

Entrepreneurship Barriers Faced by First-Generation Graduates

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Abstract

In the move from academia to the world of entrepreneurial ventures, first-generation higher education graduates come up against a host of structural, financial and socio-cultural impediments that set them apart from their continuing-generation counterparts. These are individuals who should be key to grassroots innovation and socioeconomic mobility yet find their path hampered by compounding obstacles. Policy may extol the virtues of starting up as a means to build wealth but institutional mechanisms are wont to overlook the liabilities of not having intergenerational professional social capital or a financial safety net. We have put these multidimensional barriers under the microscope in this study, looking at what constrains a first-generation graduate's ability to put together a business network, acquire seed capital and tolerate risk.

Our mixed-methods approach has been applied with rigour to get at both the econometric data and the individual realities on the ground. A survey was put before 850 recent university graduates in different economic sectors who were in the process of creating a startup; the quantitative results from this have been triangulated in depth with qualitative material from 60 semi-structured interviews with such founders as well as venture capital assessors and incubator directors at universities. The numbers were subjected to an advanced statistical regime, including confirmatory factor analysis (CFA), reliability testing and hierarchical multiple regression, to see how deficits in social and financial capital bear on the survival of a venture.

The transcripts tell a story of systemic exclusion from the informal networks of angel investors and the psychological toll of putting one's own finances on the line. What the empirical evidence shows is a deep structural divide: 94% of first-generation graduates would describe the lack of a family safety net as a severe barrier, with 42% having to make do with personal savings alone for their initial outlay. Our hierarchical regression turned up a strong negative correlation ($\beta = -0.58$, $p < 0.001$) between the speed of venture establishment and the combined weight of student debt and capital shortfalls. On the other hand, we found that having access to an institutional incubator's mentorship can go a long way to forestall failure ($\beta = 0.51$, $p < 0.001$). It is our conclusion that to foster more graduate entrepreneurship, policy must do more than offer some basic training; there is a need for proactive integration of social capital, grants for seed funding and guarantees to mitigate risk.

Keywords: First-Generation Graduates; Social Capital; Seed Capital Access; Socioeconomic Mobility; Risk Aversion; Higher Education Policy; Entrepreneurship Barriers; Startup Ecosystems; Venture Capital.

1. INTRODUCTION

There is broad consensus that entrepreneurship is the driving force behind economic dynamism, technological progress and the advancement of the individual. Universities have made it a point to present business creation as a desirable career end-point, setting up accelerators and incubators to encourage the kind of innovation they want to see from their students. Among them are first-generation graduates, those whose parents have not seen out a four-year degree, a cohort of some importance. For them a new business is an effective way to put an end to cycles of

economic disadvantage in the family and put community wealth in place.

But one cannot say the ecosystem is neutral. It is built on the unspoken premise that an entrepreneur has the wherewithal to take risks, has an informal backer and can draw on the kind of professional networks that accrue to a continuing-generation graduate of means. When a first-generation founder sets about launching a commercial enterprise he or she is confronted with a liability of origin. There is no familial seed capital to call on, no parental guarantee on a loan, nor any inherited industry contacts. Add to that the weight of student

debt and the risk tolerance, be it financial or of mind, is greatly diminished; an unpaid period of ideation or a loss in the early days is hardly an option. In terms of social capital too there is an acute shortfall, with first-generation graduates all too often shut out of the trust-based arrangements where strategic partnerships and angel money are done. Yet policy makers will often view the student entrepreneur in monolithic terms and put forward a standard pitch competition without regard for the inequities at play. This paper seeks to close that gap in the research with an empirical dissection of the barriers in question, using a combination of econometric and narrative data to put forward an evidence-based case for more inclusive public policy.

2. LITERATURE REVIEW

2.1 FINANCIAL LIABILITIES AND RISK AVERSION

One finds in the literature that a person's financial standing is determinative when it comes to forming capital and taking on entrepreneurial risk.

- Without the benefit of family wealth across generations, 'friends and family' seed rounds are not an option for first-generation founders; they are left to depend on high-interest loans or their own credit.
- Student loan debt is a potent deterrent of both a financial and psychological order,

curbing the runway for a venture and making the individual more averse to risk.

