Barriers to Growth in Entrepreneurial Ecosystems

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Introduction

High-tech firms have enormous, previously unseen potential to scale (e.g. Facebook, Dropbox, WhatsApp, …)

Problem: most firms do not grow persistently

Persistent high growth: over 20% growth per year in employees or revenue for the period of at least four years.

One assumption why this happens: there are internal and external factors that are preventing growth of companies.

Focused on small and medium sized high-tech companies, particularly startups.

Theoretical background

Barriers to growth are usually viewed as internal or external factors that constrain the growth potential in firms that wish to grow (Storey, 1994:154).

Internal barriers are under the influence of firms' entrepreneurs and managers, while external barriers are the domain of policymakers and other ecosystem actors.

Problem: aside for internal/external there is no standard categorization of barrier types.

Very little effort has been spent researching barriers to growth in high-tech firms.

Theoretical background

A large amount of the barriers to growth research is geographically focused on **Central and Eastern European transitional countries**. Barriers to growth have been researched in Lithuania (Aidis, 2005), Albania (Hashi, 2001; Xheneti & Bartlett, 2012), Kosovo (Hoxha & Capelleras, 2010), Slovenia (Bartlett & Bukvič, 2001), Russia (Doern, 2009), and Bulgaria (Pissarides et al., 2003).

Another focus has been on **developing countries** like India and Ghana (Coad & Tamvada, 2012; Das & Das, 2014; Robson & Obeng, 2008) or **specific contexts in developed countries** like the UK and Canada (Gill & Biger, 2012; Lee & Cowling, 2013).

Theoretical background

The most thorough and comprehensive critique of barriers to growth literature was made by Doern (2009).

- Research on barriers to growth often does not distinguish actual and perceived barriers to growth.
- The same concept is labelled differently in different studies (e.g., barriers, obstacles, constraints)
- No specific definition has been broadly recognized.
- Often no standardized and pre-tested measures of barriers are used.
- Most studies employ a cross-sectional design.
- No focus on a particular industry.
- The literature does not seem to converge on a stable set of findings.

Entrepreneurial ecosystems

The entrepreneurial ecosystem is a set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship (Stam, 2015).

Main point: context matters.

Developed entrepreneurial ecosystems can help entrepreneurs grow their companies by drawing on supportive culture, mentorships, investment capital and other resources.

The concept offers a new perspective on firm growth that emphasizes the role of the external environment (Mason & Brown, 2014).

Spigel, 2015: Three types of attributes of entreprenurial ecosystem (cultural, social and material)

Methodological approach

Literature review revealed that authors do not rigorously define what they mean by ‘barriers’.

Rigorous concept development is often neglected, but having a good concept definition is vital before the process of developing a measure can begin.

Four-step process of creating a concept definition recommended by Podsakoff and colleagues (2016):

(1) identify the potential attributes of the concept and collect a representative set of definitions;
(2) organize the potential attributes by theme and identify any necessary and sufficient ones;
(3) develop a preliminary definition; and
(4) refine the conceptual definition.

Data collection

Alltogether 32 in-depth interviews was conducted.

I spent three months following a batch of startups in venture accelerator.

I used the MAXQDA software for coding and analysis.

I constantly compared the responses with our observations and findings of past studies.

Finally I discussed the definition with colleagues and practitioners, including the three interviewees.

Necessary conditions analysis (NCA)

Necessary conditions are determinants that allow a certain outcome to exist, but are not sufficient to attain that outcome (Dul, 2016).

Without the necessary condition, the outcome will not exist. Failure is guaranteed and cannot be compensated with by other determinants of the outcome. (example: passenger airplane).

Traditional approaches (e.g. multiple regression) are based on sufficiency logic. They often also use the additive rule where the effects of each cause add up to the outcome, meaning that the lack of one sufficient cause can be compensated by others.

Hypotheses containing statements about necessary conditions should be tested with NCA, not traditional regression-based analyses.

Barriers to growth

Barriers to growth are firm-level factors that are necessary conditions for persistent growth.

