

A Growing (Opportunistic) Hub for Entrepreneurs:

A Report on the Innovation Ecosystem in Paris, France

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Executive Summary

As the economic capital of one of Europe's biggest economies, Paris is a natural location for a strong and vibrant innovation ecosystem. Yet it has historically fallen short of that designation. Rather, much more of the attention with regards to innovation has fallen on other cities such as London and even, increasingly, Berlin. Deeper analysis would indicate that Paris has vast potential to rise in the world of innovation powerhouses, but suffers as a result of an imbalance in its innovation ecosystem. Applying a research structure developed by MIT's REAP Program, it becomes clear that the city boasts strong and lasting Innovation Capacity (I-Capacity) but has been quite limited historically in its

Entrepreneurial Capacity (E-Capacity). And, according to MIT's research, while each capacity can exist independently, neither I-Capacity of E-Capacity is enough to create a truly dynamic innovation ecosystem. One established, the two reinforce each other and establish a lasting system that is beneficial for all involved. More directly, Paris' dynamic university system and strong commitment to R&D both on public and private levels create a vibrant landscape for innovation and research to thrive, yet the city remains mired in a complex bureaucratic system (the result of decades of centralization) that limits the agility of entrepreneurs.

Nonetheless, the innovation landscape looks to be gradually changing. There are an increasing number of entrepreneurs eager to mentor a younger generation and to offer the resources



necessary to establish burgeoning companies; and the government, too, has expressed a bullish willingness to make the bureaucratic changes necessary to make the entrepreneurial landscape of Paris more appealing. These changes, combined with a growing vacuum presented by the retreat of existing innovation powerhouses in Europe, indicate the potential for a bright future for Paris as an innovation hub. Nonetheless, the city needs to maintain its commitment to increasing E-Capacity, while continuing support its existing I-Capacity resources, maintaining a much more effective balance between the two going forward. Should both be realized, very little will stand in Paris' way.

Introduction

With a population of 2.4 million, Paris serves as the political and economic capital of France.¹ The city is truly an economic powerhouse, accounting for nearly a third of the wealth generated in France and 5 percent of European GDP. Like many other global cities, Paris' economy is largely founded on service-sector jobs, which can be partially attributed to the large number of corporate headquarters that can be found in the city: according to Forbes' "Fortune Global 500," 29 or the 31 largest French companies are based in the Paris Metropolitan Region and the city ranks first in Europe for the number of major companies located there. The country's industrial activity is notably largely located elsewhere.

Paris boasts considerable economic diversity, with jobs in fields ranging from aeronautics to biotechnology to telecommunications. As the economic capital of the country, Paris also accounts for much of the country's export/import activity: nearly a quarter of all imports and a fifth of exports. Much of its trade is conducted with partners across the European continent, but it also counts the



United States and China among its close trading partners.

Nonetheless, although Paris is an economic power in its own right, in order to truly understand the Parisian economy, one has to approach it as a product of French economic history more generally. Following World War II, Charles de Gaulle's government instituted the economic policy of 'dirigisme' in order to help the country to rebuild and to get the economy back on

its feet. Under Charles de Gaulle's leadership, the economy was largely centralized, and the state seized control of many key functions ranging from transportation to electricity to communications. The policy was initially a resounding success, ushering in the 'Trente Glorieuses' years of economic prosperity, but growing inflation and debt in the early 1980s ultimately resulted in a reversal of course, beginning an era of gradual privatization.²

Today, the process of privatization is still ongoing: the state still controls many key economic functions but is seeking to shed them as the burden of fiscal support becomes an increasing challenge. Although France was one of the original members of the European Union and one of the first to start integrating its economy into the larger European web, it is important to note that France's economic experience of intense centralization followed by gradual privatization doesn't mimic that of its peers; in fact the country is relatively unique in Europe in its ongoing struggles between public ownership and privatization—and the balance of public regulation over private enterprise.

As the country's capital, Paris has benefited immensely from France's tendencies towards centralization, serving as the hub of governmental activity and attracting corporate headquarters eager to coordinate with public activities.

