Extended Abstract for Submission to Economics of Talent Meeting

Start-up visas around the Baltics

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Abstract[1]

Using novel online resume microdata, we analyse global patterns of competition for entrepreneurial talent through start-up visa programs. Exploiting the 2017 introductions in Estonia, Latvia, and Lithuania, we track cross-border flows of first-time founders from non-EU origins and estimate the impacts of entrepreneur-targeted immigration policies. A difference-in-differences event study shows a sharp and lasting rise in founder inflows only for Estonia of about 220 additional founders annually. Additional analysis shows that Estonia's policy also diversified founder inflows, increasing arrivals from beyond traditional European and Central Asian origins.

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Keywords: Start-up visas, Entrepreneurial migration, Immigrant founders, Innovation ecosystems, Global talent competition

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1. Introduction

Demographic changes have sparked a global competition for workers and talent. Advanced economies face ageing and shrinking workforce, with profound implications for long-term economic growth. Population size matters because it influences the underlying engine of growth: the generation and diffusion of new ideas. The latter are becoming harder to find (see Bloom et al., 2020; Jones, 2022).

Start-up visa programs have emerged as an increasingly popular approach in an attempt to "import" entrepreneurial human capital via start-up-specific residence permits to boost innovation and productivity growth (Kerr and Kerr, 2022). The early movers on start-up- and scale-up-visa programmes among advanced economies include Australia, Canada, Chile, Denmark, Singapore, South Korea and Sweden (see, Appendix A). Evidence on the impact of these programs remains limited.[1] One recent study of the 2013 launch of Canada's Start-Up Visa finds that the policy made immigrant founders in the U.S. much more likely to establish their firms in Canada, with responsiveness shaped by ethnicity and local immigrant community ties. (Lee and Glennon, 2023).

In this paper, we investigate the role of start-up visa programs in attracting highly skilled individuals in three Baltic countries: Estonia, Latvia and Lithuania. They are small, high-income economies in Northern Europe that share a history of Soviet occupation and subsequent rapid transition to market systems in the 1990s. Since independence in 1991, all three have pursued policies of trade liberalisation, fiscal prudence, and integration with Western institutions; in 2004, they joined the European Union. The Baltic countries provide an interesting context for this study because they experienced a substantial population decrease since the early 1990s and are new entrants into the global competition for talent and ideas: In 2017, each of them launched start-up-specific residence permits with committee-based screening rather than capital thresholds.[2]

We draw on harmonised data from online CVs and follow a recent set of studies in identifying founder status and location (Jin et al., 2025; Lee and Glennon, 2023). To assess the effectiveness of these permits, annual flows of first-time founders from origin to destination were constructed using the information on individuals' education histories, job positions and locations from the Revelio Labs' global online-CV data harmonised from public LinkedIn profiles.

Our paper adds to the literature on the international migration of highly skilled individuals. Recent literature has documented the important role different actors and programs play in facilitating skilled migration. In this paper, we analyse how governments seek to facilitate skilled migration. Our paper is among the first to assess the impacts of startup visa programs on global

[1] Though not examining start-up visas directly, prior studies show that firms and universities are key facilitators of skilled migration and innovation (Kerr and Lincoln, 2010; Choudhury and Kim, 2019; Choudhury et al., 2023).

[2] Estonia immediately extended eligibility to start-up employees, turning the visa into a broader talent-pipeline tool.

talent inflows and to compare the impact of start-up visa programs across countries.

The following examines how start-up visa programs introduced in 2017 affected entrepreneur migration to the Baltic states. Using a difference-in-differences approach, first-time entrepreneurial moves from outside the EU to Estonia, Latvia, and Lithuania are tracked, comparing them to other 2004 EU entrants without start-up visa programs. The results reveal important differences. Figure 1 shows that Estonia experienced a dramatic and sustained increase in non-EU founder arrivals, a 121% jump compared to pre-program levels, bringing in approximately 220 additional founders. The program also diversified Estonia's entrepreneur pool, attracting founders from beyond the traditional European and Central Asian regions. In contrast, Lithuania and Latvia saw no clear impact from their programs. Rather than attracting new entrepreneurs, their start-up visas appear to have merely formalized existing migration flows. This stark variation in outcomes among three similar neighbouring countries implementing the same policy underscores how local conditions and implementation details determine policy success.