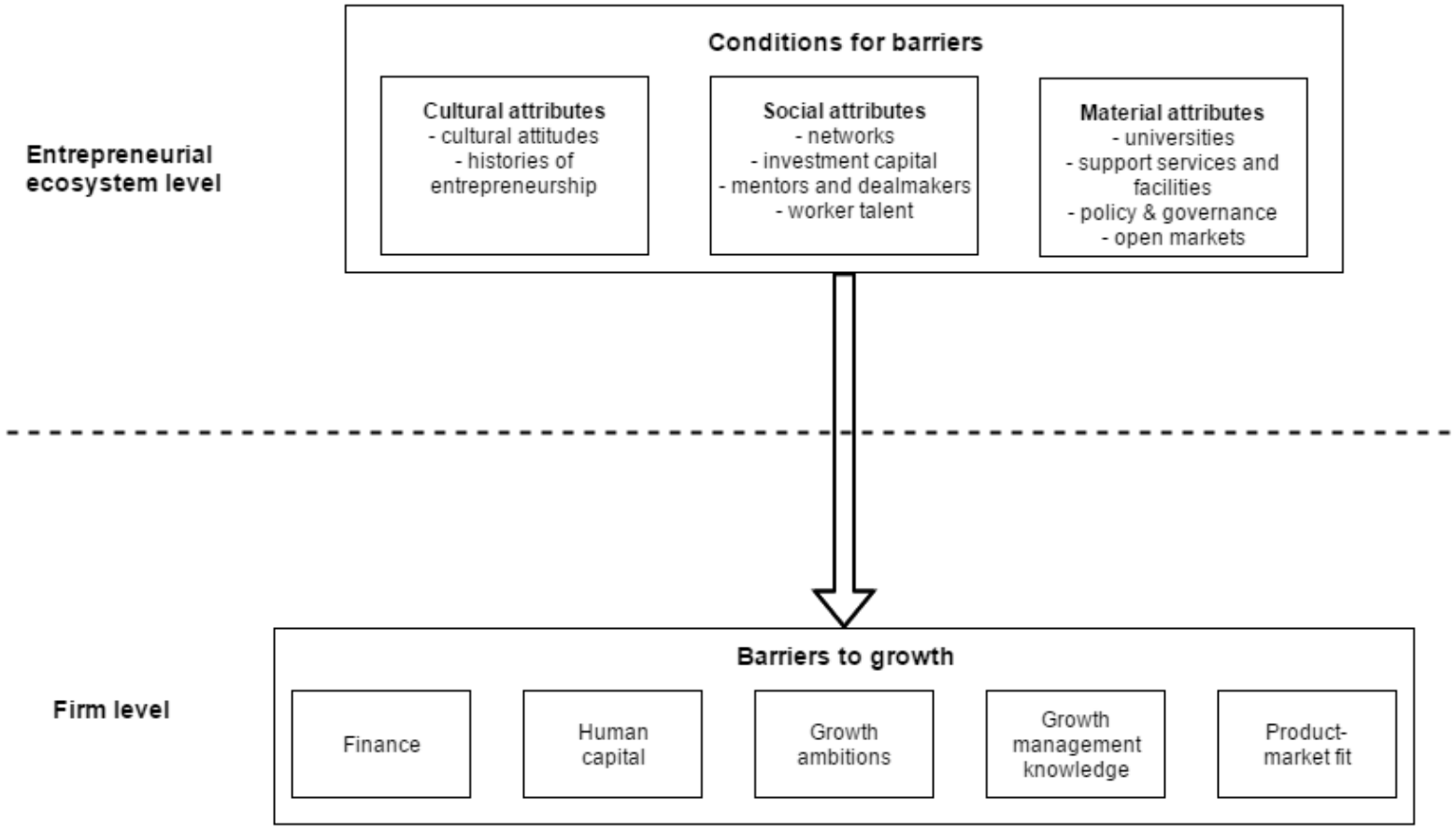
There are five barriers to growth:

- finance,
- human capital,
- growth ambition,
- growth management knowledge and
- product-market fit.

Necessary conditions logic demands that all five conditions must be fulfilled if firm is to grow. But they are not enough!

Barriers vs. drivers of growth

Barriers to growth



Barriers to growth

Two main ways to achieve temporary growth:

- finance push,
- market pull.

Eliminating a powerful barrier like finance or achieving product-market fit can put the company on a trajectory of temporary growth.

This buys time so leadership can eliminate other barriers.

But if other barriers are not dealt with, the growth will be eventually brought to a halt.

Barriers: Finance

“These things can be expensive. We had an app three years ago which exploded, nobody expected an explosion like that. First week we had 6,000, second week 40,000 and the third week 200,000 users. But then we had to shut it down, because we got the invoice from Google for 12,000 US dollars per week. We had no structure, so it was over.”

- Entrepreneur

Barriers: Finance

Finance barriers mean the ability of a firm to finance its growth.

The main ecosystem-level factors that influence companies' ability to obtain financial resources are cultural attitudes, networks, investment capital, and policy and governance.

Cultural attitudes determine what amount of risk and debt is culturally appropriate for entrepreneurs to take.

