

START-UP VISAS: A PASSPORT FOR INNOVATION AND GROWTH?

By Liam Patuzzi



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Executive Summary

Rapid technological developments in the past few decades have transformed business models, industries, and entire economies. Start-ups (i.e., young innovative companies with a potential for rapid growth) have been at the center of this transformation. Silicon Valley's entrepreneurial culture—tech-driven, creative, risk-taking, and with a preference for flat hierarchies and open communication—has now spread to start-up hubs all over the world. As governments navigate an era of rapid labor-market change, they are increasingly looking for ways to nurture and spread this "special sauce," and to translate it into long-term economic competitiveness.

Immigration policies capable of attracting talented entrepreneurs are at the heart of start-up success. But while many countries have long-standing immigration channels for business purposes, these are often ill-suited to start-up entrepreneurs, who tend to be relatively young and inexperienced. Traditional entrepreneur visas are often unattainable for start-up founders with early-stage, high-risk, innovative business projects due to their stringent requirements (e.g., high minimum investment thresholds and a proven track record of business expertise) and their emphasis on immediate economic returns, such as job creation, which can discourage risk-taking. While self-employment visas offer more flexibility, they are sometimes poorly managed and, crucially, do not focus on innovation. Talent visas, on the other hand, are geared toward people with exceptional abilities in their field and might therefore admit individuals with the potential to become successful start-up founders; but their focus on past academic and professional achievements makes them best suited to individuals who are already well established in their fields, which excludes most young start-up entrepreneurs.

While many countries have long-standing immigration channels for business purposes, these are often ill-suited to start-up entrepreneurs.

In recent years, and especially since 2015, numerous countries have introduced start-up visas to address this gap. Many of these visas have sprung up in Europe, but they have also made prominent appearances in countries around the world, including in Chile (2010), Canada (2013), South Korea (2013), New Zealand (2014), Taiwan (2015), Australia (2016), Thailand (2018), and Japan (2019). Start-up visas aim to strike a balance between two priorities: gambling on people with great entrepreneurial potential but everything yet to prove, while mitigating this risk through various selection, monitoring, and support mechanisms. To do so, policymakers designing a start-up visa must weigh several considerations:

Creating rigorous programs that are flexible enough to suit the nontraditional profiles of start-up entrepreneurs. The admission criteria for start-up visas focus primarily on the quality and growth potential of the applicant's business concept. While it is clear that for a business to qualify as a start-up, it must be innovative, scalable, and preferably technology intensive, it is less clear what expectation a country should set in relation to job creation and growth. The skills, experience, and achievements of candidates need to be judged more flexibly than with applicants for talent visas, taking into account their relevance to the proposed business idea rather than as generic human capital indicators. Entrepreneurial attitudes, personality traits, values, and soft skills need to be weighed alongside formal education and work experience. In Denmark, for instance, start-up visa applicants do not need to have a university degree; instead, innovation experts judge whether they have the skills to turn their proposed idea into reality.



- Assessing the potential success of projects in new or fast-growing sectors. Assessing the potential of candidates' start-ups requires solid business expertise, nuanced market knowledge, and a familiarity with what innovation is and how it can be generated and sustained. Organizations or teams of experts with strong roots in start-up ecosystems (often from the private sector) usually perform an important role in selection procedures. In Italy, representatives from venture capital organizations, science and technology parks, and university incubators assist the government in assessing the quality of applications. In Israel, Canada, and other countries, it is mainly the market that decides: only start-ups endorsed by private investors or incubators can apply.
- Providing adequate oversight when bringing in industry experts. A third-party endorsement—that is, when a foreign start-up entrepreneur secures the support of an incubator, accelerator, or investor group in the destination country—is a prerequisite for applying for many (though not all) recent start-up visa schemes. This illustrates the willingness of governments to let the market decide whether a business project has potential. But carefully balancing the roles and responsibilities of private stakeholders and government authorities is a complex task, especially where market and public interests may diverge. In Canada, the government engages industry experts as peer reviewers to make sure the agreement between an endorser and an applicant complies with industry standards and is not fraudulent. And in Thailand, the start-up visa scheme (which is also based on endorsement) is limited to business activities in sectors the government regards as nationally strategic.
- Supporting risk-taking—even if it may not pay off. To increase the chance of success, start-up visa schemes often include some support mechanisms. "Lean" schemes focus on simply removing entry barriers and offering foreign entrepreneurs a simplified fast-track visa procedure. These tend to be the preferred option for countries with mature start-up ecosystems, where foreign entrepreneurs can readily thrive with minimal government intervention, and they are best suited to admitting start-ups that are already past the ideation stage. "Thick" schemes such as the long-running Start-Up Chile, on the other hand, tie visas to government-funded incubators or accelerators, offering candidates a plethora of benefits: training packages, mentoring support, access to facilities, networking events, and even public funding. Although costlier, such schemes can be a worthwhile investment in countries with a relatively nascent entrepreneurial environment, due to the initial stimulus they provide as well as their branding advantages.
- Monitoring start-ups' progress against sound benchmarks, while also giving them time and flexibility to develop. Defining and measuring success is crucial to determine whether a visa should be renewed and, more broadly, whether the start-up is fulfilling expectations. But unlike classic entrepreneur schemes, start-up visas cannot—at least in the short run—measure success in terms of traditional job creation or revenue criteria, since these will be impossible for many early-stage ventures to meet. Instead, success should be assessed with greater patience and on the basis of more flexible criteria, and by experts with in-depth knowledge of start-up trajectories. As with success, "failure" should be defined broadly. Setbacks are a realistic possibility and do not necessarily disprove a candidate's entrepreneurial potential. Schemes that allow the visa holder to depart from the original business idea lower the risk of dead ends and encourage transparency and learning.

Start-up visas have had mixed results so far in attracting and retaining foreign entrepreneurs. Thick schemes have achieved greater visibility and higher application numbers with their attractive support packages, but they can struggle to keep immigrant entrepreneurs in the country after these incentives expire. Lean schemes, on the other hand, have often gotten off to a slow start—even for attractive destinations such as Australia, Canada, Denmark, and Ireland. This is partly due to their more arduous admission requirements, such as having an endorsement from an incubator or investor, but also to weak



scheme administration and promotion. As Canada, the Netherlands, and other examples show, however, these schemes can successfully overcome teething problems and get off the ground, especially where governments are patient, self-critical, and flexible enough to adapt their requirements.

Start-up visas are by design very low-volume immigration channels. As such, they are only one piece of a much larger puzzle when it comes to encouraging entrepreneurship and economic growth. An immigrant's decision to relocate and start a business in a foreign country is influenced by a variety of factors, including business and tax rules, the location of industry clusters, and the size of the potential market. With more and more countries jumping on the start-up-visa bandwagon, to be competitive these schemes need to be complemented by broader innovation policies and programs, such as incubators/accelerators, networking events, and investment incentives. The most successful national innovation strategies will build on a country's strengths and traditional industries (e.g., exploring how new technologies may transform and revitalize them) rather than seeking to import models from elsewhere. Embedding a start-up visa within such a strategy makes it more credible and allows it to stand out from the crowd.

I. Introduction

Over the past decade, the global appetite for start-ups has grown exponentially. Technological progress has brought profound change to businesses and entire industries. The so-called Fourth Industrial Revolution (or more simply, "Industry 4.0") blends advanced digital technologies with physical and biological ones, unleashing considerable possibilities in fields as diverse as artificial intelligence, robotics, the Internet of Things, 3-D printing, and biotechnology.¹ The rise of tech companies such as Facebook, Google, Airbnb, and Uber has led governments to appreciate the role of entrepreneurial innovators—individuals capable of identifying new business opportunities and using cutting-edge technology to seize them—in future economic competitiveness (see Box 1).

Talented entrepreneurs are quick to move to locations that offer the best mix of investment, fiscal and legal environments, and markets.

There are a number of steps governments can take to create a fertile environment for entrepreneurship and innovation. But to foster new products and services with the potential to conquer global markets, they need a particular type of talent: relatively young, well-educated, tech-savvy people with the creativity, ambition, skills, and networks to find new solutions to old problems, and with enough market knowledge to recognize growth opportunities. While virtually every country counts some of these individuals among its own citizens, this type of talent is rare and highly mobile. Talented entrepreneurs are quick to move to locations that offer the best mix of investment, fiscal and legal environments, and markets. Countries therefore need to compete both to attract foreign skills and to retain homegrown talent. Moreover, domestic start-up ecosystems can greatly profit from the international networks and experience that foreign entrepreneurs bring with them, especially in knowledge-intensive, innovation-

¹ Klaus Schwab, "The Fourth Industrial Revolution: What it Means, How to Respond," World Economic Forum, January 14, 2016, www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond.



driven industries that are inherently global. These international connections can unleash creativity, open up new markets, and attract foreign capital, to name but a few benefits.

Start-up visas have proliferated in recent years, cropping up in countries ranging from those with a tradition of settlement such as Canada, Australia, and New Zealand to a number of European countries (both large and small) to industrialized and emerging economies in Asia and South America (see Table 1). Looking only at the past two years, Austria, Cyprus, Estonia, Lithuania, Latvia, Israel, France, Finland, Portugal, Japan, Thailand, and the United Kingdom have all launched new start-up visas, Canada and Denmark have turned pilot programs into permanent schemes, and other countries have trialed similar instruments at the subnational level—such as in South Australia² and in the Shanghai metropolitan area.³

Box I. What Is a Start-Up?

Since the turn of the century, the buzz around "start-up" businesses has grown exponentially. What exactly is a start-up, and how do governments decide which companies qualify? Most experts agree that a start-up is a relatively young company with the potential to grow rapidly, even as definitions of the term place emphasis on different factors (e.g., age of the company, number of employees, growth rate, stability, profitability, or scalability).

This raises another question: when does a start-up stop being one? In 2014, TechCrunch writer Alex Wilhelm proposed what became known as the "50-100-500 rule": if a company has either a revenue rate higher than \$50 million, employs 100 or more people, or is worth more than \$500 million, then it cannot still be considered a start-up. Others insist that the defining feature of a start-up is its company culture (e.g., risk-taking over stability, impact before structure), which can remain intact regardless of age and size.

The lack of an unequivocal definition is not problematic per se, since the blurred boundaries of the term "start-up" have made it appealing to multiple stakeholders. Over time, the term has become deeply intertwined with the concept of "disruptive innovation": the idea that start-ups, free from an industry's status quo and less constrained by hierarchies and administrative structures, are able to move into uncharted territory, find better or cheaper solutions to known problems, and even displace established market leaders as a result. Inspired by Silicon Valley, governments have strived to promote "start-up ecosystems": local networks of entrepreneurs, investors, research centers, and other stakeholders who, through cooperation, can create the ideal conditions for innovation to emerge and grow.

But for policymakers designing a dedicated start-up-focused immigration channel, vagueness is an obstacle. Some governments have responded by setting thresholds for companies to qualify as a start-up, such as company age limits (e.g., maximum six years in Ireland, five years in Italy, and six months in Singapore) or sectoral boundaries. But on their own, these thresholds are often too broad to serve as selection tools. Moving toward a system that selects people based on individualized assessments rather than one-size-fits-all criteria is therefore a better option for handling the slippery nature of what constitutes a start-up.

Sources: Alex Wilhelm, "What the Hell Is a Startup Anyway?" TechCrunch, December 30, 2014, https://techcrunch.com/2014/12/30/what-the-hell-is-a-startup-anyway/; Arnobio Morelix, E. J. Reedy, and Joshua Russell, The Kaufmann Index 2016: Growth and Entrepreneurship (Kansas City, MO: Ewing Marion Kauffman Foundation, 2016), https://techcrunch.com/microsites/kauffman_index_growth/kauffman_index_national_growth_entrepreneurship_2016_report.pdf; Leigh Alexander, "Why It's Time to Retire 'Disruption,' Silicon Valley's Emptiest Buzzword," The Guardian, January 11, 2016, https://www.theguardian.com/technology/2016/jan/11/disruption-silicon-valleys-buzzword.

Australian Government, Department of Home Affairs, "Working in Australia: Visas for Innovation," updated March 12, 2019, https://immi.homeaffairs.gov.au/visas/working-in-australia/visas-for-innovation/supporting-innovation-in-south-australia

³ Vivian Mao and Dorcas Wong, "Shanghai's New Startup Visa," China Briefing, August 2, 2018, www.china-briefing.com/news/shanghais-new-startup-visa/.



This report analyzes the effectiveness of this new wave of start-up visas in attracting innovative entrepreneurs, their added value vis-à-vis existing immigration channels, and their role as part of broader strategies to foster innovation. It first looks at the goals of start-up visas and how they reflect different national priorities and contexts, before exploring the opportunities, trade-offs, and limitations they present. Although most of the evidence on this trend is nascent, the report draws some provisional conclusions on whether start-up visas are living up to their ambitious goals, and offers some reasons why, so far, these programs have delivered mixed results.

Table 1. Start-Up Visas à Gogo: Newly Established and Reformed Schemes, 2010-19

Year	Scheme Launched (or Significantly Reformed)
2010	Chile: Start-Up Chile
2011	United Kingdom: reform of Tier 1 Entrepreneur Visa (capital requirements lowered for high-potential businesses)
2012	Ireland: Start-Up Entrepreneur Programme (STEP) United Kingdom: Tier 1 Graduate Entrepreneur Visa
2013	Brazil: Start-Up Brasil Canada: Start-Up Visa (as a five-year pilot) Singapore: reform of EntrePass visa South Korea: D-8-4 Visa (or Start-Up Visa) Spain: Entrepreneur Visa (or Start-Up Visa)
2014	Ireland: 12-Month Immigration Permission (additional to STEP) Italy: Italia Start-Up Visa and Start-Up Hub New Zealand: Entrepreneur Work Visa
2015	Denmark: Start-Up Denmark (as a three-year pilot) and Establishment Card Netherlands: Start-Up Visa Taiwan: Entrepreneur Visa
2016	Australia: Entrepreneur stream (Subclass 188) France: French Tech Ticket
2017	Austria: Red-White-Red Card for start-up founders Cyprus: Start-Up Visa (as a two-year pilot) Estonia: Start-Up Visa France: French Tech Visa (Talent Passport) Israel: Innovation Visa (as a three-year pilot) Latvia: Start-Up Visa Lithuania: Start-Up Visa New Zealand: Global Impact Visa (as a four-year pilot) Portugal: StartUP Visa Singapore: reform of EntrePass visa United States: International Entrepreneur Rule* (rescission process underway)
2018	Australia: Supporting Innovation in South Australia, or SISA (as a three-year pilot) Canada: Start-Up Visa is made permanent China: Business start-up visa piloted in Shanghai Denmark: Start-Up Denmark is made permanent Finland: Finnish Start-Up Permit Thailand: SMART Visa
2019	Japan: Start-Up Visa Philippines: Innovative Start-Up Act (incl. a start-up visa) United Kingdom: Start-Up Visa and Innovator Visa

^{*} The International Entrepreneur Rule is a regulation granting temporary permission to enter and stay in the United States based on a parole period rather than a visa category.

Note: Different versions of a Startup Visa Act / a Startup Act that would create a start-up visa category were introduced in the U.S. Congress in 2010, 2011, 2012, 2013, 2015, 2017, and 2019, but none has been enacted so far. See Section V for more details.

Source: Compilation by the author.



II. What Role Can Start-Up Visas Play in Immigration Systems?

In most advanced economies, start-up visas sit within a complex ecosystem of immigration programs designed to maximize a country's economic competitiveness. Most countries have some type of business visa for professionals not sponsored by a destination-country employer (targeting foreign entrepreneurs, self-employed persons, and/or investors) as well as channels for the highly skilled (such as talent visas and skilled employment visas). Start-up entrepreneurs fall somewhere between these two categories: they are often too inexperienced and/or their business projects tend to be too unconventional and early-stage for entrepreneur visas. They may also lack the level of academic and professional excellence needed for talent visas, and their entrepreneurial ambitions are at odds with the emphasis most high-skilled worker visas place on being sponsored by an employer. Table 2 sets out some of the different visa programs available to skilled professionals, and how they compare with start-up visas.

Table 2. How Do Start-Up Visas Compare with Other Visas for Entrepreneurs, Investors, or Skilled Professionals?

Visa Category	Target Group	Common Requirements
Start-up visas	Individuals/teams planning to establish a start-up	Innovative, scalable, high-potential business idea, and a tentative business plan; appropriate skills to set up the business; in some cases, endorsement from a relevant third party (e.g., incubator or investor group) and/or minimum investment (comparatively low, with waivers possible)
Entrepreneur visas (including self-employment visas for company founders)	Experienced entrepreneurs in all economic sectors	Minimum capital investment (midlevel threshold, typically U.S. \$100,000–500,000); employment creation; fully formed business plan; proven track record of successful entrepreneurial experience
Self-employment visas (excluding company founders)	Individuals planning to work independently (e.g., as freelancers) without hiring employees	Financing and revenue plan; recognized qualifications and professional permit, if needed for the profession; demonstrated economic benefit to the country/region in which the person operates
Investor visas (for investments in business activities)	Experienced investors in all economic sectors (generally not actively involved in managing the business)	Minimum capital investment (high-level threshold, typically more than U.S. \$1 million); proven track record of successful investment
Skilled worker visas	Skilled workers with a professional degree	Usually, an employment offer and appropriate qualifications and experience for the position; sometimes, broader human capital criteria (e.g., education, work experience, age, host-country language proficiency)
Talent visas	Recognized or emerging leaders in a limited number of economic sectors and activities	Outstanding academic and/or professional achievements in sectors of particular economic interest; recommendation or endorsement by experts or renowned institutions in the field
Tech visas	Can include start-up founders, skilled professionals, investors, and (more rarely) senior executives in innovative, technology-intensive, high-growth businesses	Eligibility requirements are tailored to the type of professional. For start-up founders, requirements include an innovative, scalable, high-potential business idea, tentative business plan, adequate skills, and endorsement from a relevant third party. For skilled professionals (and senior executives), requirements include an adequate employment contract with an innovative, technology-intensive, and/or high-growth start-up based in the country; higher qualification/work experience proving industry-relevant expertise; and salary thresholds. For investors, requirements include that the business is innovative, technology-intensive, and/or high-growth; minimum capital investment (mid-level threshold, typically around U.S. \$300,000–500,000); and a track record of successful investment.

Source: Compilation by the author.



While most industrialized countries offer visas to admit people for business purposes, these were usually created with corporate entrepreneurs in mind: experienced "safe bets" with a proven track record of establishing and running profitable companies, who are expected to rapidly bring in capital and create jobs. As a result, entrepreneurs looking to establish a start-up may not qualify for these programs—even though the potential benefits of start-ups may be greater in the medium and long term.