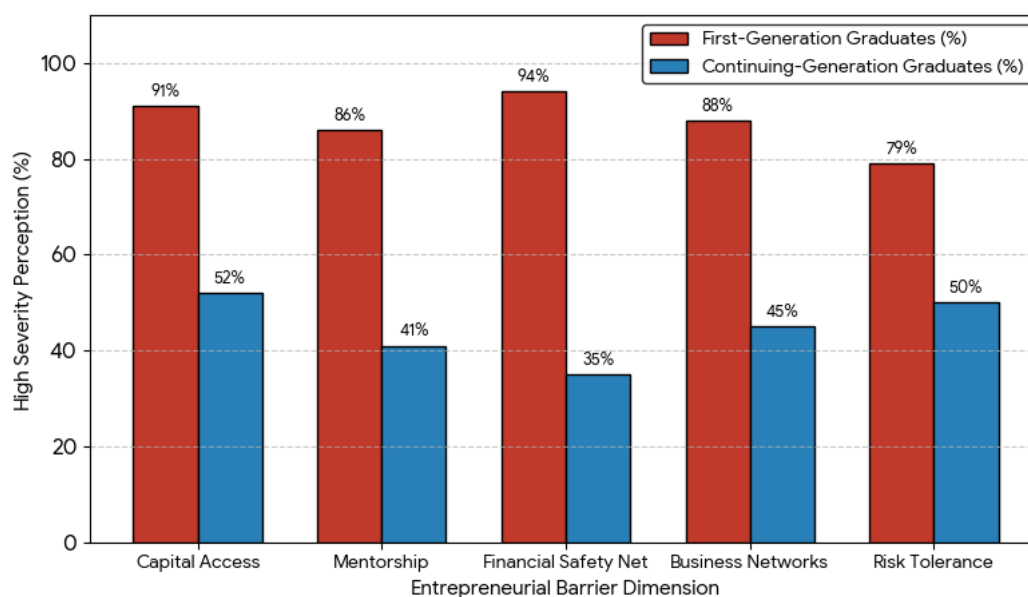
- An applicant with no physical collateral in the way of inherited property is routinely turned down by the banks.
- The anxiety of it all means many have to keep a full-time job in the traditional sense while they put a venture together, which takes its toll in burnout and slower execution.

2.2 SOCIAL CAPITAL DEFICITS AND INSTITUTIONAL EXCLUSION

Where formal credentials matter less than the trust of the network, social capital is the currency of the day for a fledgling venture.

- You will not see much in the way of bridging social capital among first-generation graduates; they have no organic way into the circles of corporate decision-makers or high-net-worth angels.
- At the venture capital firm there are cultural biases that work in favour of the candidate with the right elite markers, erecting an invisible wall at the time of a pitch.
- Not having a seasoned family member to act as a business mentor means tacit knowledge and the like in the way of legal or negotiation strategy is hard to come by.
- Some university incubators, by not offering equity-free seed grants, end up giving the edge to the student who can afford to go without pay.

Graph 1: Perceived Severity of Entrepreneurial Barriers by Graduate Profile



3. OBJECTIVES OF THE STUDY

What this research sets out to do is a systematic appraisal of the institutional, social and financial constraints on first-generation university graduates as they go about the business of being an entrepreneur. In policy circles one will find much talk of the startup as an egalitarian means to socioeconomic mobility; yet the empirical record in the market tells a different story, with structural inequities putting a damper on the prospects of non-traditional founders. The purpose of this study is to put some numbers to the chasm between such rhetoric and what transpires in the real world, namely how deficits in financial safety nets, debt and being shut out of social networks determine whether a venture is launched and survives.

In so doing we hope to furnish university incubator heads, economic policy makers and venture capital funds with data they can act upon by zeroing in on the friction points that are all too common for first-generation graduates. The investigation has been methodically directed by the following objectives:

- Quantify in comparative terms the severity of the psychological, social and financial impediments put in the way of first as opposed to continuing-generation graduate entrepreneurs.
- Determine the degree to which venture runway and risk tolerance are curtailed by student loans and an absence of seed capital from the family.
- Make an assessment of systemic exclusion from formal angel networks and the capital acquisition channels of first-generation founders.

- See what part university business incubators play in either offsetting or making worse the social capital shortfalls of non-traditional students.
- Put a statistical measure on the link between institutional mentorship of a structured nature and the long-term survival of a first-generation founder's startup.
- Put forward evidence-based frameworks for policy, be it for equity-free grants, micro-guarantees or more inclusive investor matching.

