For instance, beginning from 2006 Nigeria's National Universities Commission (NUC) mandated every university in Nigeria to establish an Entrepreneurship Development Centre (EDC) and to offer courses in entrepreneurship to all students using a curriculum developed by the NUC. Additionally, the National Board for Technical Education (NBTE) organized a series of capacity building workshops for entrepreneurship teachers in all Nigerian polytechnics in 2009. Given that our data come from both before and after these initiatives, the analyses in this paper offer some preliminary insight on their apparent success or failure.

The rest of the paper is organized as follows. In the next section we present facts from the literature on determinants of entrepreneurial interests among young people, particularly students. In section three we describe the method of data collection and analysis. This is followed by section four where we present and discuss the results. We then conclude and point out relevant policy recommendations from the foregoing.

2. LITERATURE REVIEW

Interests or intentions are stimulated by a number of factors – situational, cultural and environmental – as identified by the theory of planned behaviour (Ajzen, 1991; Akanbi and Onyema, 2011; Samuel, Ernest and Awuah, 2013; Agbim, Oriarewo and Owocho, 2013). The theory of planned behaviour identified attitude towards behaviour, subjective norms and the degree of perceived behaviour control as the three key predictors of intention. The attitude towards behaviour is seen as a reflection of individual appraisal of the behaviour, and appraisal itself may be placed on a continuum running from favourable to unfavourable; the more favourable the appraisal the greater the intention. On the subjective norms, these refer to the degree to which family, friends, peers and society at large expect the individual to exhibit the behaviour. The theory suggests that the greater the expectations or pressures from the society, the greater the gravitation towards the behaviour. Perceived behaviour control refers to the extent to which an individual feels capable of performing

the behaviour. The latter is determined by individual's know-how, experience and appraisal of likely obstacles to performing the behaviour (Samuel, Ernest and Awuah, 2013). Personality traits equally play important roles in interest/intention formation. The entrepreneurial intention is one's willingness to undertake entrepreneurial activity or become self-employed or ambition to stand on one's feet (Gulruh and Aykol, 2009). In this study, we examine some variables related to the theory of planned behaviour and determine the extent to which this theory is applicable in developing economy context. Some of the variables considered relate to the attitude of students towards starting own business, who or what motivated their interest and entrepreneurial education received.

In the literature, several factors have been found to influence individual's entrepreneurial intention or interest. Some scholars primarily focus on the effect of personality traits on decision making process (Bonnett and Furnham, 1991; Brockhaus, 1980; Johnson, 1990). Though results vary across studies, they often indicate a link between entrepreneurial intention and some personality factors, such as self-confidence, risk-taking ability, need for achievement and locus of control. However, a person is surrounded by an extended range of cultural, social, economic, political, demographical, and technological factors which influence decision making. Tulker and Selcuk (2009) argued that personality traits cannot be isolated but be considered in the light of other factors which influence entrepreneurial intentions. The global entrepreneurship model (2014) identified demographic, psychological, and motivational factors such as age, gender, opportunity and necessity (GEM, 2014) as influencing factors for entrepreneurial interest. This shows that entrepreneurial attributes can be developed from available opportunities in particular settings and or as a result of the need to change the status quo (necessity).

Considering the determinants of entrepreneurial interests among the future entrepreneurs (students) in developed economy, gender and entrepreneurial education were found to be positively influential among the Welsh Students who reported that they are likely to set up business ventures within three years of graduation (Czchry and Yasin, 2008). Financial constraints, education and self-efficacy were found to have much influence on Irish students' entrepreneurial intentions (Hall and Sobel, 2006). Family and community background influenced the orientation towards entrepreneurship among British India and Chinese Students (Stella, 2008). Students whose family members are entrepreneurs are more likely to intend to start their own businesses (Pruett et. al., 2009). Entrepreneurial exposure and social norms help explain students' entrepreneurial intentions in the USA, Spain and China (Pruett et. al., 2009).