¹ 'France Economic Outlook.' FocusEconomics. July 24, 2018. <u>https://www.focus-economics.com/countires/france</u>

In the past several years, there has been a notably aggressive push to speed up the process of privatization and to allow freer movement for private enterprises. The election of Emmanuel Macron in particular, resulted in a government that is known to be pro-business and has proclaimed itself particularly interested in establishing Paris and France more generally as a start-up hub.

Meanwhile, France's economic competitors in Europe and across the Atlantic Ocean are offering a unique opportunity for the country to increase in its economic preeminence. One of France's biggest economic and tech rivals, the United Kingdom, is currently in the throes of Brexit, for example, which has left many companies eager to stay in Europe searching for a new home base—and Paris is looking increasingly attractive. Germany meanwhile is mired in intense immigration debates and the increasingly inward-looking policies of the United States are dislodging some companies that are interested in maintaining their global focus. The time is ripe for Paris to step up and establish itself as a global center for innovation.

Methodology

This report applies MIT's REAP (Regional Entrepreneurship Acceleration Program) model of innovation to better dissect and understand the Parisian context. The model divides innovation into two categories: I-Capacity and E-Capacity.

I-Capacity is the "ability to develop new to the world innovations from inception through to the market." It thus looks at such measures as universities, investment in R&D, number of researchers, the quality of physical infrastructure, demand for innovative output, number of patents and others to better understand the research and innovative capacity of a location.

E-Capacity, meanwhile, is the "ability to start and build new to the world businesses from inception to maturity. Measures for E-Capacity include number of entrepreneurs, availability of capital, quality of management schools and others to better understand a location's ability to convert research into a usable product.

While each capacity can exist independently, neither I-Capacity of E-Capacity is enough to create a truly dynamic innovation ecosystem. One established, the two reinforce each other and establish a lasting system that is beneficial for all involved.

According to the REAP approach, there are five groups of stakeholders that play a key role in the establishment of an innovation ecosystem. As exhibited in Figure 1, entrepreneurs, universities, governments, corporate entities and risk capital providers all have a significant part in ensuring the establishment and sustenance of both I-Capacity and E-Capacity.



Figure 1. Stakeholders. MIT REAP 2017

This report thus seeks to analyze the Parisian innovation ecosystem context with an eye to both forms of innovation. The first step was to collect key statistics across many different categories to better understand the existing context. That step was followed by a series of 15 in-country interviews with representatives of all stakeholder groups. Each interviewee was asked a similar set of questions regarding the Parisian innovation ecosystem as tailored to their specific role within it. Interviews were scrupulously documented and supplemented by additional external research. Although names have been withheld for privacy reasons, interviewees participated from a wide variety of organizations including (among others):

- La Mairie de Paris
- Mobotiq
- > Uber
- Station F

- ➢ Renault
- Sciences-Po
- > Université Paris-Est Créteil Val de Marne
- > APUR

Key Findings

The statistics paint a very clear picture of the Parisian economy: Paris has much to offer in terms of I-Capacity, but is still limited in its E-Capacity potential. Nonetheless, the country is working hard to rectify the latter, with efforts by both the public and private sectors. In fact, the opportunity presented by the struggles of other innovation powers is widely recognized and Paris, specifically, is eager to seize it. This section explores some key areas within the innovation ecosystem whose analysis provides a more in-depth understanding of the system as a whole and its ongoing evolution.

Human Capital

France has numerous research universities and institutions that are among the most highly regarded in the world. The country is ranked among the top 5 in business schools and universities globally, with highly respected programs in a wide variety of fields ranging from mathematics to physics to the arts. In the IIe-de-France region alone, there are over 630,000 students at 16 universities and 61 'Grandes Ecoles.' 43 percent of those completing their PhDs in the region are international students. Those PhD students produce a lot of research, making the region third in the world for the number of

scientific articles published annually. And over 19 percent of graduates are in STEM fields. 38,000 engineers graduate in France every year. This contributes to a particularly strong I-Capacity—these researchers are well equipped for innovation and research in a wide variety of fields.³

Yet significantly, the French university system doesn't allow for education within multiple fields. Its best universities are separated by expertise: there is a literature Grande Ecole, a business Grande Ecole, a



science Grande Ecole, etc. Students emerge from the Grandes Ecoles experts in their field, with little exposure to other subject areas that might be useful. Most importantly, the sciences and business are two separate educational worlds. Thus, unsurprisingly, innovation in France usually results in very advanced technologies in a siloed field that are perhaps not very marketable. This is direct evidence of a strong I-Capacity without the balance of a strong E-Capacity.