- Visas for entrepreneurs. Traditional entrepreneur visas often ask applicants to prove they have a solid business track record and a detailed, viable, and financially sound business plan ready for implementation. Start-up founders, on the other hand, often still need to refine and develop their business concepts. Minimum capital and job creation requirements, which are rather common for entrepreneur visas, set prohibitively high bars for most start-ups, which at their early stages tend to be concerned with other, more basic questions—is the product marketable? is the business model sustainable? will investors believe in the project? Over the past decade, some countries have softened the eligibility criteria for their entrepreneur visas to attract younger businesses. The United Kingdom, for instance, reformed its Tier 1 Entrepreneur Visa in 2011, lowering minimum capital requirements for high-potential businesses.⁴ But the program ended up admitting many low-value businesses, due to the absence of innovation-focused criteria and a lack of involvement of industry experts in the scheme.⁵
- Visas for self-employment. Prevalent in Europe, this visa type has standards for self-employed individuals that tend to be relatively lenient; for company founders, however, they are often as demanding as entrepreneurship visas. There are some exceptions to this rule: Germany and Sweden's self-employment visas do not set rigid thresholds for how much capital must be invested or how many jobs created, and it is telling that these countries have so far deemed it unnecessary to introduce a start-up visa. Even in these cases, however, self-employment visas come with certain hurdles for foreign start-up entrepreneurs, such as limited guidance and information (partly due to language barriers), a high bureaucratic burden, a lower weighting of business innovativeness in candidate selection, and weak to nonexistent mechanisms for helping insert immigrant entrepreneurs into relevant host-country networks.⁶
- Visas for investors. These are usually out of reach for start-up entrepreneurs due to the large amount of investment capital they require. Additionally, many of these schemes do not expect investors to actively participate in running the business, while start-up entrepreneurs tend to play a very hands-on role in their ventures. Investor visas are thus directed at an entirely

⁴ Next to the standard investment threshold of £200,000, the government introduced the option for high-potential businesses to come to the United Kingdom with £50,000 in funding from an approved organization, such as venture capitalists, angel investors, or seed competitions. See UK Home Office, "Government Rolls out the Red Carpet for Entrepreneurs and Investors" (press release, March 16, 2011), www.gov.uk/government/news/government-rolls-out-the-red-carpet-for-entrepeneurs-and-investors.

⁵ Migration Advisory Committee, *Tier 1 Entrepreneurs: Review of the Tier 1 Entrepreneur and Graduate Entrepreneur Routes* (London: Migration Advisory Committee, 2015), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/472236/Report_Tier_1_Entrepreneurs.pdf.

In the past few years, both in Sweden and Germany, start-up communities have lamented the perceived shortcomings of the current self-employment visa regime (in particular, weak promotion of the channel and excessively rigid rules) and called for the introduction of a proper start-up visa. See Annika Lidne et al., "The Swedish Startup Manifesto," accessed July 20, 2019, http://static1.snowfire.io/accounts/14099/files/179.pdf; Jens Tönnemann, "Heißt sie willkommen!" *Die Zeit*, October 19, 2017, https://www.zeit.de/2017/43/einwanderung-einwanderungsgesetz-start-up-deutschland-buerokratie.

⁷ The average sum across the world is \$1.2 million, but there are large variations between countries. See *The Economist*, "The Kushners Put Controversial Investor Visas in the Spotlight," *The Economist*, May 9, 2017, www.economist.com/democracy-in-america/2017/05/09/the-kushners-put-controversial-investor-visas-in-the-spotlight.

While this "passive role" is true for most investor visas, there are some notable exceptions: the EB-5 and E-2 visas in the United States, for example, require candidates to be engaged in the management of the enterprise. See U.S. Department of Homeland Security (DHS), U.S. Citizenship and Immigration Services (USCIS), "E-2 Treaty Investors," updated January 14, 2014, www.uscis.gov/working-united-states/temporary-workers/e-2-treaty-investors; DHS, USCIS, "EB-5 Investors," updated May 8, 2017, <a href="https://www.uscis.gov/working-united-states/permanent-workers/employment-based-immigration-fifth-preference-eb-5/eb-5-investors.



different target group—albeit one that can play a major role in developing a healthy start-up scene. (For this reason, investors are also being wooed by so-called tech visas, a recent spin-off of start-up visas, described later in this section.) That said, where minimum investment requirements are relatively low and alternatives are lacking, start-up entrepreneurs might resort to investor visas as an entry channel, as has been the case for the E-2 visa in the United States.⁹

- *Visas targeting skilled professionals.* Such visas do sometimes screen for human capital criteria—thus potentially rewarding the experience in knowledge- and technology-intensive industries possessed by many start-up entrepreneurs—but they are generally tied to a job and an employer. Founding a company—or, for that matter, pursuing any other income-generating activity—is therefore disallowed under most of these schemes. And even where a skilled employment visa may technically allow, under specific circumstances, a stepwise route to founding a start-up alongside normal employment (such as the H-1B visa in the United States, which allows visa holders already in the country to become co-owners of a business and even to work for it, provided that they are credibly hired by an independent entity such as a board of directors 1, this is very hard in practice; planning and founding a start-up is an intensive project that can rarely be done in the spare time around a full-time job. 12
- Visas for exceptional talent. Some start-up entrepreneurs may qualify for talent-based visa categories. Examples of these visas (such as the O-1 temporary visa and the EB-1 and EB-2 permanent visas in the United States,¹³ or the Exceptional Talent/Exceptional Promise visas in the United Kingdom¹⁴) do not necessarily require a job offer and, in some countries, are specifically tailored to fields of innovation, such as digital technology and creative industries. However, they often take a rather conservative approach when evaluating applicants' careers, relying almost exclusively on past academic and professional achievements, with less attention paid to future plans and entrepreneurial intentions. Previous start-up activity, if particularly

⁹ While the United States' EB-5 visa requires a capital investment of at least \$1 million (or \$500,000, in industries of particular economic interest) and the creation of ten jobs, the E-2 visa does not specify a minimum amount of investment. According to experts, however, at least \$150,000 is usually needed, which is still a very lofty requirement for young start-ups. See Andy J. Semotiuk, "Quickest Visas for Investors to Immigrate to the U.S.," Forbes, July 12, 2018, www.forbes.com/sites/andyjsemotiuk/2018/07/12/quickest-visas-for-investors-to-immigrate-to-the-u-s/. Moreover, the visa is available only for treaty partners (which excludes countries such as Brazil, China, and Russia) and does not have a path to permanent residence.

¹⁰ Even countries with a traditionally supply-oriented, points-based system, such as Canada and Australia, have become more demand-oriented in recent years, prioritizing applications tied to a job offer. For more on Canada, see Daniel Hiebert, *The Canadian Express Entry System for Selecting Economic Immigrants: Progress and Persistent Challenges* (Washington, DC: Migration Policy Institute, 2019), www.migrationpolicy.org/research/canadian-express-entry-system-selecting-economic-immigrants. For Australia, see Anna Boucher and Amy Davidson, *The Evolution of the Australian System for Selecting Economic Immigrants* (Washington, DC: Migration Policy Institute, 2019), www.migrationpolicy.org/research/evolution-australian-system-selecting-economic-immigrants.

¹¹ DHS, USCIS, "Questions & Answers: Memoranda on Establishing the 'Employee-Employer Relationship' in H-1B Petitions," updated January 9, 2019, https://www.uscis.gov/news/questions-answers-uscis-issues-guidance-memorandum-establishing-employee-employer-relationship-h-1b-petitions.

¹² Sonia Paul, "The Trump Administration Is Driving Away Immigrant Entrepreneurs," *The Atlantic*, June 7, 2018, https://www.theatlantic.com/business/archive/2018/06/trump-immigrant-entrepreneurs/561989/.

In the United States the EB-1 and EB-2 visas are permanent employment visas generally reserved for immigrants with exceptional ability and who are well recognized in their profession. A petition by an employer is needed, but the scheme leaves some room for self-petitioning, providing opportunities for entrepreneurs. See DHS, USCIS, "Employment-Based Immigration: First Preference EB-1," updated October 29, 2015, www.uscis.gov/working-united-states/permanent-workers/employment-based-immigration: Second Preference EB-2," updated October 29, 2015, www.uscis.gov/working-united-states/permanent-workers/employment-based-immigration-second-preference-eb-2. The O-1 is a temporary visa for individuals with extraordinary ability or achievement in a number of areas, including sciences, education, business, athletics, arts, and entertainment. See DHS, USCIS, "O-1 Visa: Individuals with Extraordinary Ability or Achievement," updated January 5, 2017, www.uscis.gov/working-united-states/temporary-workers/o-1-visa-individuals-extraordinary-ability-or-achievement.

¹⁴ UK Home Office, Visas and Immigration, "Tier 1 (Exceptional Talent) of the Points Based System—Policy Guidance," updated July 6, 2018, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/605982/T1_ET_Guidance_04_2017.pdf.



successful, may count as an achievement,¹⁵ but this would only help start-up entrepreneurs who are already stars, not those who might shine in the future. Exceptional entrepreneurs with an outstanding academic and professional record, significant expertise in their field, and industry recognition might be an asset in creating and running a start-up—but a team of early-career professionals with the right mix of skills could be an even greater asset.

Tech visas. In some countries, tech-focused admissions channels have emerged that bring together different types of professions involved in the start-up world (founders, tech workers hired by start-ups, and sometimes risk investors and even senior executives) under a single instrument. Such visa channels can be a powerful tool for building a country's start-up ecosystem by drawing together groups that are key to entrepreneurial innovation. The concept of tech visas is rapidly becoming popular, and they have recently been introduced (in various forms) in countries as different as France, Thailand, ¹⁶ Singapore, ¹⁷ and Estonia. The 2017 Estonian Start-Up Visa was among the first to include a fast-track option for Estonia-based startups to hire foreign workers, alongside the normal track for company founders. ¹⁸ In the same year, France launched the French Tech Visa, which grants foreign start-up founders, but also employees of high-growth companies and investors financing start-ups based in the country, facilitated access to a four-year residence permit.¹⁹ In a few other countries, such as Chile,²⁰ Australia, 21 and Portugal, 22 tech visas have a narrower focus and do not include a pathway for entrepreneurs, instead working solely as fast-track channels for start-ups to recruit foreign professionals in the science and technology sectors. Even in these cases, however, they are often closely linked to visa schemes for start-up founders, and therefore indicative of the trend of thinking of these two target groups in conjunction.

As this brief review illustrates, there is a clear gap in many immigration systems that a targeted visa for early-career entrepreneurs could fill, boosting innovation in in-demand sectors. While the established visa schemes mentioned above might constitute viable entry options for some start-up founders, all too often their eligibility criteria mean they are unattainable for talented entrepreneurs.

Start-up visas could also play an important "bridging" role to other visas. For young and inexperienced entrepreneurs, start-up visas can be a stepping stone (rather than an alternative) to entrepreneur visas, especially when immigrants are able to smoothly transition between the two permits. Where exceptional talent visas target high achievers in tech and knowledge-economy sectors (e.g., in the United Kingdom), promising candidates who do not yet meet all the requirements could be referred instead to the start-up visa route. Granting foreign students a preferential path from a study visa to a start-up permit could help a country unlock one of the most promising pools of international innovators. This would encourage students to start developing business ideas before graduation, thus taking advantage both of their freshly acquired

¹⁵ UK Home Office, Visas and Immigration, "Tier 1 (Exceptional Talent) of the Points Based System," 42.

Thailand Board of Investment, "Thailand's SMART Visa: Attracting Foreign Talents and Technologies" (brochure, January 2018), www.boi.go.th/upload/BOI-brochure%202018-smart%20visa-EN-20180125_97687_87299.pdf.

¹⁷ Singapore Government, Ministry of Manpower, "Eligibility for EntrePass," updated October 31, 2018, www.mom.gov.sg/passes-and-permits/entrepass/eligibility.

¹⁸ Startup Estonia, "Startup Visa Eligibility," accessed July 13, 2019, www.startupestonia.ee/visa/eligibility-estonian-startup.

¹⁹ La French Tech, "What Is the French Tech Visa?" accessed August 28, 2018, https://visa.lafrenchtech.com/. In March 2019, the visa was made accessible to all innovative enterprises, not only high-growth ones—a decision that came after the original scheme had fallen well short of expectations, generating only 150 recruitments in 1.5 years; Zeliha Chaffin, "Un 'French Tech Visa' élargi à toutes les entreprises considérées comme innovantes," *Le Monde*, March 1, 2019, www.lemonde.fr/economie/ article/2019/03/01/plus-ouvert-et-plus-simple-le-french-tech-visa-fait-peau-neuve_5429889_3234.html.

²⁰ Invest Chile, "Visa Tech Chile," accessed March 22, 2019, https://investchile.gob.cl/es/visa-tech-chile/.

²¹ Australian Government, Department of Home Affairs "Global Talent Scheme Pilot – Fact Sheet," accessed September 7, 2018, http://minister.homeaffairs.gov.au/alantudge/Documents/factsheet-global-talent-scheme-pilot.pdf; Emma Koehn, "Global Talent Scheme Fails to Issue Visas as Startups 'Crippled'," *The Sydney Morning Herald*, March 1, 2019, www.smh.com.au/business/small-business/global-talent-scheme-fails-to-issue-visas-as-startups-crippled-20190301-p51129.html.

Yessica Klein, "StartUp Visa and Tech Visa in Portugal: Here's What You Need to Know," Medium, January 23, 2019, https://medium.com/growinportugal/startup-visa-and-tech-visa-in-portugal-heres-what-you-need-to-know-389bd39a243.



knowledge and networks, and of the incubators and accelerators offered by many higher education institutions.

Crucially, introducing a start-up visa also allows a country to "market" itself specifically to young, high-potential, and innovative founders rather than to foreign entrepreneurs more generally—for instance, highlighting its strengths as a place that encourages innovation, ideally in a language that is recognizable to start-up communities worldwide. Effective branding of this sort is of vital importance in a field characterized by increasing competition for talent (see Box 2).

Box 2. New Actors, New Branding

While visa applications are normally associated with extensive red tape, start-up visas are generally marketed to potential applicants in a way that is young, trendy, and aesthetically captivating. Terms such as "creativity," "vision," "pioneering," or "global change" are used profusely, and sometimes governments employ relatively bold language or humor (the official website of an Estonian start-up visa, for example, temporarily embraced the term "Estonian Mafia," coined in 2017 by American investor-entrepreneur David McClure to reflect the positive impression Estonia's innovation environment made on him, and now commonly used to refer to the country's start-up ecosystem. Start-up visa programs are advertised in English—in some cases, exclusively so—through websites, international media, and information days in other countries. Application procedures are usually fully electronic, user friendly, available in English, and comparatively cheap: in the Netherlands, applying for a start-up visa costs 326 euros, compared to 1,350 euros for a normal entrepreneur permit.

The unique constellation of players behind start-up visas favors this "smart" branding. Ministries of economy often take the lead in designing, promoting, and (alongside immigration departments) administering this channel, either directly or via specialized innovation agencies. Frequently, education and employment ministries participate in planning, reviewing, and promoting the visa, while private-sector actors support government outreach efforts (as in Latvia, where the start-up community platform "Labs of Latvia" has taken it upon itself to strengthen the English-language marketing of the new start-up visa).

Increasingly, start-up visas are embedded within larger umbrella initiatives aimed at fostering the country's start-up ecosystem, usually managed and promoted by a specialized agency/secretariat created for this purpose. Often, the result is a coherent and powerful brand. In 2017, the Singapore government launched "Startup SG," an umbrella for its start-up-related programs and incentives, including the visa. On the occasion, the Minister of State for Trade and Industry highlighted the crucial importance of these branding efforts: "A coherent brand identity for Singapore start-ups that resonates among Singaporeans and the rest of the world is important, given the fierce global competition for entrepreneurial talent and funding today."

Sources: Startup Estonia, "About Startup Estonia," accessed September 6, 2018, http://startupestonia.ee/about; Labs of Latvia, "How to Apply for the Latvian Startup Visa—A Guide," updated August 24, 2017, www.labsoflatvia.com/news/how-to-apply-for-the-latvian-startup-visa-a-guide; Lianne Chia, "Government to Unify Start-Up Support Schemes under Startup SG Branding," Channel News Asia, March 3, 2017, www.channelnewsasia.com/news/singapore/government-to-unify-start-up-support-schemes-under-startup-sg-br-8774876.

III. Designing a Start-Up Visa Program

Policymakers designing start-up visa programs face a number of key decisions ranging from the admission criteria and skillsets they should prioritize to the permit's duration and conditions for renewal. Ultimately, these design choices depend on more fundamental decisions: how much risk is the country ready to take? How long is it willing to wait until promising ideas deliver profits? And how far is it willing to go to be on the map of international start-up entrepreneurs?



A. What Business Concepts Should Start-Up Visas Prioritize?

Start-up visas are clearly geared toward technology-intensive enterprises, but most are rather cautious when it comes to explicit sectoral limitations: they opt for barring what they deem to be unsuitable activities (such as restaurants, retail stores, or import-export businesses) rather than offering a detailed "positive list" of sectors. In part, this is due to the complexity of defining the tech sector, which cuts across traditional industries and transforms them. Some recently created start-up visas are, however, specific about their preferences: schemes in Thailand and Lithuania, for example, only apply to a handful of sectors considered of strategic importance, from biotechnologies to mechatronics. In any case, at the core of the start-up visa selection process is the business concept, which depending on the scheme may still be roughly sketched at the time of the application. Other criteria, such as the skills, qualifications, and experience of the applicant, are very important (see Section III.B.), but they are mainly judged based on how relevant they are to the planned enterprise.

As for other entrepreneur visas, investment capital is an important criterion for some start-up visas—though not for all (see the Appendix for more details). As part of their efforts to attract early-career entrepreneurs who may not have the fundraising capacity of more established businesspersons, most start-up visas tend to set a low bar for initial funding. In Estonia, no capital is required to apply for a start-up visa, whereas the more traditional entrepreneur visa requires investments of 65,000 euros. In Italy, while start-up visa applicants must have 50,000 euros in investment capital, this is one-tenth of the amount required for an entrepreneur visa.²⁴ Other countries, such as Ireland,²⁵ Singapore,²⁶ and Australia,²⁷ have followed a more iterative approach, progressively lowering or removing capital requirements that were initially quite high.

The pressure to fulfill quantitative job creation targets might discourage risk-taking ... to the detriment of the broader goal of fostering innovation.

Most start-up visas do not set initial job creation requirements, unlike entrepreneur visas, for a number of reasons. First, many start-ups simply cannot afford to hire employees at the beginning of their journey, when they are still finding their feet in the market and lack a continuous revenue and profit stream. Second, the pressure to fulfill quantitative job creation targets might discourage risk-taking (and even encourage entrepreneurs to target low-value-added sectors with cheaper labor), to the detriment of the broader goal of fostering innovation. Lastly, start-ups need to be cautious when hiring new people. While smart recruitment is important for any company, start-ups live and die depending on the people they

²³ Startup Lithuania, "Frequently Asked Questions," accessed August 29, 2018, www.startupvisalithuania.com/faq.

²⁴ Stranieriinitalia.it, "Flussi 2017: Ecco tutte le quote disponibili e chi può venire in Italia per lavoro," updated March 21, 2017, http://stranieriinitalia.it/attualita/attualita/attualita-sp-754/flussi-2017-ecco-tutte-le-quote-disponibili-e-chi-puo-venire-in-italia-per-lavoro.html.