In the developing economy context, Wang and Wong (2004) found that entrepreneurial intentions among Singaporean students were driven by business experience, educational level and gender. Also, Dugassa (2012) concluded in her study that entrepreneurship education improves motivation towards being entrepreneurial by inspiring students' personal attraction towards entrepreneurship and perceived behaviour control. Ethnic origin of students has also been identified as one of the important variables that influence perception towards entrepreneurship (Brijlal, 2011). Some of the recent studies on entrepreneurial intentions in developing countries, as shown in Table 1, show that entrepreneurial courses taken at the undergraduate level, family members' engagement in entrepreneurial activities, business education and personality traits were among the factors influencing entrepreneurial among Malaysian students (Zain et al., 2010). In Ethiopia, with entrepreneurial intention of 77.7%, family background, entrepreneurial education courses, self-

efficacy, perceived opportunities and the role of university were found to be important determinants towards entrepreneurial intention among the students (Mekonnin, 2015). This was similar to the experience of Ghanaian students which revealed that gender, parental influence and personality traits were important determinants of entrepreneurial interest (Samuel, Ernest and Awuah, 2013).

In Nigeria, Akpom (2008) found 12.4% entrepreneurial intention among the 500 students randomly sampled. Akanbi and Onyema (2011) study considered situational factors as important variables contributing to high (63%) entrepreneurial intention among undergraduate students in Oyo state of Nigeria. He concluded that perceived desirability, perceived feasibility, subjective norms and considerations of future unemployment were important determinants of entrepreneurial intentions among 392 students sampled. Among the important variables identified in Siyanbola et. al. (2012) as being central in encouraging students' entrepreneurial interests, only seven were found to be very significant to stimulate the interest. They are gender, number of children by father, position among mother's children, father's educational qualification, father's monthly income and entrepreneurial education and entrepreneurial experience of the students.

Table 1: Factors influencing entrepreneurial intention among students in developing countries

Author	Sample size	Variables	EI	Country/Region
Turker and Selcuk (2008)	300	Education and structural support factors	-	Turkey
Akpom, 2008	500		12.4%	Nigeria
Akanbi and Onyema, 2011	392	Situational factors: perceived desirability, perceived feasibility, subjective norms and future unemployment	High: 63% Low: 37%	Oyo state, Nigeria
Agbim, Oriarewo, 2013	307 university graduates	Age, gender, courses of study, ethnicity, creativity, risk propensity, Networks, access to capital and learning	-	Benue, Nigeria
Samuel, Ernest and Awuah, 2013	136	Gender, gender, parental influence and personal traits	70.6%	Ghana
Mekonnin, 2015	152 (148)	Family background, entrepreneurial education courses, self-efficacy, perceived opportunities and university role.	77.7%	Ethiopia
Zain et. al., 2010	230	Entrepreneurial courses, family member entrepreneurs, business courses taken and personality traits	-	Malaysia

Source: Authors' compilation

3. METHODOLOGY

3.1 Research design, instruments and validation

This research project employs the use of empirical primary data gathered with the use of structured questionnaires. The questionnaires were designed by experts using information from relevant literature. A pilot survey was carried out for each of the two main surveys in representative institutions in the South Western region of the country. The feedback from the pilot surveys helped to affirm and improve the adequacy of the final instruments.

3.2 Data collection

A longitudinal survey to explore how students transfer their entrepreneurial interest into actual practice would have been the most appropriate to answer the research questions, but that is not available in Nigeria as far as we know. For this project, the data used is a pooled dataset from two independent cross-sectional surveys on entrepreneurial attitude of Nigerian tertiary institution students¹. The first survey was conducted between November 2006 and February 2007 and the second between 2010 and 2011. In total, over 57,000 randomly selected Nigerian undergraduates were sampled in both surveys. To date, this very large and unique dataset is the only one of such in the country.

3.3 Sample selection

For both surveys, the population of tertiary institutions in Nigeria² was stratified by location, age, ownership and availability of the disciplines of focus (science, social science and engineering). This was a multi-stage sampling method that involved clustering the tertiary institutions into the six geo-political zones in Nigeria, followed by a consideration of their age and ownership type. The institutions visited were finally selected based on availability of the courses focused in the study. Printed copies of questionnaire were distributed in the classes by field workers recruited for the purpose.