Nonetheless, this is starting to change. The country has recognized the dangers of siloed education and research and has begun to introduce several measures to address it. Business, for example, is increasingly being taught as a requisite subject for those in other fields, particularly science. And other innovation educational systems, meanwhile, are arising. Ecole 42, for example, is a new school funded by French entrepreneur Xavier Niel. It is private, free and open 24 hours a day with a focus on subjects that are pertinent to today's working place, most notably, coding.⁴

It is also important to note that decades of policies that disincentivized entrepreneurship (as discussed below) resulted in several lost generations of entrepreneurs in France. Many left the country; there is a higher concentration of French citizens working in Silicon Valley today than any

³ IAU

⁴ Ranger, Steve. 'Startup Republic: How France reinvented itself for the 21st century by wooing entrepreneurs to Paris.' *TechRepublic*. January 2018.

other nationality from Europe (a total of 60,000).⁵ Thus, when looking at building up the necessary human capital for a stronger E-Capacity, it is important to look beyond to proper education to the incentives to stay as well. More directly, France has traditionally lacked both the education and the incentives necessary to build a strong E-Capacity despite all of the tools in place to ensure a strong I-Capacity. But the former is slowly starting to change.

Funding

France has traditionally committed considerable funds to R&D. In 2017, R&D expenditure totaled an impressive 19.026 million euros with 31 percent coming from the government and the private sector contributing 69 percent.⁶ This has contributed to the country's considerable research output: the country easily ranks in the top ten on a yearly basis for patent applications.

Nonetheless, France has lagged behind with regards to entrepreneurial capital. Up until recently, they ranked 35th globally in venture capital availability and receive a mediocre 4 on a scale from 1-7 for ease of access to loans.⁷ This echoes the complications of a convoluted bureaucracy discussed in the previous section as well as the traditional dearth of entrepreneurs and small businesses: if the bodies don't exist to fund, then any potential funding itself will also be sure to dry up.

Nonetheless, the number of venture capitalists and the funds available are quickly growing as France starts to increasingly show its prowess in this area. French funds, for example, outraised Europe for



the first time in 2017 and there are now hundreds of venture capitalists operating out of Paris. At 2.2 billion euros, venture capital investment is in fact now almost to the level of the UK. Further, larger corporations are now increasingly looking to invest in small start-ups instead of doing all of the R&D in house.⁸

Yet venture capital expertise and longevity remains a challenge for the region. With so many of the previous generation's entrepreneurs having left the country for

opportunities elsewhere, there is a dearth of mentorship and funding for smaller companies by other ventures looking to support the next generation of companies.

Bureaucracy

As discussed in the introduction, France has a long history of a centralized economy. This has resulted in a very extensive and convoluted bureaucracy that persists decades after the country's pivot towards gradual privatization. This red tape is complex to navigate for many companies based in France, but perhaps most difficult for start-up companies as a result of their limited resources, vulnerability and the even greater complexity when it comes to small-business law.

There are a wide variety of laws that entrepreneurs point to as having limited the E-Capacity of the country. Employees must give at least two months' notice, for example, before leaving. Meanwhile,

⁶ IAU

⁵ Olson, Parmy & Wood, Alex. 'France's Big Pivot. *Forbes*. May 1, 2018. <u>https://www.forbes.com/feature/france-macron-station-f-entrepreneurship/#7a8c3631573a</u>

⁷ WEF

⁸ Olson et al

just last year, the country passed a 'right to disconnect' law that makes it illegal for employers to ask employees to check their email after working hours (a particular challenge for start-ups that need to be agile and nimble). That is of course compounded by the 35-hour work week. Further, there still exists an 'exit tax' of 30 percent for companies that want to leave France. And for start-ups that have a global perspective and evolving markets, that makes the country unappealing as an initial home base. Then there are, as always the high taxes for companies and workers (payroll tax is an impressive 42 percent) and the strong unions that threaten strikes on a regular basis. Finally, the mere complexity of labor laws (housed in a 3,000 page tome) is frequently an insurmountable bureaucratic and legal challenge for companies just starting out.