In 2014, the Irish government lowered the capital requirements for the Start-up Entrepreneur Programme (STEP) from 75,000 to 50,000 euros, and introduced a 12-month permit with no capital requirement to allow would-be immigrant entrepreneurs to prepare a start-up visa application while getting acquainted with the start-up ecosystem in the country. See Irish Department of Justice and Equity, "Minister Shatter Announces Targeted Changes in the Start-Up Entrepreneur Programme" (press release, March 13, 2014), https://www.inis.gov.ie/en/INIS/Pages/Minister%20Shatter%20announces%20targeted%20changes%20in%20the%20Start-up%20Entrepreneur%20Programme.

²⁶ Singapore Government, Ministry of Manpower, "Enhanced EntrePass Scheme" (fact sheet, August 2, 2017), www.mom.gov.sg/-/media/mom/documents/press-releases/2017/0802-annex-a-enhanced-entrepass.pdf.

A scheme for early-stage entrepreneurs, without any minimum investment threshold, is currently being piloted in South Australia, next to the regular start-up visa route with capital requirements (AU \$200,000). The pilot will run until 2021. Government of South Australia, Immigration South Australia, "Supporting Innovation in South Australia (SISA)," accessed March 24, 2019, www.migration.sa.gov.au/resources/faq/supporting-innovation-in-south-australia-sisa.



hire. A start-up's small size and youth mean that each team member has a large potential impact on the company's future structure, culture, strategy—and therefore, its ultimate success.

But while job creation and minimum investment requirements are downplayed for start-up visas, the importance of innovation is elevated. Almost all start-up visas require applicants to prove that their proposed business is innovative—but visa programs can be unclear both about what they mean by "innovation" and how they measure it. For example, Singapore, Italy, and Cyprus use so-called intangible capital metrics such as intellectual property rights and patents, levels of research and development (R&D) spending, and education levels of the company's founders and employees.²⁸ But this one-size-fits-all approach may be insufficiently nuanced to capture genuine innovation. In Italy, government-led efforts to clarify what qualifies as an innovative start-up²⁹—not just for the purposes of the start-up visa, but also for a package of incentives and tax cuts accessible to all start-up founders regardless of nationality—produced a legalistic definition that gives weight to criteria such as annual revenue and founder/staff education levels that have little direct bearing on potential innovation and growth. This type of exercise can result in a burgeoning number of firms being officially listed as "start-ups" even though many are low-innovation businesses unlikely to lead to rapid growth, profitability, and job creation.³⁰ But most start-up visa programs follow an output-oriented logic, judging innovation by the proposed product and/or service. Because this approach is highly sector specific and requires detailed industry expertise, many such schemes build an expert assessment into their selection procedure (see Section III.C.).

Besides innovation, start-up visas often emphasize scalability—the ability of a business to grow and expand to new markets while reducing costs per unit, thus generating larger profit margins. The emphasis on scalability goes hand in hand with the focus on tech, since digital technologies have dramatically increased opportunities to create scalable products by cutting distribution and manufacturing costs. Scalability can be relatively easy to assess in theory, based on the proposed business concept and its model of value creation; but actual scaling is a lot more complex to predict in innovation-driven sectors, as it depends on fluctuating demand and global competition in a highly dynamic market. At a minimum, most start-up visa programs require applicants to set out in their business plan how they are going to enter the—ideally, international—market and achieve rapid grow, based on their innovative product and/or service.

B. What Founder Profiles Should Start-Up Schemes Prioritize?

Governments designing start-up visa programs need to consider how to select immigrants with the right skillset to create a successful enterprise. Start-up founders in knowledge- and technology-intensive sectors require specialized technical skills, as they often also have a hands-on role in the team, at least initially. At the same time, they need to be jacks of all trades, with at least a smattering of administrative, marketing, public relations, and recruitment know-how; specific soft skills (such as resourcefulness, charisma, and tenacity); and even certain beliefs (such as a positive view about the future and

²⁸ This is in line with an "input-driven" approach to measuring innovation. See Bhaskar Chakravorti, "What's the Best Way to Measure Innovation?" World Economic Forum, April 30, 2015, www.weforum.org/agenda/2015/04/whats-the-best-way-to-measure-innovation/.

³⁰ As of March 2019, Italy's National Company Register listed more than 10,000 "start-ups"; see Registro delle Imprese, "The Companies of Italian Innovators," accessed March 18, 2019, http://startup.registroimprese.it/isin/search?4. This is an increase of almost 15 percent compared with one year before; see Registro delle Imprese, "Cruscotto di indicatori statistici, 1° trimestre 2018," accessed March 18, 2019, http://images/stories/documenti/1-rapporto-trimestrale-2018-trend-registro-startup-innovative%2005_06_2018.pdf. The register is based on simple self-certification, raising doubts about its validity. See Giuditta Mosca, "Il flop delle start up italiane: non creano impiego, stentano ad andare all'estero e non sono aiutate dal Paese," Business Insider Italia, April 28, 2017, https://it.businessinsider.com/non-creano-impiego-stentano-ad-andare-allestero-e-non-sono-aiutate-dal-paese-loccasione-persa-delle-startup-italiane/.



technology's potential to solve challenges). While start-up visas do not have age criteria, the language they use often evokes youth with terms such as ambition, energy, learning, vision, and next generation. Their emphasis on digital technology and relatively low business or investment experience requirements also clearly point toward a younger age group.

An emphasis on applicants' human capital is particularly pronounced in programs admitting candidates with nascent business ideas that will need further development in the host country (see Section III.C.). Start-up visas have a more flexible approach to assessing human capital than other visas. For example, a university degree is almost never a rigid requirement (even though it can help). Most schemes rely instead on a case-by-case evaluation of applicants' skills and experience and their relevance to the proposed business idea. In New Zealand's Global Impact Visa, which is tied to an incubator program, an expert panel uses several qualitative and quantitative metrics to evaluate applicants' entrepreneurial capabilities, their vision and the skills to realize it, and even their alignment with the values of the program (such as boldness, authenticity, and global impact).³¹

In its two editions so far, the French Tech Ticket only accepted applications from teams of two or three cofounders, not individuals.

Because of this focus on human capital, many start-up visas solicit team applications. Especially in high-innovation sectors characterized by unpredictability, a well-balanced team can compensate for a founder's individual limitations and make a young start-up much more adaptable and resilient in the face of rapid change (investors may even regard the makeup of a team as a better predictor of success than the business proposal itself³²). In its two editions so far, the French Tech Ticket only accepted applications from teams of two or three cofounders, not individuals; similarly, Finland's start-up visa only accepts proposals submitted by teams.

An additional challenge is that even the most talented entrepreneurs coming from abroad may struggle to create a successful business without knowing the local business environment or having networks in place to raise capital. With this in mind, some programs try to harness the entrepreneurial potential of international students, who often have country-specific human capital, state-of-the-art knowledge, international networks, and links with research and technology hubs. Some visa schemes, such as the Italia Start-Up Hub initiative and the Danish Establishment Card, offer international students preferential treatment vis-à-vis other applicants from abroad.³³

C. Who Selects Participants?

While government agencies usually administer visa schemes, they may not have the industry expertise needed to assess business plans or entrepreneurial qualities. Evaluating applicants for start-up visas is especially challenging, given that it requires an in-depth assessment of ideas and future plans, in

³¹ Edmund Hillary Fellowship, "Apply to Cohort 6," accessed July 13, 2019, www.ehf.org/apply.

³² Alejandro Cremades, "Here Is What Startup Investors Look for in Entrepreneurs before Investing," Forbes, January 31, 2019, www.forbes.com/sites/alejandrocremades/2019/01/31/here-is-what-startup-investors-look-for-in-entrepreneurs-before-investing/.

³³ Italian Government, Ministries of Economic Development, Interior, and Labour and Social Policies, "Italia Startup Hub: The Policy of the Italian Government to Favour the Retention of Innovative Talents from All over the World: Guidelines," accessed March 24, 2019, http://italiastartupvisa.mise.gov.it/media/documents/Linee%20Guida%20Italia%20Startup%20Hub%20 [Eng].pdf; New to Denmark, "Establishment Card," updated June 18, 2019, www.nyidanmark.dk/en-GB/Applying/Work/Establishment%20card.



lieu of standard admissions metrics. Proposed projects can be unconventional and their success may depend on many moving parts (such as market competition, the availability of certain technologies, future developments in the sector, and changing private-sector investment priorities)—all complicating evaluation. Nongovernmental actors, especially from the private sector, thus play a prominent role in adjudicating and selecting candidates in many countries. Depending on the amount of control a government is willing to cede to the market, start-up visa schemes generally bring in private-sector actors in one of two ways:

- Third-party endorsement. In this market-driven approach, an expert organization must endorse (and pledge to support) a proposed business project before the candidate can officially apply for a start-up visa. The endorsing body is usually a destination-country institution that is involved in the start-up world—an incubator or accelerator, an investor organization, or a research and technology institution (see Box 3). Endorsing incubators may agree to support the candidate for one or two years (also depending on the duration of the permit), while for accelerators the time frame can be shorter due to the different nature of their services. Both incubators and accelerators may offer support in the form of facilities, counselling, mentoring, and guidance services. In the Netherlands, for example, endorsing incubators may help a young company with operational management, marketing, research, and seeking investors.³⁴ Investors normally offer start-up capital in return for some equity in the business. Third-party endorsement is not a radically new concept, as other entrepreneur visas already include preferential treatment for candidates backed by venture capital investors.³⁵ But start-up visas have undeniably given it much greater weight, frequently making it a requirement while also involving incubators and accelerators alongside investors. (See the Appendix for details on different schemes' requirements.)
- Multistakeholder evaluation committees. A more government-driven approach, this involves bringing experts in during the early stages of the selection process. An evaluation committee—usually including representatives from different ministries as well as other public entities and nongovernmental institutions with business expertise, such as incubators and accelerators³⁶—assesses the quality of each application. If approved, the candidate can then formally apply for a visa. By including private- and public-sector representatives, governments can ensure that candidates are selected based on both market demand and national economic priorities. In contrast to an endorsement-based system, expert committees produce neutral evaluations by actors with no direct material stake in the proposed start-up.

³⁴ Netherlands Permits and Visa, "Startup Visa," accessed September 6, 2018, https://business.gov.nl/coming-to-the-netherlands/permits-and-visa/startup-visa/.

³⁵ Madeleine Sumption, "Visas for Entrepreneurs: How Countries Are Seeking Out Immigrant Job Creators," *Migration Information Source*, June 13, 2012, https://www.migrationpolicy.org/article/visas-entrepreneurs-how-countries-are-seeking-out-immigrant-job-creators.

³⁶ Expert panels work best when they include people with hands-on experience with start-up development, rather than white-collar appointees from interest associations. In Chile and Estonia, for example, the committee includes risk investors, accelerators, tech experts, and entrepreneurs. In Lithuania, the evaluation committee is 40 percent public-sector and 60 percent private-sector representatives, and also includes hands-on evaluators from start-up accelerators and venture capital funds. See Startup Lithuania, "Lithuania's Startup Visa Scheme Explained," uploaded January 26, 2017, www.startuplithuania.com/news/lithuanias-startup-visa-scheme-explained/.



Box 3. Who Are the Endorsers?

In selection systems that involve endorsements, different types of actors can act as the endorsing organizations. Depending on the type of organization, the support they offer ranges from nonfinancial assistance to investment.

Incubators support start-ups in their early stages, when entrepreneurs have an idea they want to develop into a marketable product/service, but need help developing a plan of action. Start-ups can usually stay in an incubator for an extended period (sometimes more than a year) until they have a sustainable business model. Most incubators do not provide capital and rarely take an equity stake in the companies they support. Some are privately run (e.g., linked to a larger company) while others are publicly owned (e.g., linked to municipalities, economic development organizations, or universities).

Accelerators take on start-ups that already have a business model and offer more structured and often shorter programs than incubators (typically three to four months). They aim to add value to the nascent start-up and, at the end of the program, find investors so it can stand on its own feet. Many accelerators invest a small amount of capital in start-ups in exchange for a percentage of equity. Like incubators, accelerators can be public or privately operated.

Angel investors are usually wealthy individuals who invest in early-stage, high-potential companies in exchange for an equity stake. They generally offer financial backing, without other business development support. This makes getting capital from angel investors relatively quick and simple, but the sums they offer are small compared to venture capital funds (typically less than U.S. \$1 million).

Venture capital funds are groups of professional investors (including corporations, pension funds, and foundations) that target relatively mature start-ups with a convincing product or service, large potential market, and a talented team. They can invest significant amounts of capital, sometimes up to U.S. \$10 million, into a single company and sometimes also offer business development support.

Sources: George Deeb, "Is a Startup Incubator or Accelerator Right for You?" Forbes, August 28, 2014, www.forbes.com/sites/georgedeeb/2014/08/28/is-a-startup-incubator-or-accelerator-right-for-you/; Will Jiang, "Differences between an Angel Investor and a Venture Capitalist," Business.com, August 28, 2017, www.business.com/articles/angel-investors-vs-venture-capitalists/.

The active involvement of experts in the selection of candidates means that all start-up visa schemes have two procedural steps. First, applicants need to get their business idea endorsed by an expert organization or greenlit by an evaluation committee, and then they can apply for a visa. This preliminary expert assessment speeds up the visa issuance process, as only the highest-quality applications are seen by immigration authorities (who at that point only need to run standard checks, such as for security and self-subsistence requirements). And indeed, several start-up visas can boast much faster processing times than other entrepreneur visas, ranging from just a few weeks to three or four months.³⁷

Both models for bringing in nongovernmental experts have benefits and drawbacks. One advantage of the committee approach is its relative objectivity. Because the same team reviews all applications, it can apply standardized criteria, whereas endorsers apply their own. Committees also review all complete applications—something that cannot be expected from endorsement-based systems—although this makes the process more time consuming and resource intensive.

Third-party endorsement, on the other hand, appeals to governments because of its elegance. It allows governments to outsource part of the selection process, leaving it to the market to decide on a project's potential, and connects applicants to industry organizations that can guide and support their business. However, this model comes with certain risks. Giving nongovernmental entities a gatekeeping role

³⁷ In Chile, the process of visa acquisition was shortened in 2017, from 25 to 15 days. See Tas Bindi "Chile Introduces Lenient Tech Visa as US Applies Limitations on Immigration," ZDNet, April 6, 2017, www.zdnet.com/article/chile-introduces-tech-visa-as-us-looks-to-apply-limitations/. Estonia, Finland, Italy, and Portugal all have fast-track assessment procedures in place for start-up visa applicants, which take a little over one month.



in the admissions process can create a power imbalance between the potential sponsor and foreign entrepreneurs, which unscrupulous parties might exploit. Investors may demand unusually high equity shares as a "price" for endorsement, while large firms acting as sponsors through companyowned accelerators might use endorsement to keep potential competitors in check, which risks stifling innovation. Another challenge is that the goals of private investors and governments do not always coincide. Investors often underinvest in long-term innovation and public goods, whose profits may take longer to materialize and are harder to calculate, and instead focus on short-term returns, following the pace of equity markets.³⁸

Different schemes manage these risks in different ways, such as introducing a rigorous application procedure for prospective endorsers or using review panels to assess prospective endorsers and ensure they comply with industry standards.³⁹ Alternatively, programs may decide to follow Italy's lead and offer prospective applicants a choice between expert committee evaluation and third-party endorsement. This approach involves industry bodies in the scheme and provides them with opportunities for learning and growth, but without making them the only available entry point for start-up visa applicants. Hence, it may be particularly interesting for countries where the landscape of incubators, accelerators, and risk investors is still maturing.

Programs may decide to follow Italy's lead and offer prospective applicants a choice between expert committee evaluation and third party endorsement.

D. What Services Should Start-Up Visa Programs Offer Entrepreneurs?

Governments need to decide what assistance to offer start-up entrepreneurs through their programs, for example, to help them better understand the local market, build networks, and raise capital. Most start-up visa programs fall into one of two categories, defined by the degree of assistance they offer to participating entrepreneurs:

- "Lean" schemes. Essentially fast-track visas, these programs speed up the admissions process but generally do not include more comprehensive benefits such as public funding or accelerator support since they mostly target companies that have already passed the idea stage. Some require or encourage applicants to seek the endorsement of an incubator, accelerator, investor organization, or research institution. This type of scheme can be seen in Australia, Canada, Cyprus, Denmark, Estonia, Ireland, Israel, Italy, Japan, Lithuania, the Netherlands, Portugal, Singapore, and the United Kingdom.
- "Thick" schemes. These incubator- or accelerator-based programs target entrepreneurs with early-stage business plans, offering them not only a visa but also a comprehensive set of services to help turn their ideas into businesses. They normally have quotas and are highly selective, with periodic deadlines for applications. Chile's start-up visa is linked to a six-month acceleration program and offers a coworking space, a grant (approximately U.S. \$80,000), and other perks such as software packages and consulting services. 40 The French Tech Ticket offers

³⁸ Neera Tanden and Blair Effron, "How to Foster Long-Term Innovation Investment," *Global Policy*, July 12, 2015, <u>www.globalpolicyjournal.com/blog/12/07/2015/how-foster-long-term-innovation-investment</u>.

³⁹ See, for example, Government of Canada, Immigration, Refugees, and Citizenship Canada, "Designated Organizations for the Start-Up Visa Program: About the Process," updated November 13, 2018, www.canada.ca/en/immigration-refugees-citizenship/services/immigrate-canada/start-visa/participate.html.

⁴⁰ Start-Up Chile, "Seed," accessed July 13, 2019, www.startupchile.org/programs/seed/.



accepted teams a grant of 45,000 euros, involvement in a one-year acceleration program, and support when relocating to France.⁴¹ Other examples that focus on training and incubation but that do not provide any funding have been introduced in New Zealand⁴² and in South Australia.⁴³

A "lean" scheme may suffice in a country that already has an established community of incubators, accelerators, and other organizations to support foreign start-ups. But countries with less developed support communities may wish to opt for a "thick" scheme that will allow them to develop some of this infrastructure. In this scenario, a thick scheme offers several advantages. First, linking the visa to a standard support package allows the government to ensure that visa holders receive high-quality services, while allowing for an up-close look at the challenges they encounter along the way. Second, offering foreign start-up entrepreneurs some equity-free public funding might initially compensate for the relative lack of private investment capital in some countries—Chile being one example "—and, ideally, kick-start a virtuous cycle that could eventually attract private investors. Third, thick schemes give the visa a stronger brand, as a tightly knit support infrastructure adds character to what would otherwise simply be an entry channel. Lastly, thick schemes can allow for the admission of candidates whose business projects are still a rough sketch but show great potential, placing them in a supportive environment that allows them to develop their ideas.