In the first survey, 25 tertiary institutions were selected comprising 13 (20% of all registered) universities, 9 (18% of all registered) polytechnics and 3 (38% of all registered) technical colleges of education (Table 3). Total sample was 7,560 and response rate was 82.5%. The second survey had a larger sample size of 50,000 students from a total of 55 universities, polytechnics and technical colleges of education, which is over a third of all registered tertiary institutions in Nigeria at that time (Table 3), but had a smaller response rate of 41.2% (Table 2).

¹ Both surveys were designed and conducted by the National Centre for Technology Management (NACETEM), Nigeria.

² In selecting a representative sample for the two surveys, the directory of institutions used was based on the latest examination brochures published by the Joint Admissions and Matriculations Board (JAMB) as at the time of commencement of each of the surveys. This source selection is justified on its intrinsic reliability since JAMB is the principal authority responsible for conducting admission examinations into all categories of institutions covered by the study and because it is known that JAMB's institutional listings include only accredited institutions and courses.

Table 2: Sample

Year of survey	Sample	Response rate (%)	Final sample
2007	7,560	82.5	6,235
2011	50,000	41.2	20,612
TOTAL	57,650	-	26,847

Table 3: Distribution of sampled institutions

Institution type	2006-2007			2010-2011		
	Total	Sample	% of total	Total	Sample	% of total
Universities	65	13	20.0	92	31	33.7
Polytechnics	51	9	17.6	52	17	32.7
Colleges of education (Technical)	8	3	37.5	7	7	100.0
TOTAL	124	25	20.2	151	55	36.4

3.4 Variables and measurement

The main variable of interest is entrepreneurial interest (EI), which captures whether or not respondents are interested in starting a business of their own. This variable has a binary value of 1 or 0 if the respondent answered 'Yes' or 'No', respectively, to the question, 'Are you interested in starting your own business?' To further explore the respondents' EI, a number of statements were put forth (e.g., rate your level of interest in starting your own business, etc) to ascertain their level of interest, what spurs that interest, what kind of business they would like to start, whether or not they consider lack of money as a constraint to exploring their business interest and whether or not they already has a written business plan.

Correlates of the main variable were examined in this study. These include variables capturing respondents' personal information, education, entrepreneurial training and present engagement in business, as well as family socioeconomic background, family entrepreneurial history, and risk aversion. Age was categorised into 5-year groups from 16-30 years and whether respondents are below 16 or above 30. Gender was measured by a binary of 1 or 2 for male or female, respectively. Marital status and ethnic origin were nominal variables. Respondents' education background was measured by two categorical variables – discipline and present CGPA. Entrepreneurial training was captured by a binary of 1 or 0 if the respondent had taken entrepreneurship training in school before or not, respectively. Entrepreneurial practice (EP) was captured by respondents' present engagement in business which was measured by a binary of 1 or 0 for 'Yes' or 'No', respectively to the question of whether or not they were presently engaged in business. To further understand their level of involvement in the business, respondents were asked to state if they were the initiators or partners in the business. Family socioeconomic background was captured by two categorical variables – parents' highest education, separately for father and mother. Family entrepreneurial history was captured by two binary variables. The first binary variable indicated whether or not any of the respondents' parents had engaged in business before (1 if yes and 0 if not), and the second examined the state of the business (1 if the business is still on-going and 0 if not). Finally, risk-taking was measured by a 5-point Likert scale response (ranging from 5, very high to 1, very low) to the statement, "I do things that are risky."

3.5 Method of data analysis

The significance of association between the variables of interest was tested using the Chi-squared statistics (with Contingency coefficient and Phi & Cramer's V tests showing the strength of the relationships). Gender differences were explored within some of the predictor variables. Both significant and non-significant results are reported.