It is also worth mentioning that because of the country's former centralization and existing ownership of many key functions, there is a closer proximity between large companies in the government within France than perhaps elsewhere on the European continent. Thus larger companies have increased access to government actors and thus exert perhaps undue influence on policies or perhaps receive approvals more expeditiously than their peers might. The absence of this influence presents an additional challenge to smaller companies. In the autonomous vehicle space, for example, several start-up interviewees mentioned that they had considerable confusion and difficulty determining what sorts of approval they needed for testing and how to go about getting it. Yet large companies like Renault and Groupe PSA went through the process quite easily and have been operating AV experiments on public roads for several months now.

Nonetheless, these hurdles are well-known to the French government and the current administration, under the leadership of former entrepreneur Emmanuel Macron, is working actively in an attempt to ease the difficulties imposed by all of the aforementioned red tape. The president,

for example, has already made it easier to hire and fire, has simplified the labor structure (marginally) and is striving to slash and simplify the tax structure. And he has made it no secret that the 'exit tax' is his next target for removal.

Also of note, in 2009, France introduced the concept of the auto-entrepreneur into its tax law. Individuals who declare themselves an auto-entrepreneur undergo a simplified bureaucratic process of registering their 'business' and receive



considerable tax exemptions. It thus allows very young companies to face less red tape for their first years of business. Significantly, there are limits to the amount of money that is exempt under the designation of auto-entrepreneur and the country is considering imposing term limits so that individuals don't use the designation to establish have a permanent advantage over other tradespeople. And, as discussed in the previous section, as soon as companies graduate from 'small business' status, they are left to their own devices.

Culture/Language

Statistically, France ranks among its peers in such factors as technology adoption by the public and firm-level technology absorption.⁹ But while those cultural factors may be in its favor, there are

numerous other cultural factors that arguably undermine the country's E-Capacity. Many Parisians don't speak English, for example, requiring a good level of French for anyone eager to effectively operate in a Parisian ecosystem. Further, there still exist laws that require that a French-based company's literature be available in French adding an onus for those companies that are global and operate solely in English. This resistant to external linguistic influence is even evidenced in the language itself: instead of adopting anglicized words like email or data as many foreign countries have, the French have established French iterations of those words to be used within French borders.

Further, the business culture itself has a formal and unique etiquette that must be followed to thrive within the city. There is generally a strict dress code, for example, and relationships/networks are built over years as opposed to over a cocktail or lunch.

Last but not least, what has been enshrined within the bureaucratic code is also a fact of the culture itself. Workers in France have a culture of leaving work early, not working on weekends and taking large vacations in the month of August. Albeit laudable in many ways, those habits are arguably at odds with traditional start-up culture which requires responsiveness, agility and endless hours of work.

These cultural codes and requirements all combine to make the life of start-ups a little more difficult—which is enough to tip the scales in a start-ups decision whether or not to stay in a country. It is cumbersome to adhere to language requirements in a world that operates in English; it is more difficult to communicate across cultures in the globalized world of start-ups with so many tiers of cultural etiquette; and start-ups need employees willing to work overtime if they want to get off the ground. Sometimes these little factors are enough to persuade start-ups to base their company elsewhere.

Nonetheless, the country's culture is also a key factor in what makes starting a business in Paris appealing. It is a beautiful, international city with a dynamic personality and, once established, a loyal client base.

Infrastructure

The country's physical infrastructure is impressive. Paris ranks top 10 globally for urban mobility, has Europe's second-largest airport and boasts the continent's second-best road network. The city also has extensive warehousing opportunities. Business, particularly big ones, are considerably benefited by these public investments.¹⁰

Yet infrastructure to support start-ups has traditionally been quite limited. Up until recently, there were very few physical hubs for start-ups and small companies to 'incubate.' This can partially be



attributed to the complex bureaucracy of space rental in Paris: when small companies are looking to lease space, they face an initial three-year contract—a considerable challenge for a company that is presumably just starting out. And, while, internet infrastructure could be described as strong in the city, it is not as fast or as developed as in other major cities. Nonetheless, that is beginning to change—and rapidly. In 2017, entrepreneur Xavier Niel (also behind the aforementioned Ecole 42) opened a world-class startup campus dubbed Station F. Based in a former railway station, the campus is 34,000 square meters in total and today has as many as 1,000 start-ups.¹¹ Large companies pay for their occupation of the space and access to this elite group of start-ups selected to operate out of the campus. Station F even has an office for the French government where start-ups can go to more easily navigate the vast bureaucracy and red-tape.