E. How Long Should Start-Up Visas Last?

All but one national start-up visa scheme offers a temporary permit (Canada, the sole exception, offers permanent residence). The typical duration is shorter than for more traditional entrepreneur and investor visas, usually lasting a couple years. And while some schemes, particularly in traditional settlement countries such as Australia and New Zealand allow start-up visa holders to transition to permanent residence, European schemes do not offer these preferential pathways; start-up visa holders may be eligible only after five years or longer, following the general criteria of long-term residence for third-country nationals.

In some countries, the expectation is that once the company is up and running, start-up entrepreneurs can switch to conventional entrepreneur visas, which generally last longer. He But it can be tricky to define this cutoff point: when does a start-up stop being a start-up? (For example, is it just a question of making profits? The demanding business requirements of an entrepreneur visa can be difficult for many start-up visa holders to meet within the first few years of their business. To tackle this issue, most countries resort to repeat renewals of start-up visas, sometimes offering a renewed permit

⁴¹ La French Tech, "Questions on the French Tech Ticket Program Season 2," accessed July 13, 2019, www.frenchtechticket.com/7/faq.

⁴² Immigration New Zealand, "Global Impact Visa (GIVs)," accessed March 24, 2019, www.immigration.govt.nz/new-zealand-visas/options/start-a-business-or-invest/i-want-to-invest-or-do-business-in-nz/the-global-impact-visa.

⁴³ Government of South Australia, "Supporting Innovation in South Australia."

⁴⁴ Naomi Larsson, "Welcome to Chilecon Valley: A Startup Hub with Its Own Special Charm," *The Guardian*, December 22, 2016, www.theguardian.com/small-business-network/2016/dec/22/chile-accelerator-startup-grants.

⁴⁵ Across Europe, for example, many start-up visas are only valid for one or two years, although they can usually be renewed a few times and with relative ease. Outside Europe, the duration tends to be longer, reaching four years in Australia, New Zealand, and Thailand.

⁴⁶ In Estonia, for example, the start-up visa lasts for one year, while the residence permit for entrepreneurs has a duration of up to five years. See Startup Estonia, "Frequently Asked Questions," accessed March 22, 2019, https://startupestonia.ee/visa/faqs. In the Netherlands and Italy, start-up visas are granted for one year, while the generic self-employment permit is valid for two years. See Italian Government, Ministry of the Interior, "Visto e permesso di soggiorno," updated August 14, 2018, https://www.interno.gov.it/it/temi/immigrazione-e-asilo/modalita-dingresso/visto-e-permesso-soggiorno.

⁴⁷ Natalie Robehmed, "What Is a Startup?" *Forbes*, December 16, 2013, <u>www.forbes.com/sites/natalierobehmed/2013/12/16/what-is-a-startup/</u>.



with a longer duration.⁴⁸ While a few countries, such as the Netherlands and Estonia, try to avoid indefinite extensions of start-up visas, viewing them as transitional permits, they are well aware of the difficulties immigrants who hold them can face when trying to meet the more arduous entrepreneur visa requirements. Instead, these countries offer preferential pathways for start-up visa holders to switch to another entrepreneur permit, for example, by waiving the minimum capital requirement (as Estonia does) or by applying much more lenient assessment procedures if the endorsing organization has issued a positive recommendation (as in the Netherlands).⁴⁹

It is likely that start-up visa programs will start issuing longer permits that give entrepreneurs more certainty.

Granting a longer residence period can provide more certainty to investors and accelerators with a stake in a start-up's success. (It is no coincidence that Canada—where investors arguably have the strongest role in selection—is the only country to offer permanent residence immediately.) But a short permit duration, if accompanied by realistic options for foreign entrepreneurs to prolong their stay, has its advantages too, particularly for schemes that are still at the pilot stage, as governments can monitor their programs closely to see how participants fare at an early stage and ensure the program's integrity. But with competition for entrepreneurs growing and countries under pressure to offer attractive packages for innovative entrepreneurs, it is likely that start-up visa programs will start issuing longer permits that give entrepreneurs more certainty. In some countries, this trend is already underway: in 2017, Singapore doubled the duration of the renewal permits for its EntrePass visa (from one to two years), and in the same year, France became the first European country to introduce a four-year permit for start-ups, under its French Tech Visa scheme.

F. How Should Success Be Measured?

Governments designing start-up visa schemes must also grapple with what constitutes "success," and how it can be measured. Most schemes are only a few years old, and some are still running as pilots. Measuring success is therefore particularly important, both for the more immediate purpose of deciding whether an individual visa should be renewed and for the more structural goal of assessing whether the visa scheme is fulfilling its policy objectives.

Classic entrepreneur schemes usually link renewal to quantitative metrics such as job creation and growth rates. Start-up visas are considerably more flexible. In Italy, for example, start-up visa holders simply need to prove they established a company that meets the legal definition of innovativeness to get their visa renewed.⁵⁰ New Zealand's Entrepreneur Work Visa has a total duration of three years, but there is an intermediate "checkpoint" at the end of the first year (when the official "start-up stage"

In Ireland, start-up visas are initially granted for two years, but they can be renewed for three years; after five years of residence, permit holders under the program gain access to long-term residence. See Irish Naturalisation and Immigration Service (INIS), Start-up Entrepreneur Programme: Guidelines (Dublin: INIS, 2018), www.inis.gov.ie/en/INIS/Guidelines%20for%20STEP%20Applications%20January%202018.pdf/Files/Guidelines%20for%20STEP%20Applications%20January%202018.pdf/Files/Guidelines%20for%20STEP%20Applications%20January%202018.pdf. In Denmark, the initial permit is valid for two years, but any successive renewal gives it an additional validity of three years. See New to Denmark, "Start-Up Denmark," accessed March 24, 2019, www.nyidanmark.dk/en-GB/You-want-to-apply/Work/Start-up-Denmark.

⁴⁹ See Government of the Netherlands, "Self-Employment Scheme to Be More Accessible for Start-Ups" (news release, December 14, 2015) www.government.nl/latest/news/2015/12/14/self-employment-scheme-to-be-more-accessible-for-start-ups.

⁵⁰ See Italian Government, Ministries of Economic Development, Foreign Affairs and International Cooperation, and Interior, "A New Visa Policy to Attract Innovative Entrepreneurs from All over the World: Italia Startup Visa: Guidelines," updated March 20, 2018, 8, http://italiastartupvisa.mise.gov.it/media/documents/Guidelines%20ISV%20ENG%2020_03_2018%20def.pdf.



of the visa ends) to make sure that the business has been set up.⁵¹ And in Denmark, a committee evaluates the foreign start-up entrepreneur based on four rather broad criteria (the company's performance, commercial potential, consistency with the original business plan, and potential for growth and innovation).⁵² The candidate is not required to fulfil every single one of these criteria, but simply to have a satisfactory average score.

This flexibility is key to the success of start-up visas. As new risk-taking projects, start-ups are inherently volatile. The fast pace of innovative industries, combined with their global character,⁵³ add to their unpredictability and make it hard to evaluate—or write off—a start-up simply based on its underwhelming short-term performance.

While it is true that start-up experiences are very diverse, industry experts could assess their progress through common developmental stages.

At the same time, policymakers designing start-up visas need to strike a good balance between flexibility and standardization. While it is true that start-up experiences are very diverse, industry experts could assess their progress through common developmental stages⁵⁴ as benchmarks for their development trajectory (e.g., the formation stage of developing a vision and building a team; the validation phase of developing a product and testing it; and the scaling phase of seeking a larger market). Another common approach is to evaluate the start-up based on the targets proposed in the original application, while taking into consideration that changing direction or even insolvency are realistic scenarios and may not indicate the ultimate failure of the project (or the entrepreneur). Instead of stigmatizing failure and linking it to the threat of visa termination, start-up visa schemes should include tools to help innovators recover quickly from setbacks. In Italy, for example, start-up visa holders can access a fail-fast mechanism that limits the financial and reputational costs associated with failure and speeds up liquidation procedures, allowing entrepreneurs to embark on a new project.⁵⁵

IV. How Successful Are Start-Up Visas at Recruiting and Developing Talent?

Many start-up visa schemes have only been operational for a few years at most, making it difficult to evaluate how successful they are in recruiting entrepreneurial talent and fostering new start-ups that add value to the national economy. The meager amount of data available, combined with national variations both in visa programs and the broader business and innovation environment, beg caution when comparing schemes and drawing early conclusions about their results.

⁵¹ Immigration New Zealand, "Entrepreneur Work Visa," accessed September 6, 2018, www.immigration.govt.nz/new-zealand-visas/apply-for-a-visa/about-visa/entrepreneur-work-visa.

⁵² Start-Up Denmark, "Extension," accessed September 6, 2018, www.startupdenmark.info/extension/

⁵³ Due to the high scalability of tech products and services, many start-ups are competing with players worldwide.

⁵⁴ Startup Commons, "Startup Development Phases," accessed September 6, 2018, www.startupcommons.org/startup-development-phases.html.

⁵⁵ Italian Government, Ministry of Economic Development, *Executive Summary of the New Italian Legislation on Innovative Startups*.



Adding to the complexity of evaluation, start-up visas have numerous interrelated but distinct goals. Generally, three main objectives can be identified:

- Economic impact. First, all governments introducing a start-up visa aim to achieve a positive economic impact. This impact can be articulated in a number of ways, such as business activity, economic growth, employment creation, attracting foreign investment, increased exports, and international competitiveness. It is telling, however, that there is very little public communication of the expected economic benefits of start-up visas and what their size or timeline for delivery might be. On the contrary: in some cases, governments communicating early results of start-up visas have even downplayed these benefits, as if focusing on financial and economic indicators would miss the point. The official website of Start-Up Chile on one hand boasts positive numbers (including raising capital 18 times higher than the government's investment in the program, almost 80 percent of which comes from international investors);⁵⁶ at the same time, it stresses that the program's original goal is to improve the country's entrepreneurial culture, rather than to produce immediate economic impact.⁵⁷
- *Ecosystem impact.* A second key objective of start-up visa schemes is fostering a welcoming climate for entrepreneurship and innovation, especially in countries that have yet to establish themselves as major innovation hubs. This impact can be measured in terms of the rate of start-up activity, expansion of a financial market, and proliferation of relevant infrastructure, such as incubators and accelerators. Countries as different as Singapore, Chile, Cyprus, and Portugal have explicitly mentioned strengthening the business ecosystem as a central goal—if not the most important one—of their schemes.⁵⁸
- **Brand impact.** Lastly, a crucial goal is making the country attractive to international start-up communities. Governments recognize that they are competing with other countries for start-up entrepreneurs, and that a start-up visa can help them achieve recognition internationally as an entrepreneurship-friendly place.⁵⁹ Some countries, such as Chile, actively measure this objective on a rolling basis, including mentions in international media and academic reports or international rankings. Most other start-up visa programs measure this by looking at the number of applications received.

Measuring the economic impact of start-up visas is not only extremely difficult given the limited data available at this stage, but would also be misleading, as these schemes focus on middle- to long-term outcomes instead of immediate economic returns. Similarly, the relative youth of these schemes makes it difficult to evaluate the extent to which they have helped improve the culture or infrastructure for entrepreneurship. Brand impact, on the other hand, is comparatively easy to review at an early stage—and it is often one of the first indicators governments use to assess success. Taking stock of the first season of the French Tech Ticket, for example, the initiative's secretariat highlighted its success in spreading "a message of attractiveness for welcoming international start-ups," citing numbers of applications as well as the participants' positive perceptions of France as a place to do innovative

⁵⁶ Start-Up Chile, "Economic Impact," accessed July 7, 2019, www.startupchile.org/economic-impact/.

⁵⁷ Start-Up Chile, "Economic Impact."

⁵⁸ Startup Portugal, "Startup Visa," accessed September 6, 2018, http://startupportugal.com/startup-visa/; Singapore Government, Ministry of Manpower, "Startup SG Talent: Enhanced EntrePass to Attract Global Startup Talent to Build Innovative Businesses in Singapore" (press release, August 2, 2017), http://www.mom.gov.sg/newsroom/press-releases/2017/0803-enhanced-entrepass-to-attract-global-startup-talent-to-build-innovative-businesses-in-singapore; Republic of Cyprus, Presidency, Unit of Administrative Reform and Development, "Cyprus Startup Visa for Foreign Nationals of Non-EU Countries—Startup Visa Scheme" (brochure, February 2017), www.reform.gov.cy/assets/mainmenu/168/docs/startup-visa_scheme_english_version.pdf; Start-Up Chile, "Cultural Impact," accessed June 25, 2019, www.startupchile.org/social-impact/.

⁵⁹ Irish Department of Justice and Equity, "Minister Shatter Announces Targeted Changes."



business.⁶⁰ Therefore, examining the interest start-up visas have generated (primarily measured in numbers of applications) and the profiles of the applicants they have attracted might provide an early indication of the potential impact of these programs.

How Popular Are Start-Up Visa Programs?

With their focus on quality and intensive selection procedures, start-up visas are by design a low-volume admissions channel. With this in mind, application numbers are a somewhat better indicator than the number of visas granted when evaluating demand. Countries with a "lean" visa scheme have generally started out with low numbers of applications and visa grants, in spite of national start-up ecosystems that are often quite attractive—such as those in Canada, Ireland, Australia, and the Netherlands. Even though governments generally do not set numerical targets (and have sometimes played it cool in the face of low numbers⁶¹), some of these schemes have been regarded as underperforming in their early years.⁶² This can be attributed to high admission requirements, sometimes compounded by a lack of branding and promotion of the visa, or by weak cooperation between the stakeholders involved.

Even though governments generally do not set numerical targets ... some of these schemes have been regarded as underperforming in their early years.

Accessing these schemes requires initiative among applicants, particularly when they have to obtain third-party endorsement, and some financial requirements (such as having minimum capital or subsistence funds) might be hard to meet, particularly for early-career start-up entrepreneurs. As competition for talent grows, even countries that have traditionally been counted among the most attractive destinations for entrepreneurs are realizing they cannot afford to be too cautious—a lesson they have sometimes had to learn the hard way: Australia's Entrepreneur Visa, which requires minimum capital of AU \$200,000 (approx. U.S. \$140,000) resulted in a meager 25 applications and eight granted visas in two and a half years. As a proposed to be a proposed to be a possible of the countries of the countrie

⁶⁰ La French Tech, "Press Kit—French Tech Ticket: Season 2," accessed March 24, 2019, https://drive.google.com/file/d/0805001Wvh9-dWHRYX3FxYktMME0/view.

⁶¹ An official evaluation of the Canada Start-Up Visa, released in November 2016, stressed that "[w]hile some key informants felt that the pilot is currently not fulfilling the need because of the low number of successful applicants, many other[s] felt that the relatively low number was not an issue because the program was meant to be small and focus on attracting high value entrepreneurs. ... [M]ost key informants were positive about the pilot but noted that it is too early to measure its long-term success." See Government of Canada, "Evaluation of the Start-Up Visa (SUV) Pilot," updated May 31, 2017, www.canada.ca/en/immigration-refugees-citizenship/corporate/reports-statistics/evaluations/start-visa-pilot.html.

⁶² On Canada's start-up visa's failure to attract applications a few years after its establishment, see Lisa Xing, "Start-Up Visa Program a 'Disappointment,' says Windsor, Ont. Lawyer," CBC News, February 12, 2016, www.cbc.ca/news/canada/windsor/start-up-program-disappointment-laywer-says-1.3443956. On Denmark's scheme attracting less interest than expected, see Niels Brandt Pedersen and Felix Bekkersgaard Stark, "Denmark Could Be a DREAM for Foreign Entrepreneurs," Confederation of Danish Industry, April 1, 2016, https://di.dk/english/news/pages/denmarkcouldbeadreamforforeignentrepreneurs.aspx.

⁶³ Dominic Powell, "Government Urged to Reform Entrepreneur Visa after Receiving Only One Applicant in over 12 Months," SmartCompany, November 30, 2017, www.smartcompany.com.au/startupsmart/news/entrepreneur-visa-only-one-applicant-in-12-months/.

⁶⁴ Australian Government, Department of Home Affairs, "Freedom of Information Request: FA19/01/00704," accessed July 13, 2019, www.homeaffairs.gov.au/foi/files/2019/fa190100704-document-released.PDF.



On the other hand, countries with more recently introduced "lean" visa schemes (such as Lithuania and Estonia, whose start-up visas entered into force in January 2017) have been able to attract higher numbers of applications from the outset. ⁶⁵ This is largely thanks to relaxed requirements around capital and third-party endorsement, better branding, stronger involvement of local start-up communities, user-friendly and swift application procedures, and—in the case of Estonia—the inclusion of start-up employees along with start-up founders from the beginning.

Table 3. "Lean" Start-Up Visa Application and Approval Numbers, 2014–First Half of 2019

Scheme		2014	2015	2016	2017	2018	2019 (First Half)	
Australia	Applications	N/A		25			N/K	
Subclass 188 Entrepreneur	Approvals			8			N/K	
Canada	Applications	32	61	76	118	302	N/K	
Start-Up Visa	Approvals	9	90	94	196	212	N/K	
Denmark	Applications	N/A (918 teams/business pl 173 business plans appr 75 granted permits			-	ns)	N/K	
Start-Up Denmark	Approvals					N/K		
Ireland Start-Up Entrepreneur	Applications	N/K	49	134	171	35	N/K	
Programme (STEP)	Approvals	N/K	25	33	23	12	N/K	
Italy	Applications	14	44	99	156	102	35	
Start-Up Visa	Approvals	105 119			19	N/K		
Lithuania	Applications	- N/A			126	178	N/K	
Start-Up Visa	Approvals				28	41	N/K	
New Zealand Entrepreneur Work Visa	Applications	3	123	346	218	354	N/K	
(only "start-up stage," interim visa)	Approvals	1	53	208	100	35	N/K	
Netherlands	Applications	N/A	95	86	N/K	N/K	N/K	
Start-Up Visa	Approvals		21	28	N/K	N/K	N/K	
Portugal	Applications	N/A				115		
StartUP Visa Portugal	Approvals					57		

N/A = not applicable; N/K = not known.

Sources: Australian Government, Department of Home Affairs, "Freedom of Information Request: FA19/01/00704," accessed July 13, 2019, www.homeaffairs.gov.au/foi/files/2019/fa190100704-document-released.PDF; Italian Government, Ministry of Economic Development, 107_2019.pdf; Italian Government, Ministry of Economic Development, https://lineaces.gov.it/images/stories/documenti/ISVH-4th-quarterly-report-2018-15_01_2019.pdf; Italian Government, Ministry of Economic Development, https://lineaces.gov.it/images/stories/documenti/IsVH-4th-quarterly-report-2018-15_01_2019.pdf; Italian Government, <a href="https://lineaces.gov.it/images/stories/documenti/IsVH-4th-quarterly-report-2018-15_01_2019.pdf; Italian Government, <a

⁶⁵ See DELFI, "The Number of Foreign Startups Choosing Lithuania for Starting Their Businesses Is Growing," DELFI, January 17, 2019, https://en.delfi.lt/lithuania/economy/the-number-of-foreign-startups-choosing-lithuania-for-starting-their-businesses-is-growing.d?id=80125507; Startup Estonia, "Two Year Anniversary of the Estonian Startup Visa," updated January 17, 2019, https://startupestonia.ee/blog/two-year-anniversary-of-the-estonian-startup-visa; Government of Canada, "Evaluation of the Start-Up Visa (SUV) Pilot."