3.6 Sample characteristics

On the demographics of the respondents (Table 4): as can be expected of undergraduate students, most of the respondents are 25 years of age and below; females are much fewer than males. Since the sample selection was random and completely independent of gender, this figure is perhaps an indication that females are underrepresented in Nigerian tertiary institution enrolment. Most of the respondents are single, most also are Christians. There is also an imbalance in the representation of respondents across ethnic groups with fewer of them of Hausa origin than Igbo and Yoruba. These imbalances are perhaps due to the educational backwardness of most of the Northern parts of the country where there are also fewer institutions.

It is worth noting that there is negligible difference in distribution of the data in 2007 and 2011; hence, it is not attractive to explore time variations.

Table 5 gives information on the respondents' educational characteristics. Most of the respondents were drawn from the universities. This is clear from the fact that more universities were selected than other types of institutions. Highest percentage of the respondents was drawn from the South-Western part of the country while the North is underrepresented. Again, as mentioned earlier, this is as could be expected as the South-Western zone is more educationally advanced compared to the North. More of the respondents were from science-based disciplines than those from social-science-based disciplines, which in turn is more than those from technology-based disciplines.

4. RESULTS AND DISCUSSION

Here we present the background characteristics of the respondents; the prevalence of EI and EP; the association between EI and the explanatory variables; and the difference-in-differences analysis exploring the impact of a policy.

4.1 Prevalence of EP and EI among the respondents

Of all the students 27.6% were presently engaged in a business at the time of the collection of data. Of this, 67.5% were initiators of their businesses while 21.2% were partnering with other entrepreneurs (Figure 1). Partnering entrepreneurs may have ended up that way either because of the level of experience necessary to start that kind of business or because they lacked the capital for start-up. A huge proportion (94.5%) of those presently engaged in business had the wish to continue in the business. A significant relationship was found between present engagement in a business and the desire to continue ($r = 0.261$, $p < 0.01$) suggesting that those engaged in business while in school have the likelihood to continue as entrepreneurs after graduation. Also, 94.9% of those presently engaged in business showed interest in starting their own business as against 80.2% of those who were not presently engaged in any business as at the time the data was collected. A significant relationship was found between present entrepreneurial practice (EP) and EI ($r = 0.171$, p

< 0.01) indicating that the formal predisposes students to the former (Table 6), and, perhaps, vice-versa.

Students were asked to state what motivated their engagement in a business. Of the nine options including personal interest, desire to make money, etc, the highest percentage (33.8%) chose personal interest. This is against about 20% and 16% who chose parents and desire to make money, respectively, as motivation for starting their business (Table 6). A clear indication from this is the fact that personal interest is the best motivator for students to be entrepreneurs. On the other hand, those who were not engaged in a business were also asked to state why. About sixty-four per cent (64%) of them said it was because they were presently in school, 24.3% said it was because of lack of capital, while only 5.6% said it was because of lack of interest (Table 6). This shows that other factors keep students from entrepreneurial practice apart from lack of interest and that many may explore their entrepreneurial motivations only after graduation.

About 84.1% of the respondents were interested in starting their own business. Of those, only 30.2% were presently engaged in a business. To further explore their EI, a number of statements were listed in the questionnaire as a follow-up on EI. Students were asked to rate their level of interest in starting their own business; about 56% of them rated their EI as high or very high, while only 8.6% of them rated it as low or very low. In the 2011 survey only, they were also asked if they had a written business plan and if they consider lack of fund as a constraint to starting their own business; 64.4% and 79.1% of those with EI were affirmative, respectively, to the two questions. A significant relationship was found between EI and having a ready business plan ($r = 0.202$, $p < 0.01$), but an insignificant relationship was found between EI and perception of lack of fund as a constraint to starting a business ($r = 0.003$, $p > 0.05$) indicating that EI predisposes students to preparing a business plan, while perception of lack of fund does not inhibit students' EI. In the 2007 dataset, 98.4% of those with EI said they would consider starting their own business if they had access to enough capital to do so, whereas only 6.8% of those without EI said they would do the same thing. A strong, significant relationship was found between EI and considerations about availability of capital for start-up ($r = 0.553$, $p < 0.01$) indicating that students' considerations about start-up capital is critical, especially in developing EI and in translating EI to actual entrepreneurial practice after graduation (Table 7).