Meanwhile, other forms of start-up infrastructure have been popping up as well. The city, for example, has seen a vast increase in the number of coworking spaces over the past several years. Just like a home office, these spaces offer a desk, wifi and nourishment but do so in a more social setting, offering the opportunity for individuals to interact, exchange ideas and perhaps even sow the seeds of a new company. Today, there are over 85 coworking spaces in Paris and over 130 coworking spaces in the Paris Metropolitan region. According to research conducted by the Atelier Parisien d'Urbanisme, these spaces offer a unique form of opportunity to meet potential partners, clients or even resources. Coworking spaces often hold events to connect regular participants and members. And they notably offer speedy and reliable internet connections. Some examples include Anticafe, Coworkcrèche, La Ruche.

The number of start-up incubators and accelerators has also grown exponentially in recent years in the lle-de-France region. In 2017 alone, more than 160 incubators/accelerators were established. France more generally boasts the greatest incubator capacity globally.¹² Notably, the first incubators were launched in 1999 to support public research in the fields of technology and economics. Since then, many and more diverse incubators have been introduced to support everything from public research to university research to private efforts. Nonetheless, these organizations still rely quite heavily on government or angel funding for their fiscal support and have yet to boast many high-profile exits. In fact, the government is looking into how to wean the organizations off of its funding and to make them self-sufficient, but has had considerable difficulty in doing so.

Nonetheless, although this infrastructure to support start-ups has experienced considerable buildout in recent years, it is important to note that it is largely focused on budding companies. Those seeking to grow their business beyond the start-up phase still experience considerable bureaucratic *and* infrastructural hurdles.

¹¹ Ranger

¹² Atelier Parisien d'Urbanisme.

Recommendations

A deeper analysis of the Parisian innovation ecosystem thus evinces an already strong I-Capacity juxtaposed with a historically weak E-Capacity as thwarted by bureaucracy, infrastructure, culture, funding and even human capital.

Paris is truly a fascinating case for which to apply a REAP analysis: the city has, in many ways, taken the philosophy of REAP to heart. As expressed in the previous section, the city has acknowledged its shortcomings in the various categories of E-Capacity and is actively working to address them. Thus, most the overarching recommendation for the city is to keep doing what it is doing. It is important to continue to ease the bureaucratic burden through the simplification of labor codes and easing within the tax law for small- and medium-sized companies. It is important to continue to build out the infrastructure for start-ups to have a home base and one that gives them access to key networks needed to grow their business. They need to strengthen the education opportunities to ensure more well-rounded human capital to work in the growing number of start-ups. And they need to continue to expand funding options both domestically and abroad.

Yet I would proffer that the most important recommendation for the city of Paris is to look into how to support companies beyond the initial 3-person start-up phase. As the city continues to make progress on all of the above, most of the 'horror stories' of bureaucratic limitations for entrepreneurs arise after a company has started its growth phase. While it is appealing to boast of a large number of start-ups, if those start-ups don't have the tools they need to grow up into larger companies, then they will remain limited in their potential societal contribution. As the government continues to look at easing the bureaucratic tape for small companies, it should perhaps expand its efforts to apply to small- and medium-sized businesses.

Further, it is important the country not lose sight of the value of I-Capacity in its persist drive to improve its E-Capacity. An effective innovation ecosystem requires both: neither I-Capacity or E-Capacity alone is enough to create a truly dynamic innovation ecosystem. One established, the two reinforce each other and establish a lasting system that is beneficial for all involved. Yet investment in efforts targeted at supporting E-Capacity runs the risk of reducing investments in R&D more generally or the public infrastructure required to support innovation. The country should recognize its existing strengths within that area and continue to strive to maintain it.