2. Data and Methodology

We draw on harmonised online CV data from public LinkedIn profiles for 600m+ individuals across 200+ countries and follow a recent set of studies in identifying founder status via a regular-expression search over job titles and location switches via geographic information on their employment and education histories (Jin et al., 2025; Lee and Glennon, 2023). We identify founders from online resume data as individuals whose job title contains any start-up related expressions such as "founder", "co-founder", "owner" or "entrepreneur". For each person, job and higher education "spells" are merged to create a complete chronological timeline. The first spell in which an individual moves from a non-EU country to one of the EU-2004 accession countries without a start-up visa program and holds an entrepreneurial title is coded as a first-time entrepreneurial move. To assess the effectiveness of startup visa permits, we construct annual flows of first-time founders from origin to destination using these data.

We use a difference-in-differences approach to evaluate the effect of the introduction of start-up visa programmes in the Baltic countries. The outcome of interest are the first-time entrepreneurial moves from outside the EU to a given country in a given year, comparing Estonia, Latvia and Lithuania to other 2004 EU entrants that did not have a start-up visa program in place (Hungary, Poland, Slovak Republic and Slovenia). Regressions are estimated absorbing destination, origin, and calendar-year fixed effects; standard errors are two-way clustered by destination and origin.

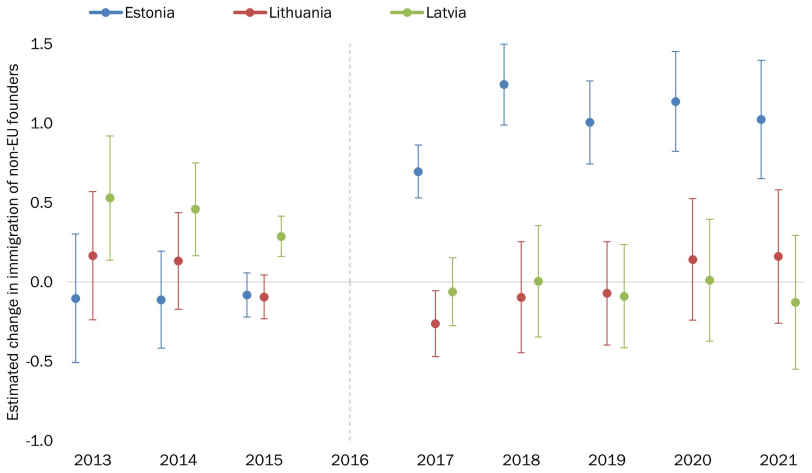
In our ongoing research, we exploit additional dimensions of this rich data from online CVs to learn about the quality of the entrepreneurs based on their past education and employment and the performance of the founded startups through the evolution of the firm size following the years after after establishment. Finally, we have obtained access to data von Venture Capital and Private Equity deals from Refinitiv which we analyse to better understand the conditions

for arriving founders with respect of the local startup ecosystems and markets for risk capital.

3. Results

The results reveal important differences. Estonia experienced a dramatic and sustained increase in non-EU founder arrivals, a 121 per cent jump compared to pre-program levels, bringing in approximately 219 additional founders annually (Figure 1). The program also diversified Estonia's entrepreneur pool, attracting founders from beyond the traditional European and Central Asian regions. In contrast, Lithuania and Latvia saw no clear impact from their programs. Rather than attracting new entrepreneurs, their start-up visas appear to have merely formalized existing migration flows. This stark variation in outcomes among three similar neighbouring countries implementing the same policy underscores how local conditions and implementation details determine policy success.

FIGURE 1. Estonia's start-up visa program boosted non-EU founder numbers



Notes: This chart shows the estimated coefficients from a difference-in-differences regression comparing the number of non-EU founders across Estonia, Lithuania, and Latvia with the number of non-EU founders in other EU-2004 accession states. The coefficients show changes relative to the baseline period in the year prior to the introduction of startup visas (vertical line). All regressions include destination, origin, and calendar-year fixed effects. The 95 per cent confidence intervals reflect standard errors clustered by origion-destination country pairs.

4. Conclusion

This analysis reveals that attracting global entrepreneurial talent requires multiple elements working together. Estonia succeeded by combining several strengths: an established start-up ecosystem with visible success stories (Skype, Bolt, Veriff), streamlined administrative processes, strong immigrant integration policies, a well-designed application system, and targeted marketing in key source countries. In contrast, Lithuania and Latvia's more limited approaches failed to produce similar results. Their experience demonstrates that simply introducing a

start-up visa is not enough. Policy success demands comprehensive ecosystem support, efficient implementation, and active promotion to compete effectively for international talent.

References

Bloom, Nicholas, Charles I. Jones, John Van Reenen, and Michael Webb (2020) "Are Ideas Getting Harder to Find?" *American Economic Review*, Vol. 110, No. 4, pp. 1104–1144.

Choudhury, Prithwiraj, Ina Ganguli, and Patrick Gaulé (2023) "Top talent, elite colleges, and migration: Evidence from the Indian Institutes of Technology," *Journal of Development Economics*, Vol. 164, p. 103120.