Table 4: Demographic characteristics of respondents

% (n=26,847)	
Age	
Below 16	0.2
16 – 20	22.8
21 – 25	56.7
26 – 30	19.3
Above 30	1.0
Gender	
Male	61.7
Female	38.3
Marital status	
Single	91.6
Married	7.7
Divorced/separated/separated	0.6
Ethnic origin*	
Hausa	22.6
Igbo	39.3
Yoruba	32.4
Others	5.7

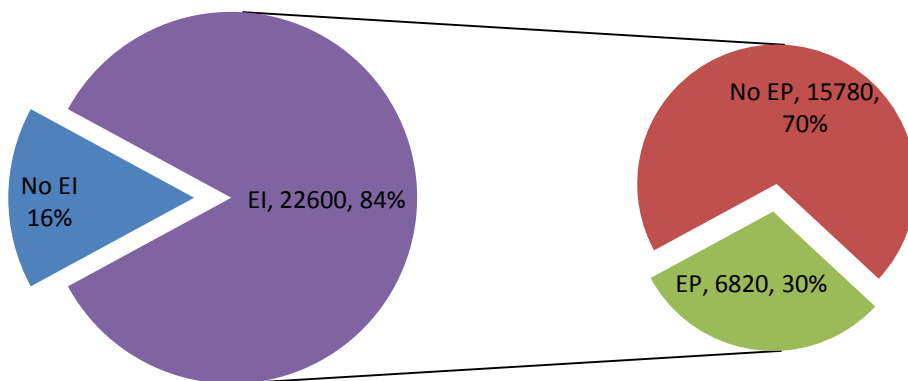
* Respondents were grouped into the three main ethnic groups in the country (Hausa, Igbo and Yoruba). All other minor groups were put together in a single category as “Others”.

Table 5: Respondents’ Course of Study

% (n=26,847)	
Type of institution	
Universities	67.2
Polytechnics	25.2
Colleges of education (technical)	7.6
Discipline of respondents*	
Technology-based	22.7
Science-based	36.6
Social science-based	32.0
Others	8.7

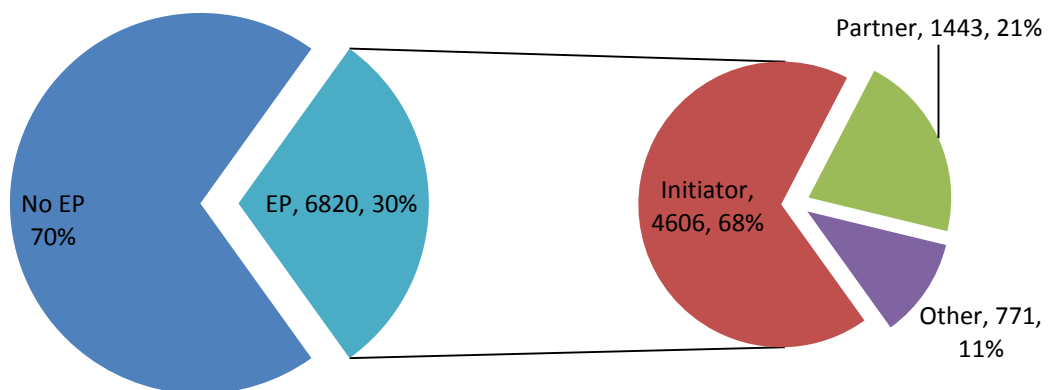
* All other courses of study not fitted into the three main categories were put together under “Others” category.