Some of the earlier schemes appear to have drawn the right conclusions from their "teething troubles" and were able to improve their application figures. The Dutch start-up visa, for instance, has profited from closer collaboration between public authorities and endorsing bodies, likely contributing to a steep increase in applications and visas granted in 2017.⁶⁶ And the Canadian Start-Up Visa experienced an uptick in applications in the final stages of its five-year pilot phase (which ended in March 2018), thanks to better branding and promotion measures—such as a short explanatory video released in 2017.⁶⁷ To further bolster the now-permanent visa program, the Canadian government decided in 2019 to invest CA \$4.6 million over five years to enhance the start-up visa client experience—including by developing an online portal to pre-evaluate applicants before they pitch their ideas to investors, and giving government officials a stronger role in connecting candidates to incubators, accelerators, or investors that may endorse them.⁶⁸

Incubator/accelerator programs with end-to-end support (thick schemes) have proven highly attractive to applicants, thanks to their benefit package as well as their openness to more inexperienced candidates and nascent business ideas (see Table 4). But the few spots available in these schemes result in intense competition and very resource-intensive, case-by-case assessments. In France, for example, only about 3 percent of all applicants were selected for a place in the French Tech Ticket program in 2015 and 2016.⁶⁹

Scheme 2015 2016 2017 2018 >5,800 >3,200 N/K N/K Chile* (two cohorts: 20. Applications (three cohorts: (two cohorts: 16. (two cohorts: 18, Start-Up Chile 13, 14, 15) 17) 19) 21) (Only "Seed" stream) Approvals 272 194 176 133 1.380 2.700 **Applications** N/A N/A **France** (cohort 1) (cohort 2) French Tech Ticket N/A 180 N/A Approvals 50 483 813 **Applications** N/A N/A (two cohorts: (two cohorts: **New Zealand** 1, 2) 3, 4) Global Impact Visa N/A N/A 69 Approvals

Table 4. "Thick" Start-Up Visa Application and Approval Numbers,* 2015-18

^{*} These data are application and approval numbers for the incubator/accelerator programs around which these start-up visas are built; they include a small number of each country's own nationals who may also participate in these programs. *Sources:* For Chile, author compiled data from Start-Up Chile blog posts welcoming incoming "generations" of Start-Up Chile participants; see Start-Up Chile, "Community," accessed July 20, 2019, www.startupchile.org/community/. For France, see La French Tech, "French Tech Ticket: A Promising Season 1," accessed August 29, 2018, www.startupchile.org/community/. For France, see La French Tech, "French Tech Ticket: A Promising Season 1," accessed August 29, 2018, www.startupchile.org/community/. For France, see La French Tech, "French Tech Ticket: Recap of Period 2," accessed August 29, 2018, www.startupchile.org/community/. For France, see La French Tech, "French Tech Ticket: Recap of Period 2," accessed August 29, 2018, www.startupchile.org/community/. For New Zealand, see Yoseph Ayele, "accessed August 29, 2018, www.startupchile.org/community/. For New Zealand, see Yoseph Ayele, "accessed August 29, 2018, www.startupchile.org/community/. For New Zealand, see Yoseph Ayele, "Announcing the EHF Inaugural Cohort," Edmund Hillary Fellowship, July 11, 2017, https://stories.ehf.org/announcing-the-ehf-inaugural-cohort-b920ef87118c; Yoseph Ayele, "44 Fellows Join Cohort 4!" Edmund Hillary Fellowship, December 19, 2018, https://stories.ehf.org/a9-ehf-fellows-joi

⁶⁶ StartupDelta, "Our Initiatives and Results: StartupDelta Plan of Action 2017," accessed March 24, 2019, www.startupdelta.org/our-initiatives-and-results/.

⁶⁷ Government of Canada, Immigration, Refugees, and Citizenship Canada, "Start-Up Visa Program," updated August 10, 2017, www.canada.ca/en/immigration-refugees-citizenship/news/video/start-up-visa-program.html.

⁶⁸ Government of Canada, Ministry of Finance, "Equality + Growth: A Strong Middle Class," updated February 27, 2018, www.budget.gc.ca/2018/docs/plan/intro-en.html; Lubna Kably, "Canada Goes All out for Foreign Entrepreneurs," *Times of India*, March 22, 2018, https://timesofindia.indiatimes.com/business/india-business/canada-goes-all-out-for-foreign-entrepreneurs/articleshow/63405342.cms.

⁶⁹ La French Tech, "French Tech Ticket: A Promising Season 1," accessed August 29, 2018, www.frenchtechticket.com/6/about-the-first-edition; Government of France, "French Tech Ticket: Recap of Period 2," accessed August 29, 2018, www.gouvernement.fr/en/french-tech-ticket-recap-of-period-2-0.



This early evidence invites a few cautious conclusions:

- Lean start-up visa schemes have a low level of risk, due to the high thresholds they set for applicants. Their drawbacks are that they offer limited opportunities for inexperienced candidates and less fleshed-out projects, and they have not always been able to spark great interest abroad or engagement from local start-up communities. However, their attractiveness tends to improve over time, especially when public authorities and actors in the domestic start-up ecosystem cooperate. And with smart branding, these schemes can send a powerful message of welcome to international entrepreneurs, putting the country on their radar. As such, they can be a low-risk starting point that can lead to bolder, more comprehensive programs.
- Thick schemes, although comparatively costly, appear to be the most effective in terms of branding, visibility, and attractiveness. By offering more than just a visa, they create a pull factor rather than simply removing barriers. But by granting access to comprehensive benefits, they risk amplifying short-term incentives at the cost of long-term commitment—as entrepreneurs might utilize them as launching points before relocating to more promising destinations. However, this is a price many countries may be willing to pay, at least temporarily, in order to gain a reputational advantage.

V. What Does the Future Hold for Start-Up Visas?

More and more countries are entering the competition for foreign start-up entrepreneurs and other talented immigrants. Creating a start-up visa program offers a way to attract and develop this talent while demonstrating the government's commitment to entrepreneurship and innovation. For example, where political uncertainty threatens to constrain innovation, governments may resort to a start-up visa to reassert the government's commitment to investing in high-tech sectors as well as to project a positive message of openness to foreign entrepreneurial talent.

In the United Kingdom, where the prospect of Brexit has created insecurity among start-up entrepreneurs, tech professionals, and venture capital investors, the government tried to generate excitement in the innovation community by launching two new visa routes in March 2019: the Start-Up Visa for early-stage, high-potential entrepreneurs, and the so-called Innovator Visa for more experienced businesspeople. Compared to their predecessor schemes, the visas relax capital requirements, make third-party endorsement obligatory, involve innovation stakeholders (including from the private sector) more closely in assessment and selection, are open to a wider pool of talent, and have a longer duration, giving entrepreneurs more time to find their feet (see Table 5). Evidently, these new schemes have absorbed many of the lessons learned in other countries, as well as similar recommendations from government-appointed experts in 2015. But with fears of a disorderly Brexit looming large and extreme uncertainty about UK-based companies' future access to EU markets and

⁷⁰ A press kit for the French Tech Ticket, summarizing the results of the scheme's first season, boasts that 86 percent of participants gained a more positive perception of the French ecosystem after one year spent in France. See La French Tech, "Press Kit—French Tech Ticket: Season 2."

⁷¹ Data from 2016 showed that only 10.3 percent of the foreign start-up founders participating in Start-Up Chile stayed in the country after the accelerator program. See Catalina Bräuchle, "The Story of Chile's Entrepreneurial Revolution" (presentation slides, Moldova ICT Summit, April 2016), www.slideshare.net/moldovaictsummit2016/the-story-of-chiles-entrepreneurial-revolution.

⁷² Bräuchle, "The Story of Chile's Entrepreneurial Revolution"; Helen Warrell, "World's Wealthy Face UK Golden Visa Crackdown," *Financial Times*, March 7, 2019, www.ft.com/content/3bbbaab4-403d-11e9-9bee-efab61506f44.

⁷³ Migration Advisory Committee, *Tier 1 Entrepreneurs*.



workers, it might take a lot more than a visa for the country to avoid an exodus of capital, ideas, and skills—especially as direct competitors such as France ramp up their strategies to lure international start-up talent.⁷⁴

Table 5. Characteristics of Old and New UK Visas for Entrepreneurs

Tier 1 Graduate Entrepreneur (until July 5, 2019)	Tier 1 Start-Up Visa (from March 29, 2019)	Tier 1 Entrepreneur (until March 29, 2019; extensions possible until 2023)	Tier 1 Innovator Visa (from March 29, 2019)
International graduates (with a UK degree) with strong business skills and/or ideas	Not only recent graduates but early- stage, high-potential applicants with an innovative, scalable, and viable business idea, who already have or are developing the skills to run a business	More experienced entrepreneurs with a credible and viable business plan and the capital to realize it	More experienced entrepreneurs with an innovative, scalable, and viable business plan and access to some investment capital
Endorsement needed from a higher education institution or from the Department of International Trade	Endorsement needed from one of a broad range of accelerators, incubators, angel investment groups, universities	Endorsement not needed in principle, but necessary to qualify for the lower capital threshold (£50,000); from a recognized UK-based venture capital firm, seed funding competition, or government entity	Endorsement needed from one of a broad range of accelerators, incubators, angel investment groups, universities
No capital needed	No capital needed	Minimum £200,000 capital (or £50,000 in limited cases)	Minimum £50,000 capital
1-year duration	2-year duration	3-year duration	3-year duration
Genuine and viable business idea	Innovation, scalability (into national markets), viability	Genuine and viable business idea (assessed via business plan)	Innovation, scalability (into national and international markets), viability
No sectoral emphasis	Emphasis on tech and innovation	No sectoral emphasis	Emphasis on tech and innovation
Cannot work outside business	Can take on outside work, provided the majority of time is spent on developing the business idea	Cannot work outside business	Cannot work outside business

Sources: UK Home Office, Visas and Immigration, "Statement of Changes in Immigration Rules," updated March 7, 2019, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/784059/CCS001_CCS0319710302-001_HC_1919_Web_Accessible.pdf; Tech Nation, "Startup and Innovator Visa: Two New Visa Options," accessed March 24, 2019, https://technation.io/visa/startup-and-innovator/.

⁷⁴ One of the main Brexit-related risks for the UK tech industry is the brain drain of EU professionals, who make up about 7 percent of all tech workers in the United Kingdom and as much as one-fifth of those in London. Many UK-based tech businesses already report a plunge of applications from EU professionals. See Aliya Ram, "Tech Start-Ups Activate Brexit Contingency Plans," *Financial Times*, February 21, 2018, www.ft.com/content/c3a2ec46-1341-11e8-8cb6-b9ccc4c4dbbb; John Harris, "The Brexit Threat Hanging over Startups in the UK Tech Sector," *The Guardian*, January 29, 2019, www.theguardian.com/politics/2019/jan/29/the-brexit-threat-hanging-over-startups-in-the-uk-tech-sector.



As political tides change and attitudes to immigration become more volatile, even previously uncontroversial entry channels such as those for start-up entrepreneurs, with their low number of admissions and high potential to create employment and benefit the economy, have found themselves in the line of fire. In the United States, the days of the International Entrepreneur Rule—the Obama administration's makeshift solution to allow innovative foreign entrepreneurs to remain temporarily in the United States⁷⁵—appear to be numbered under the Trump administration. In May 2018, the U.S. Department of Homeland Security (DHS) proposed rescinding the rule due to its excessive complexity, overly broad interpretation of parole, lack of protections, and general inadequacy to fulfill its purpose. The process of rescinding the rule has not yet come to a close, but it expected to be completed in the fall of 2019. Meanwhile, a group of U.S. senators reintroduced the bipartisan *Startup Act* in early 2019. If passed, the bill would create up to 75,000 start-up visas for foreign entrepreneurs. As with many previous attempts to pass such legislation, however, this proposal is highly likely to fizzle out in Congress, stifled by political disagreements surrounding any major attempt to reform the U.S. immigration system.

The adverse long-term consequences predicted by many economists, who fear that the U.S. economy may lose innovativeness and competitiveness, ⁸⁰ are open for debate, like any attempt at long-term projections. But they do suggest that while a good start-up visa can contribute only modestly to attracting high-potential entrepreneurs, a bad visa scheme or the absence of one altogether can prove highly effective in keeping them away. Although it is unclear how many foreign start-up entrepreneurs the United States might lose in the future as a consequence of the rescission of the International Entrepreneur Rule, experts suggest many will opt to move to Canada, Europe, or other destinations;

Under the Obama administration, there were repeated attempts at passing legislation that would establish visas for immigrant entrepreneurs, but all failed. In 2010, for example, Senators John Kerry and Richard Lugar proposed the bipartisan *Startup Visa Act*, which would allow foreign-born entrepreneurs who meet certain conditions (job creation, U.S. \$1 million investment capital) to receive a two-year visa and then be eligible for legal permanent residency. However, the initiative did not gain enough traction in Congress. Toward the end of its second term, the Obama administration implemented the International Entrepreneur Rule in an attempt to break the legislative deadlock. The rule is a workaround solution that takes advantage of government's parole authority (i.e., the power to directly allow people to enter the country for reasons of "significant public benefit"). To be eligible for parole under the rule, candidates must have a substantial ownership interest in a start-up with potential for rapid growth and job creation, and provide evidence that their stay will provide significant benefit to the country, based on investment thresholds. See the Appendix of this report for more details; DHS, USCIS, "International Entrepreneur Rule," *Federal Register* 82, no. 10 (January 17, 2017): 5238–89, www.federalregister.gov/documents/2017/01/17/2017-00481/international-entrepreneur-rule.

⁷⁶ DHS, USCIS, "DHS Proposes to Remove the International Entrepreneur Rule," updated May 25, 2018, www.uscis.gov/humanitarian/humanitarian-parole/dhs-proposes-remove-international-entrepreneur-rule.

⁷⁷ DHS, USCIS, "Removal of International Entrepreneur Parole Program" (final stage rule, RIN 1615-AC04, Spring 2019), www.reginfo.gov/public/do/eAgendaViewRule?pubId=201904&RIN=1615-AC04 .

⁷⁸ The current *Startup Act* (not to be confused with the *Startup Visa Act*) is the sixth iteration of a bill first presented by Senator Jerry Moran (R-KS) and Mark Warner (D-VA) in December 2011, and later reintroduced (in revised versions) in 2012, 2013, 2015, and 2017. For the 2019 bill, see *Startup Act*, S 328, 116th Cong., 1st sess., *Congressional Record* 165, no. 21, daily ed. (February 4, 2019), www.congress.gov/116/bills/s328/BILLS-116s328is.pdf.

⁷⁹ See Paul, "The Trump Administration Is Driving Away Immigrant Entrepreneurs"; Jeff Farrah, "Immigration Policy Isn't Working for the Economy. Let's Fix That," National Venture Capital Association, January 31, 2019, https://nvca.org/blog/immigration-policy-isnt-working-economy-lets-fix/.

⁸⁰ New American Economy, "More Than 100 Leading Economists Oppose Department of Homeland Security Move to Rescind International Entrepreneur Rule" (press release, June 27, 2018), www.newamericaneconomy.org/press-release/more-than-100-leading-economists-oppose-department-of-homeland-security-move-to-rescind-international-entrepreneur-rule/; New American Economy, Opportunity Lost: The Cost of Rescinding the International Entrepreneur Rule (New York: New American Economy, 2018), www.newamericaneconomy.org/report/opportunity-lost-the-cost-of-rescinding-the-international-entrepreneur-rule/.



some have even reportedly been advised by U.S.-based incubators to consider alternatives such as Toronto or Paris.⁸¹

In the meantime, other countries are trying to take advantage of the tech community's rising anxiety and uncertainty about residence rights, market access, and business prospects in traditional start-up strongholds. In much of Europe, a growing venture capital industry and burgeoning landscape of incubators, accelerators, and coworking spaces point to an increasingly healthy start-up ecosystem. ⁸² Governments have contributed to this development, cutting red tape and creating incentives for investments in start-ups, such as lower taxation or public-private co-investment.

In much of Europe, a growing venture capital industry and burgeoning landscape of incubators, accelerators, and coworking spaces point to an increasingly healthy start-up ecosystem.

Nevertheless, different national rules, including for start-up visas, create barriers within the European single market. Foreign entrepreneurs based in one EU Member State who decide to operate in another, for example, might have to go through a whole new administrative procedure and satisfy different requirements, thus constraining their ability to grow their company across borders. The European Commission considered taking steps in 2016 to facilitate the immigration of start-up entrepreneurs at the EU level as a way to overcome this fragmentation. The idea to expand the EU Blue Card framework to include innovative start-up entrepreneurs, however, was eventually dropped on the grounds that a program designed for traditional employment would not work for this target group. Since then, the debate around an EU-wide start-up visa scheme has markedly cooled off (as has much of the momentum around beefing up EU rules on skilled immigration, with the current deadlock on reforming the EU Blue Card legislation.

⁸¹ Ellen Sheng, "Struggling for Visas, Tech Startups Are Looking Outside the U.S. To Launch Businesses," Forbes, July 2, 2017, www.forbes.com/sites/ellensheng/2017/07/02/with-h-1b-visas-scarce-tech-startups-look-outside-u-s-to-launch-businesses/. Apart from difficulties related to the absence of a real start-up visa, the current administration has also pledged to restrict the availability of H-1B visas for highly skilled workers, creating further problems for talent-hungry tech industries, while Mexico and Canada are introducing faster and simpler channels. See Kirk Semple and Ian Austen, "America's Competitors Angle for Silicon Valley's Business," www.nytimes.com/2017/08/02/world/trump-h1b-visa-silicon-valley-immigration.html. Against the backdrop of this policy climate, the United States is losing its supremacy as global innovation powerhouse, as venture capital is rapidly moving to other destinations. In 2007, 75 percent of the world's venture-backed funding flowed into the United States, compared to 45 percent in 2017. See Paul, "The Trump Administration Is Driving Away Immigrant Entrepreneurs."

⁸² In 2017, \$19 billion was invested in European start-ups, according to a report from venture firm Atomico, a 32 percent increase from 2016. According to the Global Innovation Index, eight out of ten of the world's most innovative markets are now located in Europe. See Thomas Smale, "Why Europe Is the Next Major Startup Hub," Entrepreneur Europe, May 10, 2018, www.entrepreneur.com/article/307924.

⁸³ Joanna Plucinska and Saim Saeed, "Europe Struggles to Attract Tech Talent Even as US Closes Doors: Immigration Rules and Attitudes toward Migrants, Plus Limited Investment in Tech Startups, Are All Big Hurdles," Politico, July 14, 2017, www.politico.eu/article/why-europe-still-lacks-silicon-valleys-sex-appeal/.