Choudhury, Prithwiraj and Do Yoon Kim (2019) "The ethnic migrant inventor effect: Codification and recombination of knowledge across borders," *Strategic Management Journal*, Vol. 40, No. 2, pp. 203–229.

Jin, Zhao, Amir Kermani, and Timothy McQuade (2025) "Native-Immigrant Entrepreneurial Synergies,"Technical report, National Bureau of Economic Research.

Jones, Charles I. (2022) "The past and future of economic growth: A semi-endogenous perspective," *Annual Review of Economics*, Vol. 14, pp. 125–152.

Kerr, Sari Pekkala and William R Kerr (2022) "3 Immigration Policy Levers for US Innovation and Start-Ups," in *Innovation and Public Policy*: University of Chicago Press, pp. 85–116.

Kerr, William R and William F Lincoln (2010) "The supply side of innovation: H-1B visa reforms and US ethnic invention," *Journal of Labor Economics*, Vol. 28, No. 3, pp. 473–508.

Lee, Saerom Ronnie and Britta Glennon (2023) "The effect of immigration policy on founding location choice: Evidence from Canada's start-up visa program," NBER Working Paper 31634, National Bureau of Economic Research.

Appendix A. Supplementary materials

Country	Launch	Programme / Stream	Status
Australia	2012	Business Innovation & Investment Programme (BIIP), subclass 188E "Entrepreneur"	Closed 2024
	2025	National Innovation visa (subclass 858, replaces BIIP)	Active
Austria	2017	Red-White-Red Card – Start-up Founder track	Active
Bahrain	2018	StartUp Bahrain "Pass" (visa facilitation)	Active
Bulgaria	2022	Start-up Visa (Ministry of Innovation & Growth certificate)	Active
Canada	2013	Start-Up Visa (SUV)	Active
Chile	2010	Start-Up Chile (accelerator + visa facilitation)	Active
Cyprus (pilot)	2017	Start-up Visa (pilot launch)	
Cyprus (revised)	2025	Updated scheme: extended permits, relaxed equity, valid until Dec 2026	
Czechia	2019	CzechInvest start-up visa facilitation	Active
Denmark	2015	Start-up Denmark	Active
Estonia	2017	Estonian Start-up Visa (founders & employees)	Active
Finland	2018	Finnish Start-up Permit	Active
France	2017	French Tech Visa (for founders, employees, investors)	Active
Germany	2012	Residence permit for self-employment ("Selbständige Tätigkeit")	Active
Hong Kong (SAR)	2003	Entry for Investment as Entrepreneurs (GEP)	Active
Ireland	2012	Start-up Entrepreneur Programme (STEP)	Active
Italy	2014	Italia Start-up Visa	Active
Japan	2015	Local/municipal start-up visa pilots (6–12 months)	Active
	2018	National Start-up Visa track (Business Manager status)	Active
Korea (South)	2013	OASIS entrepreneurship support programme	Active
	2018	D-8-4 Start-up Visa (linked to OASIS)	Active
Latvia	2017	Start-up Visa	Active
Lithuania	2017	Start-up Visa	Active
Malta	2022	Malta Start-up Residence Programme	Active
Netherlands	2015	Start-up residence permit (1-year with facilitator)	Active
New Zealand	2014	Entrepreneur Work Visa	Closed 2024

Country	Launch	Programme / Stream	Status
	2017	Global Impact Visa (with Edmund Hillary Fellowship)	Active
Portugal	2018	Start-up Visa (IAPMEI)	Active
Saudi Arabia	2024	Entrepreneur Residency Permit	Active
Singapore	2004	EntrePass (venture-backed/innovative founders)	Active
Spain	2013	"Entrepreneur Law" residence permit	Active
Sweden	2008	Residence permit for entrepreneurs/self-employment	Active
Taiwan	2015	Entrepreneur Visa (initial 1-year validity)	Active
	2023	Extended Entrepreneur Visa (2 years, online application)	Active
Thailand	2018	SMART-S Start-up Visa	Active
UAE	2019	Golden Visa (entrepreneurs track)	Active
	2022	Green Visa (investors/start-ups)	Active
United Kingdom	2019	Start-up visa	Closed 2023
	2019	Innovator visa	Closed 2023
	2022	Scale-up visa (for high-growth hires)	Active
	2023	Innovator Founder visa (replaces Start-up/Innovator)	Active
United States	2017	International Entrepreneur Parole (IEP)	Active (limited uptake)

Launch years are first cohort-admission dates (Kerr & Kerr 2020; OECD 2022; gov. updates 2023-25).