Figure 1a: Prevalence of EI and EP*



* The second chart (left) expressed as a percentage of EI (n=22,600)

Figure 1b: EP across levels of engagement*



* Second chart (left) expressed as a percentage of EP (n=6,820)

Table 6: Students' motivation and inhibitions from EP*

	% (n=26,847)
Who / what motivated your involvement in business?	
Parents	20.2
Siblings	3.1
Relatives	4.7
Personal interest	33.8
Desire to make money	16.3
Self-actualisation	13.4
Events	2.1
Peers	2.9
Others	0.2
If not presently engaged in business, why not?*	
I'm presently in school	63.7
I have no interest	5.6
Lack of capital	24.3
Business is risky	2.6
I have flair for something else	3.4
Other reasons	0.4

* Multiple response categories

Table 7: Prevalence of EI ad EP

	Coefficient	Significance*
Present engagement in business*desire to continue in the business	0.261	+
Present engagement in business*EI	0.171	+
EI*have a written business plan	0.202	+
EI*perception of lack of fund as a constraint to starting a business	0.003	-
EI*considerations about availability of capital for start-up	0.553	+

* (+) significant, (-) not significant

4.2 Tests of Association between EI and correlates

For the bivariate analysis of the relationship between the dependent variable (EI) and each of the predictor variables tested, the Chi-squared test was employed because the variables are captured in binary and categorical measures.

Most of the predictor variables have significant relationship with EI (Table 8). The predictor variables, grouped into five categories – demographics, family background, EP, entrepreneurship education and personal characteristics – throw light on to the different dimensions of who potential educated entrepreneurs are in Nigeria. On the demographics, the results show that each of a student's age, gender, marital status, ethnic origin as well as discipline, present level of study and CGPA can slightly predispose them to being interested in entrepreneurship. What we do not know from the data is the direction of that predisposition (i.e., for instance, whether the older or the younger, or whether the married or single, etc are more predisposed).

Table 8: Association between EI and the predictor variables

Independent variables	Coefficient	Significance*
Age	0.045	+
Gender	0.052	+
Marital status	0.052	+
Ethnic origin	0.045	+
Discipline	0.070	+
Present level of study	0.106	+
Present CGPA	0.070	+
Family size	0.101	+
Position in the family	0.050	+
Father's highest education	0.119	+
Mother's highest education	0.128	+
Father's monthly income	0.051	+
Mother's monthly income	0.077	+
Parents' entrepreneurial experience	0.194	+
Is the parents' business on-going?	0.006	-
Present engagement in business (EP)	0.171	+
Level of involvement – Initiator	0.142	+
Partner	0.009	-
Risk-taking	0.026	+
Entrepreneurship education	0.174	+

* (+) significant, (-) not significant

On family characteristics and family entrepreneurial experience, each of the variables capturing family size and the respondents' position in the family; parents' educational background and economic status; and whether or not any of the parents has or has had a business, has some relationship with whether or not the respondent has EI. But whether or not the parents' business is ongoing was found not significant. Also, as has been discussed earlier, students' present engagement in a business as well as their level of involvement (as an initiator, but not as a partner) are found to have some slight relationship with students' EI. Furthermore, risk-taking – the characteristic of doing something that involves some danger or risk in order to achieve a goal – was found to be significant.

Finally, whether or not the respondent has taken an entrepreneurship training/education before is found to influence their EI. This is, of course, as expected, and an indication that better entrepreneurship education would help increase/improve the quality of the pool of potential entrepreneurs among Nigerian undergraduates.

4.3 An exploration of gender differences in some of the explanatory variables

We tried to see whether or not there are significant differences between males and females in some of the explanatory variables. These include EI, EP, level of engagement in business (i.e., as initiator or partner), risk-taking as well as whether or not the respondents would like to continue in the business and whether or not they have a ready business plan. Again, slight but significant gender differences are found in all of these except risk aversion (Table 9).