Social connections help entrepreneurs obtain access to the right people (investors, bankers) who are the decision-makers for dispensing finance.

Abundant investment capital in the region makes it easier for all startups to find equity capital.

Policy and governance initiatives (e.g. guarantees, subsidies) can help acquire finance for those new ventures that would otherwise be disadvantaged due to poor credit ratings and unavailable collateral.

Barrier: Human capital

“There’s one obstacle that is always constraining you! The team! This determines everything from A to Z. Team determines if you will get to growth phase, determines if you can get through growth phase. Everything else is some exercise to somehow get to product-market fit and sell things. The team is by far the most complex thing.”

- Entrepreneur

Barrier: Human capital

There are three dimensions of the human capital barrier: the human capital of the founder team, the human capital of the employees, and the firm's ability to attract and retain worker talent.

The main ecosystem-level factors that influence the human capital barrier are: cultural attitudes, histories of entrepreneurship, networks, worker talent, and universities.

Cultural attitudes are the basis for whether talented experienced people are prepared to establish or work for small companies.

Histories of entrepreneurship change these attitudes with positive role models.

Expansive **social networks** help entrepreneurs identify suitable employees and appropriate co-founders.

Abundant worker talent is necessary to support growing firms' increasing needs for workers, while universities are one of the main factors in creating human capital.

Barrier: Growth ambition

“There are no role models in Slovenia, that’s a fact. Role models are mostly craft workshops, which are known in some niche. But none of them grew into really large multinational corporation. Individuals can be very successful, but they keep their firms at 100 people, they don’t want to grow to 10,000.”

- Investor

Barrier: Growth ambition

The main ecosystem-level factors that influence the growth ambition barrier are: cultural attitudes, histories of entrepreneurship, investment capital, mentors and dealmakers, and open markets.

Cultural attitudes influence how risky the entrepreneur's actions will be and this will in turn influence the growth ambition.

Examples of successful entrepreneurs in the region and knowledgeable mentors can help overcome the adversity to risk inherent in growth.

Investment capital encourages entrepreneurs to have greater ambitions than they would normally have.

Open markets can help fuel the growth ambition with abundant opportunities for expansion.

Barrier: growth management knowledge

“Here in Silicon Valley there is much many more people who have experience how to grow to a million or hundred million users. In Slovenia there is are not many, but they do exist now. In SV you can skip this learning phase if you get into contact with the right people. “

- Slovenian entrepreneur,
now based in Silicon Valley

Barrier: growth management knowledge

The main ecosystem-level factors that influence the growth management knowledge barrier are: networks, investment capital, mentors and dealmakers, worker talent, and support services and facilities.

Entrepreneurs embedded in **expansive networks** can more easily identify people with growth management knowledge if that is insufficiently present in the company.

Investment capital investments often come with experience in handling the growth process.

Mentors can also advise the founders when growth problems arise.

If there is an abundance of people on the market who have **first-hand knowledge of the growth process**, ventures can hire the appropriate worker talent.

Finally, **support services and facilities** can help growing companies.

Barrier: product-market fit

“Precondition for growth is product-market fit on a fast growing market. If you want to get to that you have to understand the market better than others. If you want to understand it, you have to have work experience on that market”

- Consultant

Barrier: product-market fit

The main ecosystem-level factors that influence the product-market fit barrier are: networks, mentors and dealmakers, and open markets.

Networks and the proximity of customers mean that entrepreneurs can identify customer needs more easily.

Mentors who have gone through the process of finding a product-market fit can guide them with their experience and knowledge.

Being in a **big market** means even niches are big enough to develop products targeted at specific customers.

Implications for research

This conceptualization of barriers to growth is thorough and holistic. It embeds the barriers in the entrepreneurial ecosystem concept in order to capture contextual factors.

We have conceptualized barriers as necessary, but not sufficient conditions for growth (Dul, 2016). One consequence of this distinction is methodological. Traditional regression-based methods with their rule of linear additivity may be appropriate for empirically examining drivers of growth, but inadequate for assessing barriers to growth.

Multilevel connections between entrepreneurial ecosystem attributes are insufficiently researched and can be basis for future research projects.

Lessons for entrepreneurs

Entrepreneurs can use barriers to growth framework as a long-term lens on the development of their company

All five barriers must be eliminated before achieving persistent growth.

Decisions about founding team are the most difficult to correct later.

Lessons for policy

Policy measures should apply a holistic strategy towards lowering barriers to growth.

Because every barrier is a necessary condition for growth it is not enough to focus on just one barrier.

Policy-makers so far had too much focus on finance, and should spend additional resources on eliminating other barriers.