⁸⁴ It noted that "individual Member States may lack the recognition or attractiveness for entrepreneurs which the EU, as the largest economy in the world, can provide." See European Commission, Expert Group on Economic Migration, "Reviewing the Blue Card Directive" (discussion paper no. 2, European Commission, Brussels, March 17, 2015), 6, http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=19252&no=3.

⁸⁵ European Commission, "Questions and Answers: An Improved EU Blue Card Scheme and the Action Plan on Integration" (press release, June 7, 2016), www.europa.eu/rapid/press-release_MEM0-16-2071_en.pdf.

⁸⁶ Katrien Luyten and Selene González Díaz, "Legal Migration to the EU" (briefing, European Parliamentary Research Service, Brussels, March 2019), www.europarl.europa.eu/RegData/etudes/BRIE/2019/635559/EPRS BRI(2019)635559_EN.pdf.



With the European elections in May 2019 and a changing of guard in all EU institutions, including a new European Commission set to take office in late 2019, there is a chance the topic might reappear on the agenda in the coming years. But even so, it would be very hard for such a plan to secure buy-in from EU countries with strong national start-up strategies and visa schemes, such as France with its La French Tech initiative, ⁸⁷ as they are more likely to see each other as competitors. In the past few years, the European Commission has instead opted for a softer approach; for example, it has aimed to give start-up entrepreneurs already in Europe better access to the benefits of the European single market, including through a digital one-stop shop that provides information and helps start-ups tap into Europe-wide investment capital. ⁸⁸

Emerging economies are also entering the game. Inspired by Chile, Brazil launched a start-up program in 2013 that combines funding and acceleration with a visa. ⁸⁹ In 2016, the Indian government introduced Start-Up India, an initiative aimed at fostering the country's innovation scene by simplifying rules, enhancing partnerships between industry and research, and creating incentives and support—although for now, this does not include a special start-up visa. ⁹⁰ For some of these countries, start-ups hold additional promise: exploring innovative solutions to long-standing social problems such as poverty and deprivation.

VI. Conclusion

Countries that launch start-up visas aim to strike a balance between two priorities: taking a risk in order to be competitive (admitting potential innovators with everything still to prove), while containing this risk through various mechanisms (careful selection, monitoring, and support). With their focus on quality, innovation, and growth potential rather than on investment size, and with their risk-friendly design that targets young entrepreneurs rather than established businesspersons, these visa programs can be a useful tool for helping immigration systems adapt to a fast-changing global economy.

Start-up visas are more forward looking than most other admissions channels, as they look beyond current labor-market demand in pursuit of long-term modernization and competitiveness—a trend exemplified by the focus of Thailand's SMART visa on ten key industries, 91 and by Singapore's use of its

⁸⁷ La French Tech is President Emmanuel Macron's flagship initiative to turn France into a start-up hub. See La French Tech, "La French Tech," accessed July 20, 2019, www.lafrenchtech.com/en/.

Among these European efforts have been the Start-Up Europe initiative, launched in 2016, that aims to strengthen crossborder networks of innovation stakeholders and offers start-up entrepreneurs information they need to grow and scale via a centralized online platform. See "Startup Europe, "About Us," accessed March 19, 2019, http://startupeuropeclub.eu/about-us/. The Capital Markets Union pursued by the outgoing European Commission President Jean-Claude Juncker has taken steps to improve start-ups' Europe-wide access to venture capital investment and other forms of financing, such as crowdfunding. See European Commission, "VentureEU: €2.1 Billion to Boost Venture Capital Investment in Europe's Innovative Start-Ups" (press release, April 10, 2018), http://europa.eu/rapid/press-release IP-18-2763 en.htm; European Commission, "Crowdfunding," accessed March 24, 2019, https://ec.europa.eu/info/business-economy-euro/growth-and-investment/financing-investment/crowdfunding_en.

⁸⁹ Start-Up Brasil, "Start-Up Brasil," accessed July 13, 2019, www.startupbrasil.org.br/?lang=en.

⁹⁰ Startup India Hub, "About Startup India," accessed July 13, 2019, www.startupindia.gov.in/content/sih/en/about-us.html.

⁹¹ Thailand Board of Investment, "Details of SMART Visa Program," accessed September 7, 2018, www.boi.go.th/index.php?page=detail_smart_visa.



visa as an integral part of a decades-long effort to become a leading knowledge economy. This long-term approach requires collaboration between different ministries and policy portfolios (including interior, foreign affairs, economy, employment, education, and research). It also calls for close cooperation between government and other stakeholders; actors with industry expertise, for example, bring to the table the latest thinking about technological developments and how they will shape traditional industries, education systems, labor markets, and consumer behaviors. Done right, such collaboration could have a positive spillover effect for other immigration policies, as governments think about how to adapt their student, employment, and investor visas for an era of increasing competition for talent. The recent trend towards "tech visas," which include high-skilled employees and investors alongside start-up entrepreneurs, shows how the lessons of start-up visas can find wider application.

For countries trying to make a name for themselves as havens of innovative entrepreneurship, a start-up visa can show commitment and provide visibility. But advantageous immigration rules alone will not lure the next "unicorns," especially as these schemes proliferate around the world. Therefore, embedding them within a wider innovation strategy is crucial. Governments may choose to introduce dedicated funding or tax breaks to boost investments in R&D, which start-ups in rapidly evolving industries need to remain competitive. Public procurement can also work as a lever to stimulate demand for innovation—a good strategy particularly in times of budgetary pressure, as it relies on money the government would spend anyway. Supporting private incubators and accelerators with funding and fiscal incentives helps build the infrastructure for innovative ideas to take shape and grow, while investing in public accelerator programs may help attract start-up talents who are wary of giving up equity shares to private-sector actors. Moreover, start-up challenge prizes, tech congresses, and short-term training programs all contribute to giving international entrepreneurs a first taste of the entrepreneurial opportunities a country offers, and may convince them to apply for a start-up visa.

Schemes that highlight a country's unique strengths and are rooted in national industries are more likely to succeed in the long run.

More broadly, sustained investments in high-quality education systems with close ties to strategic industries will be key to generating the human capital that start-ups need to grow. A reliable regulatory framework that protects intellectual property and patents, a fiscal environment sensitive to the needs of young companies, and smooth administrative processes also add to the mix of success factors. Finally, public investment in building state-of-the-art IT infrastructure can provide innovators with an ideal testing ground for tech-intensive products and services. Governments would do well to coordinate start-up visa programs with some or all of these other measures, depending on the national context.

⁹² Since the 1997 Asian financial crisis, the country has invested heavily in the objective of becoming an innovation-led, value-added knowledge economy. To this end, it has improved its education system, increased the public R&D budget, and set up government agencies and committees specialized in innovation. Speech by Balaji Sadasivan, Senior Minister of State for Information, Communications and the Arts, and Health at the "Celebrating Knowledge: The Power and Potential" conference organized by the National Library Board, Singapore's Commitment to Innovation for Knowledge-Based Economy, Singapore, November 14, 2005, www.mci.gov.sg/pressroom/news-and-stories/pressroom/2005/11/singapores-commitment-to-innovation-for-knowledgebased-economy?page=190; Lim Chuan Poh, "From Research to Innovation to Enterprise: The Case of Singapore," in The Global Innovation Index 2016: Winning with Global Innovation, eds. Soumitra Dutta, Bruno Lanvin, and Sacha Wunsch-Vincent (Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and WIPO, 2016), www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016-chapter10.pdf; Fiona Murray and Phil Budden, Singapore: An Entrepreneurial Entrepôt? (N.p.: MIT REAP and MIT Innovation Initiative, 2015), http://reap.mit.edu/assets/Singapore CaseStudy_DRAFT_06.28.2015.compressed.pdf.

⁹³ Dirk Czarnitzki, Paul Hünermund, and Nima Moshgbar, "Public Procurement as Policy Instrument for Innovation" (discussion paper no. 18-001, ZEW Centre for European Economic Research, January 2018), http://ftp.zew.de/pub/zew-docs/dp/dp18001.pdf.



A country introducing or revising a start-up visa scheme can draw lessons from the experience of other countries. But these lessons will need to be carefully tailored to fit national economies, regulatory frameworks, strategic priorities, and—given the importance of branding—a country's broader culture around entrepreneurship and innovation. Schemes that highlight a country's unique strengths and are rooted in national industries are more likely to succeed in the long run: Portugal, for example, has flanked its start-up visa with measures to stimulate innovation in sectors crucial for its economic development, such as renewable energies, tourism, and food tech. Around the world, many governments have tried replicating the Silicon Valley model; but top-down attempts to set up high-tech clusters from scratch have often fallen short of expectations, especially where they neglect the opportunities long-standing industries could offer in terms of know-how, networks, capital, and infrastructure.

When creating or revising a start-up visa program, governments should consider the following lessons:

- Set out clear strategic goals and, in collaborative models, a division of responsibilities. Rather than simply transplanting a start-up visa model from another country, governments should clarify which national priorities such a visa might help address. Involving different ministries, levels of government, and private-sector actors in the conversation will help align priorities and balance expectations. This multisectoral perspective, while desirable for all immigration channels, is particularly important given that start-up visas are designed to support long-term economic goals. However, with numerous stakeholders involved, coordination can be difficult, so it is important to establish clear leadership. Creating a dedicated agency/secretariat to manage the start-up visa and related policies could help get buy-in from the start-up community, especially if the agency is well connected and speaks the language of the target group.
- Pick the right model for the national and economic context. Countries with a strong international reputation for innovation and solid start-up ecosystem might be best served by a leaner scheme, softening some immigration barriers and speeding up processes while conveying a welcoming environment for immigrant entrepreneurs. Countries with a less developed entrepreneurial environment might find that a more comprehensive package of incentives is needed to stand out; this may include using an accelerator program as an engine to fuel the growth of their start-up ecosystem. But in the long run, the most promising solution might be an incremental model that combines the two approaches: intense support for (a small number of) early-stage business ideas and a simple removal of barriers for more developed ones. France's introduction of a four-year visa with a fast-track admissions process on top of its internationally famous accelerator program, the French Tech Ticket, points in this direction.
- Involve the private sector in selecting candidates, but closely monitor to avoid misuse. Involving incubators, accelerators, investors, and other private-sector organizations in the development and operation of a visa scheme embeds it into the start-up ecosystem and makes the package on offer more desirable to foreign entrepreneurs. But granting private organizations significant power over immigrant selection, as is the case in schemes that rely heavily on third-party endorsement, carries certain risks. Thorough selection and certification procedures for endorsing bodies (and mechanisms for regular follow-up) can help reduce the risk of misuse or nepotism. In countries with emerging innovation ecosystems, moreover, start-up visa schemes should not rely exclusively on third-party endorsement, as a scarcity of potential endorsers might shut out promising candidates. And since the goals of government and investors do not perfectly coincide, the involvement

⁹⁴ Startup Portugal, "Government Launches New Measures to Support Entrepreneurship," accessed September 7, 2018, http://startupportugal.com/sp-plus/.

⁹⁵ Tim Mazzarol, "6 Ways Governments Can Encourage Entrepreneurship," World Economic Forum, December 29, 2014, www.weforum.org/agenda/2014/12/6-ways-governments-can-encourage-entrepreneurship/.



of public as well as private stakeholders in selection procedures helps ensure that the program's outcomes are in line with national priorities.

- Tailor the visa program to work for start-ups at different business stages. The start-up process has several phases, each characterized by specific risks, needs, and opportunities. Start-up visas should reflect this diversity in their design, instead of assessing early-stage ideas based on generic criteria. Adopting a staircase approach can make a start-up visa more inclusive. In Canada, for example, the level of capital required for a start-up visa depends on the business project's stage of development. Similarly, Start-Up Chile has three different subprograms that cater to start-ups in different business phases, ranging from those still refining their business idea to those ready to be scaled up. And in the same vein, Thailand recently moved from a fixed start-up visa duration of one year to three different options—ranging from six months for prospective entrepreneurs to two years for more experienced ones—linked to different requirements.⁹⁶
- Tackle gender-related obstacles to participation. Countries that have a genuine interest in attracting the best and the brightest would be well advised to identify and remove barriers—such as the male-dominated nature of networks in the venture capital world, which can block female entrepreneurs' access to funding⁹⁷—that may result in relatively few women successfully applying for these schemes. Piloting gender-focused support schemes linked to the visa can be a good approach, following the example of Chile's S-Factory (a preacceleration program for female start-up founders).⁹⁸
- Mind the international talent pool already in the country. With their level of education, familiarity with the host country, and links to research and technology institutions, international students and recent graduates are ideal candidates for programs that aim to attract foreign-born talent. Start-up visas should systematically target them, not only by enabling them to easily switch from their current immigration status to an entrepreneur visa, but also by advertising this option in universities and other higher education institutions. Special visa tracks for foreign graduates, as seen in Denmark and the United Kingdom, can improve start-up visas' visibility and outreach among international students.
- Allow (fast) failure. There are many unknown variables in the initial phase of a business. The original project may prove impossible to realize or the developed product or service may be a hard sell, especially in the fast-paced tech industry. Schemes that allow visa holders to depart from the original business idea lower the risk of dead ends, rather than tying them to unprofitable activities for fear of losing their visa. This can encourage transparency and learning.
- Make start-up employees, as well as founders, part of the visa category. Young, talented entrepreneurs are only one pillar of a fertile start-up ecosystem. The most promising start-up ideas will wither without a pool of highly specialized human capital. In a rapidly developing innovation cluster, the demand for specialist skills might quickly outgrow their local availability, stifling start-ups' growth and pushing them to consider relocating. For start-ups with a small size and low profit margins, filling a vacancy as quickly as possible is often essential, and classic skilled employment visas may be too slow and inflexible to meet these needs. Countries could follow the example of Estonia in offering a preferential path for innovative ventures to hire foreign employees.

⁹⁶ Thailand Board of Investment, "Thailand's SMART Visa: Attracting Foreign Talents and Technologies" (brochure, January 2019), www.boi.go.th/upload/content/BOI-brochure%202018-smart%20visa-EN-20180125_97687.pdf.

⁹⁷ Hannah Murphy, "Women Struggle to Gain Access to Start-Up Funding," *Financial Times*, June 13, 2018, www.ft.com/content/e5341062-4eb8-11e8-ac41-759eee1efb74.

⁹⁸ Start-Up Chile, "The S Factory," accessed August 30, 2018, www.startupchile.org/programs/the-s-factory/.



- Anchor the visa in a broader public start-up strategy. Many of the most recent start-up visas are designed as just one component of an overarching national entrepreneurship strategy—reflecting a growing awareness that the best foreign entrepreneurs will choose a country for its dynamism, rather than for its immigration rules. The Start-Up Portugal+initiative, for instance, aims to map the national start-up landscape, explore collaborations between start-ups and large companies as well as the public sector, and attract new investors with a series of tax and funding incentives. From a practical standpoint, streamlining all start-up incentives under a single brand and management brings coherence and saves resources. Moreover, not every foreign-born start-up entrepreneur needs a visa, as European countries competing for EU talent know all too well. Branding, information, and support need to speak to this broader target group as well (such as entrepreneurs from other EU Member States who can travel and work visa free), not only to potential visa applicants.
- Monitor with patience. Many start-up visas have been introduced very recently, and a few are still in the pilot phase, such as Israel's Innovation Visa and Australia's SISA program. Collecting further statistical evidence on their results is key and will inform efforts to adjust and improve them as necessary. At the same time, governments should set realistic expectations about these programs' short-term impact, especially regarding economic indicators. Start-up visas will need some time to get off the ground.

The first generation of start-up visas represented governments' attempts to enter a field where they sensed great potential but whose contours they were not always very familiar with. After a few years of observing, testing, adjusting, and learning—and keeping one eye on the moves of competitors—they may be entering a new phase marked by increased awareness and maturity. In this stage, start-up visas are increasingly being embedded within broader national strategies to strengthen innovative entrepreneurship. Amid the mistrust of immigration that has grown in many destination countries in recent years, start-up visas send a hopeful message: openness to the movement of people and circulation of ideas is the key to future progress and prosperity. But a lot of learning and finetuning will be necessary if these visas are to deliver on their promises.

Start up visas are increasingly being embedded within broader national strategies to strengthen innovative entrepreneurship.

⁹⁹ Startup Portugal, "Government Launches New Measures."



Appendix

Table A-1. Third-Party Endorsement and Capital Requirements in Selected Start-Up Visas

		Third-Party Endorsement	•
Scheme	Launch	Required?	Minimum Capital Required
Australia Subclass 188 Entrepreneur	2016	Yes, by an approved entity providing funding (government agency, research organization, higher education provider, or registered investor)	Yes, AU \$200,000 in funding from investors in Australia
Australia Supporting Innovation in South Australia (SISA)	2018 as a pilot	Yes, by the South Australian government (Department for Innovation and Skills)	No
Canada Start un vica	2013 as a pilot (perm. since 2017)	Yes, by a designated organization: • business incubator	 None, if endorsed by business incubator CA \$75,000, if endorsed by angel investor group
Start-up visa	(perm. since 2017)	angel investor groupventure capital fund	CA \$200,000, if endorsed by venture capital fund
Chile Start-Up Chile (Seed program)	2010	Admission to government-funded acceleration program Start-Up Chile	No (program provides CLP 25 million of equity-free funding)
Denmark Start-Up Denmark	2015 as a pilot (perm. since 2017)	No (instead, expert panel evaluation)	No
Estonia Start-Up Visa (entrepreneur)	2017	No	No
France French Tech Ticket	2016	Admission to government-funded incubation program	No (program provides 45,000 euros of equity-free funding)
France French Tech Visa (founders stream)	2017	Yes, by one (or several) of more than 50 partner incubators/ accelerators	No
Netherlands Start-Up Visa	2015	Yes, by a facilitator with experience in guiding innovative start-ups (e.g., incubator, accelerator, university-led entrepreneurship center)	No
New Zealand Entrepreneur Work Visa	2014	No	Yes, NZ \$100,000 (but waivers possible if business is in science/ICT or shows high level of innovation or export potential)
New Zealand Global Impact Visa	2017	No, but acceptance by Edmund Hillary Fellowship (EHF) program	No
Ireland Start-Up Entrepreneur Programme	2012	No	Yes, 50,000 euros (plus 30,000 euros for each additional applicant)
Ireland 12-month immigration permission	2014	Yes, by an Ireland-based incubator or innovation bootcamp	No



Table A-1. Third-Party Endorsement and Capital Requirements in Selected Start-Up Visas (cont).