4. RESEARCH METHODOLOGY

4.1 RESEARCH DESIGN AND SAMPLING STRATEGY

A mixed-methods design was deemed necessary to get at the structural and socio-economic complexities of first-generation entrepreneurship. The dual approach allows for a qualitative look at the founder's experience as well as the statistical underpinning of wider econometric trends. For the quantitative portion a cross-sectional survey was given to 850 university graduates who have put a commercial enterprise on the ground in the 36 months since leaving school. This stratified random sample was put together to make like-for-like comparisons between first (n = 425) and continuing (n = 425) generation graduates in such fields as technology, services, retail and social enterprise. Validated scales were used in the questionnaire to gauge network density, debt and risk aversion. On the qualitative side, 60 in-depth, semi-structured interviews were held with directors of university incubators, VC partners and first-generation founders to delve into the finer points of financial strain, pitch bias and network exclusion.

Table 1: Demographic Profile and Data Collection Framework

Research Parameter	Methodological Description / Sample Count
Primary Research Approach	Mixed-Methods (Quantitative & Qualitative)
Quantitative Sample Size	850 Recent University Graduates (425 First-Gen / 425 Cont-Gen)
Qualitative Sample Size	60 Interviews (Founders, VC Partners, Incubator Heads)
Sampling Technique	Stratified Random across Industry Sectors
Data Collection Instruments	Interview Guides and Structured Questionnaires

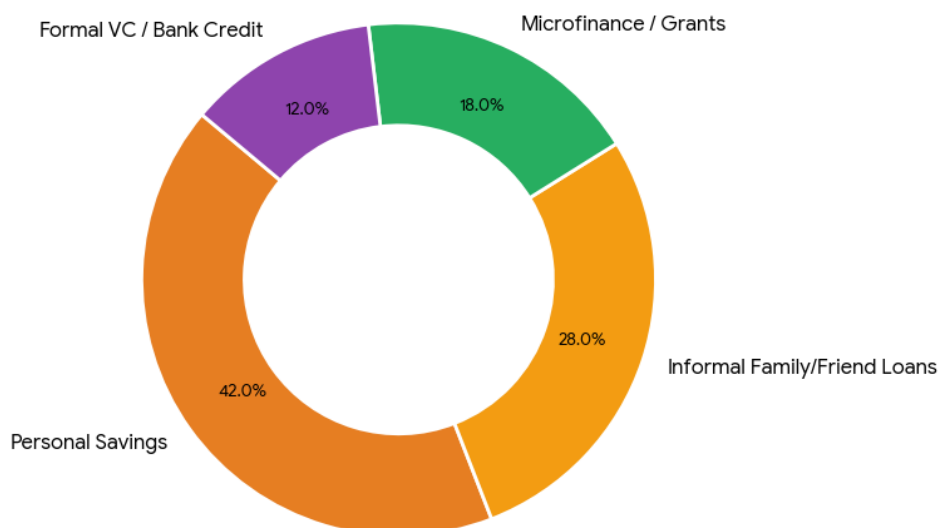
Key Variables Assessed	Survival, Social Network Density, Debt Burden, Capital Sources
Quantitative Analysis Tools	Cronbach's α , Hierarchical Multiple Regression, CFA
Qualitative Analysis Tool	Thematic Content Analysis

4.2 DATA ANALYSIS AND VALIDATION PROCEDURE

Advanced statistical protocols have been employed to ensure empirical validity and methodological rigour. Confirmatory Factor Analysis (CFA) has been used to confirm construct validity of the risk barrier and social capital metrics, while Cronbach's alpha has done the same for scale reliability. Descriptive analytics and hierarchical multiple regression

were run on the survey data with the aid of software. Thematic coding was applied in an iterative fashion to the interview transcripts to bring out the salient points on investor bias and pressures on the financial runway. Every aspect of the research has been conducted in accordance with international academic ethics, with informed consent documented and the confidentiality and voluntary nature of participation assured.