Table 9: Gender differences within EI and EP

Variables	Coefficient	Significance*
EI	0.046	+
EP	0.053	+
Initiator	0.047	-
Partner	0.055	+
Wish to continue in business	0.024	+
Have a written business plan	0.039	+
Risk-taking	0.057	+

* (+) significant, (-) not significant

4.4 Impact of an entrepreneurship education policy

The main aim of the study is to arrive at a plausible policy option for increasing supply of educated entrepreneurs in Nigeria. Of the predictor variables found to have significant relationship with EI, entrepreneurship education is clearly very amenable to policy. Zeroing in, therefore, on that variable, we carried out a difference-in-differences analysis in a subsample of six (6) leading universities to assess the impact of a recent education policy. In 2006, the National Universities Commission (NUC) mandated all universities in Nigeria to introduce compulsory entrepreneurship courses for all undergraduates and to establish entrepreneurship development (EDCs) centres. Prior to that, only students in certain business-related disciplines took courses in entrepreneurship. Compliance with that directive happened at different times in different universities. In our empirical setup, a university was treated or otherwise depending on whether it has complied with this directive as at when the two surveys were conducted. Three (3) schools were selected for each of the treatment groups. The results suggest that exposure to entrepreneurial training increases the likelihood that a student will show interest in entrepreneurship (Figure 2). The level of interest is, however, not significantly affected (Figure 3).

5. CONCLUSION

In this paper we set out to assess why and when undergraduates in a developing country choose self-employment. Our point of departure is the idea that most highly educated individuals are also the proprietors of the most productive businesses in today's world. The seeming implication of this is that it is useful to encourage the most educated young persons to choose self-employment. Using a large-scale pooled cross-sectional dataset from Nigeria, we have examined the rate and propensity for self-employment among young persons. We found that about a third of undergraduates are currently running some business while they study but most of them indicated that they would like to be an entrepreneur.

Although our analyses are basic and the results are tentative, they do provide some hints at the way forward in stimulating enterprise-led growth. First, entrepreneurial education needs to be strengthened in most developing countries. More often than not, in most universities in this context, entrepreneurial education is no more than a handful of poorly packaged courses that bear little or no practical relevance. Second, appropriate support systems need be designed and made accessible to students and young people interested in entrepreneurship to transform otherwise-dormant potential into active tool for economic growth and development.

Figure 2: Marginal effects of entrepreneurial education on entrepreneurial interest