Scheme	Launch	Third-Party Endorsement Required?	Minimum Capital Required
Israel Innovation Visa	2017 as a pilot	Yes, by one of 12 Landing Pads (private incubators, municipal companies, university-based entrepreneurship centers)	No
Italy Start-Up Visa	2014	Endorsement not necessary, but application through a certified incubator reduces documentation burden (business plan)	Yes, 50,000 euros
Singapore EntrePass (Entrepreneur stream)	2004 (revised 2017)	 Endorsement not necessary, but viewed favourably: from a recognized investor from a recognized incubator/ accelerator 	No (unless endorsed by investor, in which case at least SG \$100,000)
Thailand SMART Visa (start- up stream)	2018	Yes, by an incubator/accelerator, a governmental innovation authority, or a venture capital organization	No
United States International Entrepreneur Rule* (rescission process underway)	2017	Yes, • from a recognized U.S. investor • from a federal, state, or local government entity with expertise in economic development, research and development, or job creation	 U.S. \$250,000 by a U.S. investor, or U.S. \$100,000 in grants or awards from qualifying U.S. federal, state, or local government entities
United Kingdom Tier 1 Start-Up Visa	2019	Yes, from a designated incubator, accelerator, angel investor, and/or university	No

^{*} The International Entrepreneur Rule is a regulation granting temporary permission to enter and stay in the United States based on a parole period rather than a visa category. Sources: Australian Government, Department of Home Affairs, "Business Innovation and Investment (Provisional) Visa (Subclass 188) – Entrepreneur Stream", accessed July 20, 2019, https://immi.homeaffairs.gov.au/Visa-subsite/Pages/work/188-entrepreneur-stream.aspx#Eligibility; Government of South Australia, Immigration South Australia, "Supporting Innovation in South Australia (SISA)," accessed March 24, 2019, www.migration.sa.gov.au/ resources/faq/supporting-innovation-in-south-australia-sisa; Government of Canada, Immigration, Refugees, and Citizenship Canada, "List of Designated Organizations - Start Up Visa," updated March 3, 2019, www.canada. ca/en/immigration-refugees-citizenship/services/immigrate-canada/start-visa/designated-organizations.html; Start-Up Chile, "Seed," accessed July 13, 2019, www.startupchile.org/programs/seed/; Start-up Denmark, "FAQ," accessed July 20, 2019, www.startupdenmark.info/#faq; Startup Estonia, "Startup Visa Eligibility," accessed July 13, 2019, www.startupestonia.ee/visa/eligibility-estonian-startup; La French Tech, "French Tech Visa for Founders," accessed July 20, 2019, https://visa.lafrenchtech.com/3/french-tech-visa-for-founders; La French Tech, "Questions on the French Tech Ticket Program Season 2," accessed July 13, 2019, www.frenchtechticket.com/7/fag; Citizens Information, "Coming to Set Up a Business or Invest in Ireland," updated June 24, 2019, www.citizensinformation. ie/en/employment/types_of_employment/self_employment/coming_to_set_up_a_business_in_ireland.html; Israel Innovation Authority, "Innovation Visas Program for Foreign Entrepreneurs (Pilot)," accessed July 20, 2019, https:// innovationisrael.org.il/en/program/innovation-visas-program-foreign-entrepreneurs-pilot; Italian Government, Ministries of Economic Development and Foreign Affairs, "Italia Startup Visa: STEP 1 through Direct Application," accessed July 20, 2019, http://italiastartupvisa.mise.gov.it/index.php/#direct-application-section-ISV; Netherlands Enterprise Agency, "Finding a Facilitator," accessed July 20, 2019, https://english.rvo.nl/subsidies-programmes/residence-permitforeign-startups/where-find-facilitator; Immigration New Zealand, "Entrepreneur Work Visa – Meeting the Criteria," accessed July 20, 2019, www.immigration.govt.nz/new-zealand-visas/apply-for-a-visa/criteria/entrepreneur-work-visa?nationality=nationality=ITA&country=residence-DEU; Immigration New Zealand, "Global Impact Visa (GIVs)," accessed March 24, 2019, www.immigration.govt.nz/new-zealand-visas/options/start-a-business-or-invest/i-wantto-invest-or-do-business-in-nz/the-global-impact-visa; Singapore Government, Ministry of Manpower, "Eligibility for EntrePass," updated October 31, 2018, www.mom.gov.sg/passes-and-permits/entrepass/eligibility; Thailand Board of Investment, "Thailand's SMART Visa: Attracting Foreign Talents and Technologies" (brochure, January 2018), www.boi.go.th/upload/BOI-brochure%202018-smart%20visa-EN-20180125 97687 87299.pdf; U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services, "International Entrepreneur Rule," Federal Register 82, no. 10 (January 17, 2017): 5238-89, www.federalregister.gov/documents/2017/01/17/2017-00481/internationalentrepreneur-rule; UK Home Office, "Start-Up Visa," accessed July 20, 2019, www.gov.uk/start-up-visa.



Works Cited

- Alexander, Leigh. 2016. Why It's Time to Retire "Disruption," Silicon Valley's Emptiest Buzzword. *The Guardian*, January 11, 2016. www.theguardian.com/technology/2016/jan/11/disruption-silicon-valleys-buzzword.
- Australian Government, Department of Home Affairs. N.d. Business Innovation and Investment (Provisional) Visa (Subclass 188) Entrepreneur Stream. Accessed July 20, 2019. https://immi.homeaffairs.gov.au/Visa-subsite/Pages/work/188-entrepreneur-stream.aspx#Eligibility.
- ——. N.d. Freedom of Information Request: FA19/01/00704. Accessed July 13, 2019. www.homeaffairs.gov.au/foi/files/2019/fa190100704-document-released.PDF.
- ——. N.d. Global Talent Scheme Pilot—Fact Sheet. Accessed September 6, 2018. http://minister.homeaffairs.gov.au/alantudge/Documents/factsheet-global-talent-scheme-pilot.pdf.
- ——. N.d. Working in Australia: Visas for Innovation. Last updated March 12, 2019. Accessed March 24, 2019. https://immi.homeaffairs.gov.au/visas/working-in-australia/visas-for-innovation/support-ing-innovation-in-south-australia.
- Ayele, Yoseph. 2017. 39 EHF Fellows Join Cohort 2! Edmund Hillary Fellowship, December 21, 2017. https://stories.ehf.org/39-ehf-fellows-join-cohort-2-5e66e412a4d3.
- ——. 2017. Announcing the EHF Inaugural Cohort. Edmund Hillary Fellowship, July 11, 2017. https://sto-ries.ehf.org/announcing-the-ehf-inaugural-cohort-b920ef87118c.
- ——. 2018. 38 Fellows Join Cohort 4! Edmund Hillary Fellowship, December 19, 2018. https://stories.ehf.org/38-fellows-join-cohort-4-c6aa520ddec5.
- ——. 2018. 44 Fellows Join EHF Cohort 3! Edmund Hillary Fellowship, July 17, 2018. https://stories.ehf.org/44-fellows-join-ehf-cohort-3-382d9249c02.
- Bindi, Tas. 2017. Chile Introduces Lenient Tech Visa as US Applies Limitations on Immigration. ZDNet, April 6, 2017. www.zdnet.com/article/chile-introduces-tech-visa-as-us-looks-to-apply-limitations/.
- Boucher, Anna and Amy Davidson. 2019. *The Evolution of the Australian System for Selecting Economic Immi- grants*. Washington, DC: Migration Policy Institute. <u>www.migrationpolicy.org/research/evolution-australian-system-selecting-economic-immigrants</u>.
- Bräuchle, Catalina. 2016. The Story of Chile's Entrepreneurial Revolution. Presentation slides, Moldova ICT Summit, April 2016. www.slideshare.net/moldovaictsummit2016/the-story-of-chiles-entrepreneurial-revolution.
- Chaffin, Zeliha. 2019. Un "French Tech Visa" élargi à toutes les entreprises considérées comme innovantes. *Le Monde*, March 1, 2019. https://www.lemonde.fr/economie/article/2019/03/01/plus-ouvert-et-plus-simple-le-french-tech-visa-fait-peau-neuve_5429889_3234.html.
- Chakravorti, Bhaskar. 2015. What's the Best Way to Measure Innovation? World Economic Forum, April 30, 2015. www.weforum.org/agenda/2015/04/whats-the-best-way-to-measure-innovation/.
- Chia, Lianne. 2017. Government to Unify Start-Up Support Schemes under Startup SG Branding. Channel News Asia, March 3, 2017. www.channelnewsasia.com/news/singapore/government-to-unify-start-up-sup-port-schemes-under-startup-sg-br-8774876.



- Citizens Information. 2019. Coming to Set Up a Business or Invest in Ireland. Updated June 24, 2019. www.citizensinformation.ie/en/employment/types_of_employment/self_employment/coming_to_set_up_a_business_in_ireland.html.
- Cremades, Alejandro. 2019. Here Is What Startup Investors Look for in Entrepreneurs before Investing. *Forbes*, January 31, 2019. www.forbes.com/sites/alejandrocremades/2019/01/31/here-is-what-startup-in-vestors-look-for-in-entrepreneurs-before-investing/.
- Czarnitzki, Dirk, Paul Hünermund, and Nima Moshgbar. 2018. Public Procurement as Policy Instrument for Innovation. Discussion paper no. 18-001, ZEW Centre for European Economic Research, January 2018. http://ftp.zew.de/pub/zew-docs/dp/dp18001.pdf.
- Deeb, George. 2014. Is a Startup Incubator or Accelerator Right for You? *Forbes*, August 28, 2014. www.forbes.com/sites/georgedeeb/2014/08/28/is-a-startup-incubator-or-accelerator-right-for-you/.
- DELFI. 2019. The Number of Foreign Startups Choosing Lithuania for Starting Their Businesses Is Growing. DELFI, January 17, 2019. https://en.delfi.lt/lithuania/economy/the-number-of-foreign-startups-choosing-lithuania-for-starting-their-businesses-is-growing.d?id=80125507.
- *Economist, The.* 2017. The Kushners Put Controversial Investor Visas in the Spotlight. *The Economist,* May 9, 2017. www.economist.com/democracy-in-america/2017/05/09/the-kushners-put-controversial-in-vestor-visas-in-the-spotlight.
- Edmund Hillary Fellowship. N.d. Apply to Cohort 6. Accessed July 13, 2019. www.ehf.org/apply.
- European Commission. 2016. Questions and Answers: An Improved EU Blue Card Scheme and the Action Plan on Integration. Press Release, June 7, 2016. www.europa.eu/rapid/press-release_MEMO-16-2071_en.pdf.
- ——. 2018. Venture EU: €2.1 Billion to Boost Venture Capital Investment in Europe's Innovative Start-Ups. Press Release, April 10, 2018. http://europa.eu/rapid/press-release_IP-18-2763_en.htm.
- ——. N.d. Crowdfunding. Accessed March 24, 2019. https://ec.europa.eu/info/business-economy-euro/growth-and-investment/financing-investment/crowdfunding_en.
- European Commission, Expert Group on Economic Migration. 2015. Reviewing the Blue Card Directive. Discussion Paper No. 2, European Commission, Brussels, March 17, 2015. http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=19252&no=3.
- Farrah, Jeff. 2019. Immigration Policy Isn't Working for the Economy. Let's Fix That. National Venture Capital Association, January 31, 2019. https://nvca.org/blog/immigration-policy-isnt-working-economy-lets-fix/.
- Global Entrepreneurship Network. 2016. Startup Visa NL. Accessed July 20, 2019. www.genglobal.org/snap/startup-visa-nl.
- Government of Canada. 2017. Evaluation of the Start-Up Visa (SUV) Pilot. Updated May 31, 2017. www.canada.ca/en/immigration-refugees-citizenship/corporate/reports-statistics/evaluations/start-visa-pilot.html.
- Government of Canada, Immigration, Refugees, and Citizenship Canada. 2017. Start-Up Visa Program. Updated August 10, 2017. www.canada.ca/en/immigration-refugees-citizenship/news/video/start-up-visa-program.html.



- ——. 2018. Designated Organizations for the Start-Up Visa Program: About the Process. Updated November 13, 2018. www.canada.ca/en/immigration-refugees-citizenship/services/immigrate-canada/start-visa/participate.html.
- ——. 2019. List of Designated Organizations Start Up Visa. Updated March 3, 2019. www.canada.ca/en/immigrate-canada/start-visa/designated-organizations.html.
- Government of Canada, Ministry of Finance. 2018. Equality + Growth: A Strong Middle Class. Updated February 27, 2018. www.budget.gc.ca/2018/docs/plan/intro-en.html.
- Government of France. N.d. French Tech Ticket: Recap of Period 2. Accessed August 29, 2018. www.gouver-nement.fr/en/french-tech-ticket-recap-of-period-2-0.
- Government of South Australia, Immigration South Australia. N.d. Supporting Innovation in South Australia (SISA). Accessed March 24, 2019. www.migration.sa.gov.au/resources/faq/supporting-innovation-in-south-australia-sisa.
- Government of the Netherlands. 2015. Self-Employment Scheme to Be More Accessible for Start-Ups. News release, December 14, 2015. www.government.nl/latest/news/2015/12/14/self-employment-scheme-to-be-more-accessible-for-start-ups.
- Harris, John. 2019. The Brexit Threat Hanging over Startups in the UK Tech Sector. *The Guardian*, January 29, 2019. www.theguardian.com/politics/2019/jan/29/the-brexit-threat-hanging-over-startups-in-the-uk-tech-sector.
- Hiebert, Daniel. 2019. *The Canadian Express Entry System for Selecting Economic Immigrants: Progress and Persistent Challenges*. Washington, DC: Migration Policy Institute. www.migrationpolicy.org/research/canadian-express-entry-system-selecting-economic-immigrants.
- Immigration New Zealand. 2019. Statistics: Work Visa Applications Decided. Data tables, July 4, 2019. www.immigration.govt.nz/documents/statistics/statistics-work-applications-decided.
- ——. N.d. Entrepreneur Work Visa. Accessed September 6, 2018. www.immigration.govt.nz/new-zealand-vi-sas/apply-for-a-visa/about-visa/entrepreneur-work-visa.
- ——. N.d. Entrepreneur Work Visa Meeting the Criteria. Accessed July 20, 2019. www.immigration.govt.nz/new-zealand-visas/apply-for-a-visa/criteria/entrepreneur-work-visa?nationality=nationality=ITA&country=residence-DEU.
- ——. N.d. Global Impact Visa (GIVs). Accessed March 24, 2019. www.immigration.govt.nz/new-zealand-vi-sas/options/start-a-business-or-invest/i-want-to-invest-or-do-business-in-nz/the-global-impact-visa.
- Invest Chile. N.d. Visa Tech Chile. Accessed March 22, 2019. https://investchile.gob.cl/es/visa-tech-chile/.
- Irish Department of Justice and Equity. 2014. Minister Shatter Announces Targeted Changes in the Start-Up Entrepreneur Programme. Press release, March 13, 2014. www.inis.gov.ie/en/INIS/Pages/Minister%20 Shatter%20announces%20targeted%20changes%20in%20the%20Start-up%20Entrepreneur%20 Programme.
- Irish Naturalisation and Immigration Service (INIS). 2018. *Start-Up Entrepreneur Programme: Guidelines*. Dublin: INIS. www.inis.gov.ie/en/INIS/Guidelines%20for%20STEP%20Applications%20January%202018. pdf/Files/Guidelines%20for%20STEP%20Applications%20January%202018. www.inis.gov.ie/en/INIS/Guidelines%20for%20STEP%20Applications%20January%202018. pdf/Files/Guidelines%20for%20STEP%20Applications%20January%202018.



- Israel Innovation Authority. N.d. Innovation Visas Program for Foreign Entrepreneurs (Pilot). Accessed July 20, 2019. https://innovationisrael.org.il/en/program/innovation-visas-program-foreign-entrepreneurs-pilot.
- Italian Government, Ministry of Economic Development. 2015. Executive Summary of the New Italian Legislation on Innovative Startups. Rome: Italian Government. www.mise.gov.it/images/stories/documenti/Executive_Summary_of%20Italy_Startup_Act%2026_05_2015.pdf.
- ——. 2016. *Italia Startup Visa & Hub, 4° rapporto quadrimestrale 2016*. Rome: Italian Government. <u>www. mise.gov.it/images/stories/documenti/italia_startup_visa_hub_III_quadrimestre_2016.pdf</u>.
- ——. 2018. *Italia Startup Visa & Hub, 4th Quarterly Report, 2018*. Rome: Italian Government. <u>www.mise.gov.it/images/stories/documenti/ISVH-4th-quarterly-report-2018-15_01_2019.pdf</u>.
- ——. 2019. *Italia Startup Visa & Hub, 2nd Quarterly Report, 2019*. Rome: Italian Government. <u>www.mise.gov.it/images/stories/documenti/ISVH-2nd-quarterly-report-2019-03_07_2019.pdf</u>.
- Italian Government, Ministries of Economic Development and Foreign Affairs. N.d. Italia Startup Visa: STEP 1 through Direct Application. Accessed July 20, 2019. http://italiastartupvisa.mise.gov.it/index.php/#direct-application-section-ISV.
- Italian Government, Ministries of Economic Development, Foreign Affairs and International Cooperation, and Interior. 2018. A New Visa Policy to Attract Innovative Entrepreneurs from All over the World: Italia Startup Visa: Guidelines. Updated March 20, 2018. http://italiastartupvisa.mise.gov.it/media/documents/Guidelines%20ISV%20ENG%2020_03_2018%20def.pdf.
- Italian Government, Ministries of Economic Development, Interior, and Labour and Social Policies. N.d. Italia Startup Hub: The Policy of the Italian Government to Favour the Retention of Innovative Talents from All over the World: Guidelines. Accessed March 24, 2019. http://italiastartupvisa.mise.gov.it/media/documents/Linee%20Guida%20Italia%20Startup%20Hub%20[Eng].pdf.
- Italian Government, Ministry of the Interior. 2018. Visto e permesso di soggiorno. Updated August 14, 2018. www.interno.gov.it/it/temi/immigrazione-e-asilo/modalita-dingresso/visto-e-permesso-soggiorno.
- Jiang, Will. 2017. Differences between an Angel Investor and a Venture Capitalist. Business.com, August 28, 2017. www.business.com/articles/angel-investors-vs-venture-capitalists/.
- Kably, Lubna. 2018. Canada Goes All out for Foreign Entrepreneurs. *Times of India*, March 22, 2018. https://timesofindia.indiatimes.com/business/india-business/canada-goes-all-out-for-foreign-entrepreneurs/articleshow/63405342.cms.
- Klein, Yessica. 2019. StartUp Visa and Tech Visa in Portugal: Here's What You Need to Know. Medium, January 23, 2019. https://medium.com/growinportugal/startup-visa-and-tech-visa-in-portugal-heres-what-vou-need-to-know-389bd39a243.
- Koehn, Emma. 2019. Global Talent Scheme Fails to Issue Visas as Startups "Crippled." *The Sydney Morning Herald*, March 1, 2019. www.smh.com.au/business/small-business/global-talent-scheme-fails-to-issue-visas-as-startups-crippled-20190301-p51129.html.
- La French Tech. N.d. French Tech Ticket: A Promising Season 1. Accessed August 29, 2018. www.frenchtechticket.com/6/about-the-first-edition.
- ———. N.d. La French Tech. Accessed July 20, 2019. www.lafrenchtech.com/en/.