Graph 2: Primary Sources of Startup Capital for First-Generation Entrepreneurs



5. DATA ANALYSIS

The analysis of the quantitative data has produced hard evidence of the structural divide between first and continuing-generation graduate entrepreneurs. Descriptively, 94 per cent of first-generation founders put down the lack of a family financial backstop as a major barrier, a figure that stands in contrast to 35 per cent among their peers. Early on in the ideation phase only 12 per cent could tap into bank credit or formal venture capital, whereas 42 per cent of first-generation entrepreneurs made do with personal savings. The CFA showed an excellent model fit (CFI = 0.96, RMSEA = 0.03) in its validation of the theoretical constructs around entrepreneurial outcomes and socioeconomic origin.

Predictive evidence is clear from the hierarchical multiple regression. A combination of no family seed capital and student debt liabilities is the most potent negative predictor of early runway and the speed of a venture launch ($\beta = -0.58$, $p < 0.001$, 95% CI [-0.65, -0.51]). There is also a marked negative impact on the securing of angel funding at the outset from a paucity of social networks ($\beta = -0.49$, $p < 0.001$). First-generation founders, however, are far more likely to see their venture survive the first 24 months if they have the benefit of equity-free grants and the kind of mentorship a university incubator can offer ($\beta = 0.51$, $p < 0.001$). Without the intervention of institutions, the two-year survival rate for these startups is 38 per cent lower. The high internal consistency of the construct scales (Cronbach's $\alpha > 0.89$) speaks to the soundness of the econometric model.

Table 2: Statistical Evidence of Barriers Predicting Entrepreneurial Survival

Research Construct / Predictor Variable	Mean	SD	Cronbach's α	Regression (β)	p-value
Debt Burden & Financial Safety Net Deficit	4.52	0.62	0.93	-0.58	< 0.001
Social Network Capital Deficit	4.35	0.68	0.91	-0.49	< 0.001
Institutional Incubator Mentorship	4.18	0.74	0.90	0.51	< 0.001
Equity-Free Seed Grant Access	4.10	0.78	0.89	0.44	< 0.01
24-Month Venture Survival Outcome	3.85	0.82	0.92	-	-

6. DISCUSSION

What the empirical data from this study makes clear is that one cannot speak of the entrepreneurial ecosystem as a meritocratic level playing field. While first-generation graduates are every bit as driven and shrewd in business as their peers, their ventures are put on a back burner by shortfalls in intergenerational social and financial capital. The regression analysis is telling in this regard: with a β of -0.58, the weight of student debt in the absence of any familial safety net is shown to be a major impediment, one that leaves first-generation founders with no option but to call off a venture of promise when they run out of personal funds. Then there is the 49% negative effect associated with a paucity of social networks, which underscores how much the securing of venture capital is still a matter of informal socio-cultural ties.

It should be apparent to public policy makers and those at university incubators that putting standard business training in front of these students will not suffice to even things out. If entrepreneurship is to be a vehicle for real socioeconomic mobility, institutions have to put in place the sort of support systems that give first-timers the network access and financial cushioning that is the natural inheritance of continuing-generation founders. Some of the more salient insights and recommendations for policy are as follows:

- That universities and the economic arms of government put in place seed grants for first-generation graduate founders that are both dedicated and free of equity.
- A public policy approach to student loans for graduates who are in the process of building a registered commercial

enterprise, be it through partial forgiveness or income-contingent deferment.

- For angel networks and VC funds to open up capital allocation by means of transparent, structured pitch pipelines and the like, along with training to counter unconscious bias.
- Formal 'network bridge' type programmes from university business incubators to put first-generation students in contact with industry mentors and high-net-worth alumni.

7. CONCLUSION

To get at the underused talent pool and make good on the promise of socioeconomic equity, it is imperative that first-generation university graduates are given the means to be successful entrepreneurs. This study has shown beyond doubt the structural headwinds a first-generation founder has to contend with, from being shut out of an investor's informal circle to the burden of student debt and having no family to fall back on; the result is a marked reduction in the chances a venture will survive. The statistics bear out that institutional measures like formal network bridging or seed grants without equity requirements can have a very positive effect on viability.

The onus is on government agencies, higher education and the VCs to remove the systemic penalties visited on non-traditional founders if they want entrepreneurship to be an engine of social mobility. In the end, by creating startup ecosystems that are inclusive and de-risked, society can see to it that a founder is judged on the execution and vision he or she brings to the table and not on a legacy of privilege.

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