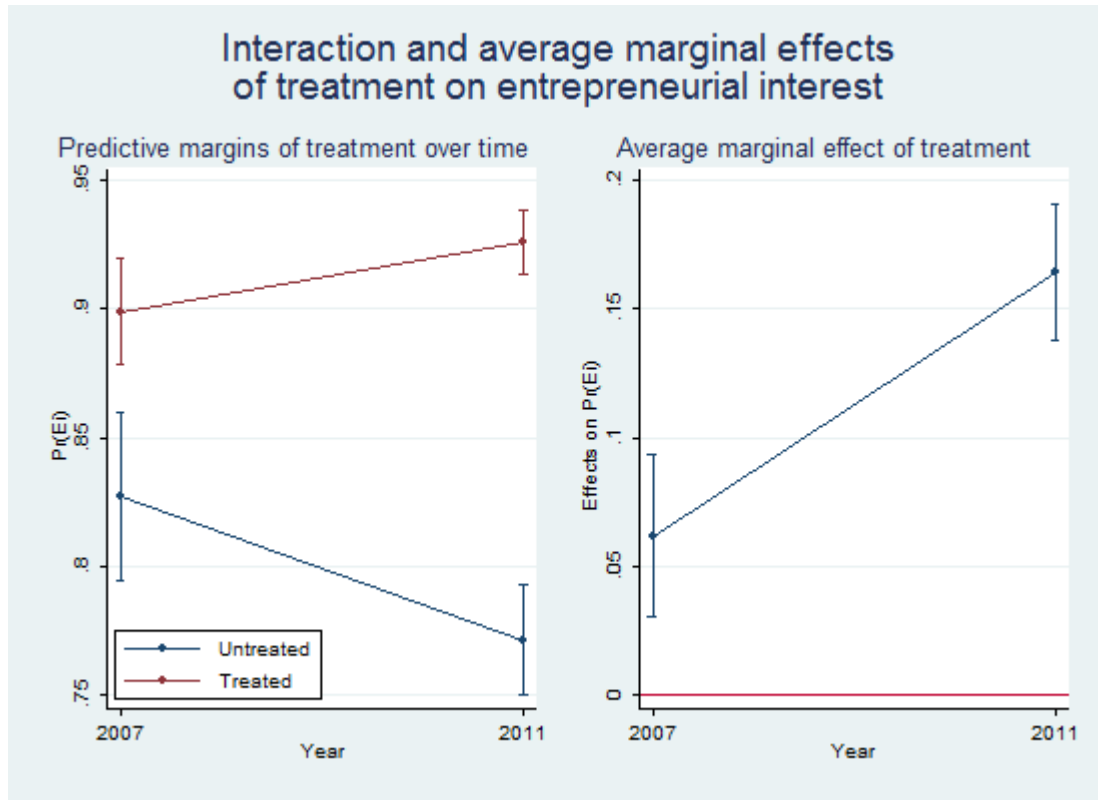
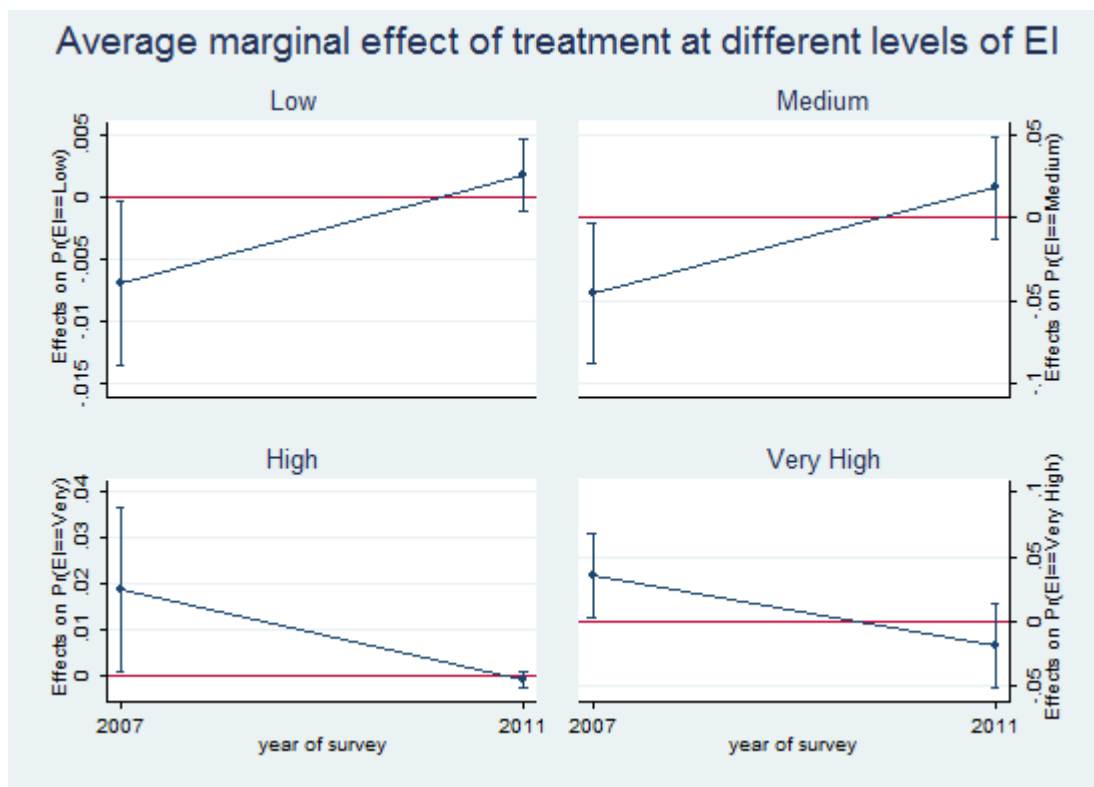


Figure 3: Marginal effects of entrepreneurial education on the level of entrepreneurial interest



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