- ——. N.d. Press Kit—French Tech Ticket: Season 2. Accessed March 24, 2019. https://drive.google.com/file/d/0B05001Wyh9-dWHRYX3FxYktMME0/view.
- ——. N.d. Questions on the French Tech Ticket Program Season 2. Accessed July 13, 2019. www.frenchtechticket.com/7/faq.
- ——. N.d. What Is the French Tech Visa? Accessed August 28, 2018. https://visa.lafrenchtech.com/.
- ——. N.d. French Tech Visa for Founders. Accessed July 20, 2019. https://visa.lafrenchtech.com/3/frenchtech-visa-for-founders.
- Labs of Latvia. 2017. How to Apply for the Latvian Startup Visa—A Guide. Updated August 24, 2017. www.labsoflatvia.com/news/how-to-apply-for-the-latvian-startup-visa-a-guide.
- Larsson, Naomi. 2016. Welcome to Chilecon Valley: A Startup Hub with Its Own Special Charm. *The Guardian*, December 22, 2016. www.theguardian.com/small-business-network/2016/dec/22/chile-accelerator-startup-grants.
- Lidne, Annika, Carl Waldenkranz, Adiba Barney, Nils-Erik Jansson, Martin Källström, Jessica Stark, Alan Mamedi, Alexandra Bylund, Nami Zarringhalam, Jacob de Geer, Sofia Franzén, Douglas Roos, Dinesh Nayar, and Andreas Ehn. 2015. The Swedish Startup Manifesto. Accessed July 20, 2019. http://static1.snowfire.io/accounts/14099/files/179.pdf.
- Luyten, Katrien and Selene González Díaz. 2019. Legal Migration to the EU. Briefing, European Parliamentary Research Service, Brussels, March 2019. www.europarl.europa.eu/RegData/etudes/BRIE/2019/635559/EPRS_BRI(2019)635559 EN.pdf.
- Mao, Vivian and Dorcas Wong. 2018. Shanghai's New Startup Visa. China Briefing, August 2, 2018. www.china-briefing.com/news/shanghais-new-startup-visa/.
- Mazzarol, Tim. 2014. 6 Ways Governments Can Encourage Entrepreneurship. World Economic Forum, December 29, 2014. www.weforum.org/agenda/2014/12/6-ways-governments-can-encourage-entrepre-neurship/.
- Migration Advisory Committee. 2015. *Tier 1 Entrepreneurs: Review of the Tier 1 Entrepreneur and Graduate Entrepreneur Routes.* London: Migration Advisory Committee. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/472236/Report_Tier_1_Entrepreneurs.pdf.
- Morelix, Arnobio, E. J. Reedy, and Joshua Russell. 2016. *The Kaufmann Index 2016: Growth and Entrepreneur-ship*. Kansas City, MO: Ewing Marion Kauffman Foundation. www.kauffman_org/~/media/kauffman_org/~/media/kauffman_org/microsites/kauffman_index/growth/kauffman_index_national_growth_entrepreneurship_2016_report.pdf.
- Mosca, Giuditta. 2017. Il flop delle start up italiane: non creano impiego, stentano ad andare all'estero e non sono aiutate dal Paese. Business Insider Italia, April 28, 2017. https://it.businessinsider.com/non-cre-ano-impiego-stentano-ad-andare-allestero-e-non-sono-aiutate-dal-paese-loccasione-persa-delle-start-up-italiane/.
- Murphy, Hannah. 2018. Women Struggle to Gain Access to Start-Up Funding. *Financial Times*, June 13, 2018. www.ft.com/content/e5341062-4eb8-11e8-ac41-759eee1efb74.
- Murray, Fiona and Phil Budden. 2015. *Singapore: An Entrepreneurial Entrepôt?* N.p.: MIT REAP and MIT Innovation Initiative. http://reap.mit.edu/assets/Singapore_CaseStudy_DRAFT_06.28.2015.compressed.pdf.



- Netherlands Enterprise Agency. N.d. Finding a Facilitator. Accessed July 20, 2019. https://english.rvo.nl/subsi-dies-programmes/residence-permit-foreign-startups/where-find-facilitator.
- Netherlands Permits and Visa. N.d. Startup Visa. Accessed September 6, 2018. https://business.gov.nl/coming-to-the-netherlands/permits-and-visa/startup-visa/.
- New American Economy. 2018. More Than 100 Leading Economists Oppose Department of Homeland Security Move to Rescind International Entrepreneur Rule. Press Release, June 27, 2018. www.newamerican-economy.org/press-release/more-than-100-leading-economists-oppose-department-of-homeland-security-move-to-rescind-international-entrepreneur-rule/.
- ——. 2018. *Opportunity Lost: The Cost of Rescinding the International Entrepreneur Rule*. New York: New American Economy. https://research.newamericaneconomy.org/report/opportunity-lost-the-cost-of-rescinding-the-international-entrepreneur-rule/.
- New to Denmark. 2019. Establishment Card. Updated June 28, 2019. www.nyidanmark.dk/en-GB/Applying/Work/Establishment%20card.
- ——. N.d. Start-Up Denmark. Accessed March 24, 2019. www.nyidanmark.dk/en-GB/You-want-to-apply/Work/Start-up-Denmark.
- Paul, Sonia. 2018. The Trump Administration Is Driving Away Immigrant Entrepreneurs. *The Atlantic*, June 7, 2018. www.theatlantic.com/business/archive/2018/06/trump-immigrant-entrepreneurs/561989/.
- Pedersen, Niels Brandt and Felix Bekkersgaard Stark. 2016. Denmark Could Be a DREAM for Foreign Entrepreneurs. Confederation of Danish Industry, April 1, 2016. https://di.dk/english/news/pages/denmark-couldbeadreamforforeignentrepreneurs.aspx.
- Plucinska Joanna and Saim Saeed. 2017. Europe Struggles to Attract Tech Talent Even as US Closes Doors: Immigration Rules and Attitudes toward Migrants, Plus Limited Investment in Tech Startups, Are All Big Hurdles. Politico, July 14, 2017. www.politico.eu/article/why-europe-still-lacks-silicon-valleys-sex-appeal/.
- Poh, Lim Chuan. 2016. From Research to Innovation to Enterprise: The Case of Singapore. In *The Global Innovation Index 2016: Winning with Global Innovation*, eds. Soumitra Dutta, Bruno Lanvin, and Sacha Wunsch-Vincent. Ithaca, Fontainebleau, and Geneva: Cornell University, INSEAD, and WIPO. www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2016-chapter10.pdf.
- Powell, Dominic. 2017. Government Urged to Reform Entrepreneur Visa after Receiving Only One Applicant in over 12 Months. SmartCompany, November 30, 2017. www.smartcompany.com.au/startupsmart/news/entrepreneur-visa-only-one-applicant-in-12-months/.
- Ram, Aliya. 2018. Tech Start-Ups Activate Brexit Contingency Plans. *Financial Times*, February 21, 2018. www.ft.com/content/c3a2ec46-1341-11e8-8cb6-b9ccc4c4dbbb.
- Registro delle Imprese. 2019. Cruscotto di indicatori statistici, 1° trimestre 2018. Accessed March 18, 2019. www.mise.gov.it/images/stories/documenti/1-rapporto-trimestrale-2018-trend-registro-start-up-innovative%2005_06_2018.pdf.
- ——. N.d. The Companies of Italian Innovators. Accessed March 18, 2019. http://startup.registroimprese.it/ isin/search?4.
- Republic of Cyprus, Presidency, Unit of Administrative Reform and Development. 2017. Cyprus Startup Visa for Foreign Nationals of Non-EU Countries—Startup Visa Scheme. Brochure, February 2017. www.reform.gov.cy/assets/mainmenu/168/docs/startup-visa-scheme-english-version.pdf.



- Robehmed, Natalie. 2013. What Is a Startup? *Forbes*, December 16, 2013. <u>www.forbes.com/sites/natalier-obehmed/2013/12/16/what-is-a-startup/</u>.
- Sadasivan, Balaji. 2005. Speech by Senior Minister of State for Information, Communications and the Arts, and Health at the Celebrating Knowledge: The Power and Potential conference organized by the National Library Board. Singapore's Commitment to Innovation for Knowledge-Based Economy. Singapore, November 14, 2005. www.mci.gov.sg/pressroom/news-and-stories/pressroom/2005/11/singa-pores-commitment-to-innovation-for-knowledgebased-economy?page=190.
- SAPO. 2019. Programa StartUp Visa aprova 57 das 115 candidaturas recebidas. Updated July 2, 2019. https://eco.sapo.pt/2019/07/02/programa-startup-visa-aprova-57-das-115-candidaturas-recebidas/.
- Schwab, Klaus. 2016. The Fourth Industrial Revolution: What it Means, How to Respond. World Economic Forum, January 14, 2016. www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond.
- Semotiuk, Andy J. 2018. Quickest Visas for Investors to Immigrate to the U.S. *Forbes*, July 12, 2018. <u>www.forbes.com/sites/andyjsemotiuk/2018/07/12/quickest-visas-for-investors-to-immigrate-to-the-u-s/.</u>
- Semple, Kirk and Ian Austen. 2017. America's Competitors Angle for Silicon Valley's Business. *New York Times*, August 2, 2017. www.nytimes.com/2017/08/02/world/trump-h1b-visa-silicon-valley-immigration. <a href="https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https://https:/
- Sheng, Ellen. 2017. Struggling for Visas, Tech Startups Are Looking Outside the U.S. To Launch Businesses. *Forbes*, July 2, 2017. https://www.forbes.com/sites/ellensheng/2017/07/02/with-h-1b-visas-scarce-tech-start-ups-look-outside-u-s-to-launch-businesses/.
- Singapore Government, Ministry of Manpower. 2017. Enhanced EntrePass Scheme. Fact sheet, August 2, 2017. www.mom.gov.sg/-/media/mom/documents/press-releases/2017/0802-annex-a-enhanced-entre-pass.pdf.
- ——. 2017. Startup SG Talent: Enhanced EntrePass to Attract Global Startup Talent to Build Innovative Businesses in Singapore. Press release, August 2, 2017. www.mom.gov.sg/newsroom/press-releas-es/2017/0803-enhanced-entrepass-to-attract-global-startup-talent-to-build-innovative-business-es-in-singapore.
- ——. 2018. Eligibility for EntrePass. Updated October 31, 2018. www.mom.gov.sg/passes-and-permits/entrepass/eligibility.
- Smale, Thomas. 2018. Why Europe Is the Next Major Startup Hub. Entrepreneur Europe, May 10, 2018. www.entrepreneur.com/article/307924.
- Start-Up Brasil. N.d. Start-Up Brasil. Accessed July 13, 2019. www.startupbrasil.org.br/?lang=en.
- Start-Up Chile. N.d. Community. Accessed July 20, 2019. www.startupchile.org/community/.
- ——. N.d. Cultural Impact. Accessed June 25, 2019. www.startupchile.org/social-impact/.
- ——. N.d. Economic Impact. Accessed July 7, 2019. www.startupchile.org/economic-impact/.
- ——. N.d. Seed. Accessed July 13, 2019. www.startupchile.org/programs/seed/.
- ——. N.d. The S Factory. Accessed August 30, 2018. www.startupchile.org/programs/the-s-factory/.



- Startup Commons. N.d. Startup Development Phases. Accessed September 6, 2018. www.startupcommons.ncg/startup-development-phases.html.
- StartupDelta. N.d. Our Initiatives and Results: StartupDelta Plan of Action 2017. Accessed March 24, 2019. www.startupdelta.org/our-initiatives-and-results/.
- Start-Up Denmark. N.d. Extension. Accessed September 6, 2018. www.startupdenmark.info/extension/.
- ———. N.d. FAQ. Accessed July 20, 2019. www.startupdenmark.info/#faq.
- Startup Estonia. 2019. Two Year Anniversary of the Estonian Startup Visa. Updated January 17, 2019. https://startupestonia.ee/blog/two-year-anniversary-of-the-estonian-startup-visa.
- ——. N.d. About Startup Estonia. Accessed September 6, 2018. http://startupestonia.ee/about.
- ——. N.d. Frequently Asked Questions. Accessed March 22, 2019. http://startupestonia.ee/visa/faqs.
- ——. N.d. Startup Visa Eligibility. Accessed July 13, 2019. www.startupestonia.ee/visa/eligibility-estonian-startup.
- Startup Europe. N.d. About Us. Accessed March 19, 2019. http://startupeuropeclub.eu/about-us/.
- Startup India Hub. 2019. About Startup India. Accessed July 13, 2019. www.startupindia.gov.in/content/sih/en/about-us.html.
- Startup Lithuania. 2017. Lithuania's Startup Visa Scheme Explained. Uploaded January 26, 2017. www.startu-plithuania.com/news/lithuanias-startup-visa-scheme-explained/.
- ——. 2019. The Number of Foreign Startups Choosing Lithuania for Starting Their Businesses is Growing. Updated January 16, 2019. www.startuplithuania.com/news/number-foreign-startups-choosing-lithuania-starting-businesses-growing/.
- ——. N.d. Frequently Asked Questions. Accessed August 29, 2018. www.startupvisalithuania.com/faq.
- Startup Portugal. N.d. Government Launches New Measures to Support Entrepreneurship. Accessed September 7, 2018. http://startupportugal.com/sp-plus/.
- ——. N.d. Startup Visa. Accessed September 6, 2018. http://startupportugal.com/startup-visa/.
- Stranieriinitalia.it. 2017. Flussi 2017: Ecco tutte le quote disponibili e chi può venire in Italia per lavoro. Updated March 21, 2017. http://stranieriinitalia.it/attualita/attualita-sp-754/flussi-2017-eccotutte-le-quote-disponibili-e-chi-puo-venire-in-italia-per-lavoro.html.
- Sumption, Madeleine. 2012. Visas for Entrepreneurs: How Countries Are Seeking Out Immigrant Job Creators. *Migration Information Source*, June 13, 2012. www.migrationpolicy.org/article/visas-entrepreneurs-how-countries-are-seeking-out-immigrant-job-creators.
- Tanden, Neera and Blair Effron. 2015. How to Foster Long-Term Innovation Investment. *Global Policy*, July 12, 2015. www.globalpolicyjournal.com/blog/12/07/2015/how-foster-long-term-innovation-investment.
- Tech Nation. N.d. Startup and Innovator Visa: Two New Visa Options. Accessed March 24, 2019. https://technation.io/visa/startup-and-innovator/.



Thailand Board of Investment. 2018. Thailand's SMART Visa: Attracting Foreign Talents and Technologies. Brochure, January 2018. www.boi.go.th/upload/BOI-brochure%202018-smart%20visa-EN-20180125_97687_87299.pdf. ——. 2019. Thailand's SMART Visa: Attracting Foreign Talents and Technologies. Brochure, January 2019. www.boi.go.th/upload/content/BOI-brochure%202018-smart%20visa-EN-20180125 97687.pdf. ——. N.d. Details of SMART Visa Program. Accessed September 7, 2018. www.boi.go.th/index.php?page=detail smart visa. Tönnemann, Jens. 2017. Heißt sie willkommen! Die Zeit, October 19, 2017. www.zeit.de/2017/43/einwanderung-einwanderungsgesetz-start-up-deutschland-buerokratie. UK Home Office. 2011. Government Rolls out the Red Carpet for Entrepreneurs and Investors. Press release, March 16, 2011. www.gov.uk/government/news/government-rolls-out-the-red-carpet-for-entrepeneurs-and-investors. -——. N.d. Start-Up Visa. Accessed July 20, 2019. www.gov.uk/start-up-visa. UK Home Office, Visas and Immigration. 2019. Statement of Changes in Immigration Rules. Updated March 7, 2019. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/784059/CCS001_CCS0319710302-001_HC_1919_Web_Accessible.pdf. —. N.d. Tier 1 (Exceptional Talent) of the Points Based System—Policy Guidance. Updated July 6, 2018. www.gov.uk/government/uploads/system/uploads/attachment_data/file/605982/T1_ET_Guidance_04_2017.pdf. U.S. Congress, Senate. Startup Act. S 328. 116th Cong., 1st sess. Congressional Record 165, no. 21, daily ed. (February 4, 2019). www.congress.gov/116/bills/s328/BILLS-116s328is.pdf. U.S. Department of Homeland Security (DHS), U.S. Citizenship and Immigration Services (USCIS). 2014. E-2 Treaty Investors. Updated January 14, 2014. www.uscis.gov/working-united-states/temporary-work- ers/e-2-treaty-investors. ——. 2015. Employment-Based Immigration: First Preference EB-1. Updated October 29, 2015. www. uscis.gov/working-united-states/permanent-workers/employment-based-immigration-first-preference-eb-1. —. 2015. Employment-Based Immigration: Second Preference EB-2. Updated October 29, 2015. www. uscis.gov/working-united-states/permanent-workers/employment-based-immigration-second-preference-eb-2. ——. 2017. EB-5 Investors. Updated May 8, 2017. www.uscis.gov/working-united-states/permanent-workers/employment-based-immigration-fifth-preference-eb-5/eb-5-investors. ——. 2017. International Entrepreneur Rule. Federal Register 82 (10): 5238-89. www.federalregister.gov/ documents/2017/01/17/2017-00481/international-entrepreneur-rule. ———. 2017. O-1 Visa: Individuals with Extraordinary Ability or Achievement. Updated January 5, 2017. www.uscis.gov/working-united-states/temporary-workers/o-1-visa-individuals-extraordinary-abilitv-or-achievement. ———. 2018. DHS Proposes to Remove the International Entrepreneur Rule. Updated May 25, 2018. www.

uscis.gov/humanitarian/humanitarian-parole/dhs-proposes-remove-international-entrepreneur-rule.

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- ——. 2019. Questions & Answers: Memoranda on Establishing the "Employee-Employer Relationship" in H-1B Petitions. Updated January 9, 2019. www.uscis.gov/news/questions-answers-uscis-issues-guid-ance-memorandum-establishing-employee-employer-relationship-h-1b-petitions.
- ——. 2019. Removal of International Entrepreneur Parole Program. Final stage rule, RIN 1615-AC04, Spring 2019. www.reginfo.gov/public/do/eAgendaViewRule?pubId=201904&RIN=1615-AC04.
- Warrell, Helen. 2019. World's Wealthy Face UK Golden Visa Crackdown. *Financial Times*, March 7, 2019. www.ft.com/content/3bbbaab4-403d-11e9-9bee-efab61506f44.
- Wilhelm, Alex. 2014. What the Hell Is a Startup Anyway? TechCrunch, December 30, 2014. https://techcrunch.com/2014/12/30/what-the-hell-is-a-startup-anyway/.
- Xing, Lisa. 2016. Start-Up Visa Program a "Disappointment," Says Windsor, Ont. Lawyer. CBC News, February 12, 2016. www.cbc.ca/news/canada/windsor/start-up-program-disappointment-laywer-says-1.3443956.



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The Migration Policy Institute is a nonprofit, nonpartisan think tank dedicated to the study of the movement of people worldwide. MPI provides analysis, development, and evaluation of migration and refugee policies at the local, national, and international levels. It aims to meet the rising demand for pragmatic and thoughtful responses to the challenges and opportunities that large-scale migration, whether voluntary or forced, presents to communities and institutions in an increasingly integrated world.

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