Conclusion

France has long had all the key ingredients necessary to be a world powerhouse of innovation. It is, after all, an appealing destination with its elegant boulevards, a vibrant and dynamic culture, and a young, energetic population. Its rents are comparatively lower than many of its competitors. It has a well-established and well-respected university system. It has a well-maintained and extensive infrastructure.

And, with recent changes, France now boasts some of the ingredients necessary for being a world powerhouse of entrepreneurship. There are hundreds of venture capitalists operating out of its capital. At 2.2 billion euros, venture capital investment is now almost to the level of the UK. And, it now has numerous start-up hubs where new ideas can be sparked, and new investments made.

As a result, there are now around 9,400 startups in the country.

Nonetheless, perspective is important. Many years of policies that thwarted entrepreneurship can't be reversed immediately. In 2017, there were only three startups in France that were valued at 1 billion dollars, as compared to 22 in the UK and over 100 in the US. E-Capacity still needs considerable work.

It is also important to note that many of these changes are currently being driven by strong personalities in France. Many of the projects noted above are brainchildren of French entrepreneur Xavier Niel (Station F, Ecole 42), for example; and French President Emmanuel Macron has taken it upon himself to tackle the challenge of red tape from inside the government by sheer force of personality. While they are doing an impressive job to instigate change, the absence of either of them would hamper the process of strengthening E-Cap in the country considerably. Stabler ground will arrive when the push towards a stronger E-Cap becomes more widely accepted.

The country needs to be sure to keep its eye on the prize and to increase its efforts in the short-term. A combination of Brexit and American isolationism are beginning to create the unique opportunity of an innovation capital void among Western democracies. Paris is well-positioned to fill that void if it can successfully balance its innovation ecosystem.

Appendix

Below are highlights from discussions with pertinent stakeholders in the Paris Metropolitan Region. Responses have been aggregated into stakeholder groups and anonymized at the request of interviewees. It is important to note that the opportunity did not present itself to connect with any stakeholders involved in venture capital investment in Paris. Nonetheless, copious amounts of research into the subject in Paris and its surrounding region serve as a substitute for direct interviews.

Entrepreneurs

- The culture of France is still one that is hostile to innovation. Big ideas often receive negative feedback because of a still nascent and undeveloped innovation ecosystem.
- A strong university system is incredibly important because that is where entrepreneurs generally meet and put down roots as they work to start their companies.
- Access to resources is the thing that entrepreneurs think most about. Where are the funds available and how generous are they? In France, there are increasingly new sources of funding, but historically funds were limited and not easily accessible.
- The bureaucratic red tape to get necessary approvals from the government can be frequently overwhelming for small companies in France. And large companies usually already have the relationships necessary to help them navigate that red tape more easily.
- Language requirements (and the limited agility of French start-ups to engage in other languages) poses serious challenges for start-ups looking to succeed on the global scale.
- Big French companies are usually quite open to and supportive of R&D and are increasingly engaging with smaller companies to coordinate efforts.

University

- The structure of education systems within a country has a strong impact on the strength of its innovation ecosystem. In France, the problem has traditionally been that different subject areas are divided from each other: historically, engineering and business experts rarely interacted. That is slowly starting to change, however, and the country is starting to prioritize key areas within the field of innovation, such as coding and other STEM subjects.
- Universities also notably serve as key bridges for an innovation ecosystem and are particular good at that role within France. Because they have conversations with a wide variety of players, they are able to introduce experts, small companies, large companies and government players to each other.
- Much wisdom can be gained internationally as well. France is sometimes perhaps inward looking in its approach to innovation of all sorts.

Government

- Strong, stable and clear government institutions are incredibly important for an innovation ecosystem to thrive. While France and Paris have long offered stable government institutions in the general sense of the term, the tax structure has long been obscure and difficult to navigate and, at times, changing. This historically undermined innovation in the region.
- France has traditionally had a very weak venture capital system because of the strong presence of government funding.
- Paris has a diverse and vibrant set of start-up accelerators and incubators. While there have yet to be a large number of high-profile exits, all of the key inputs are there for start-ups to

connect and coordinate and grow. Nonetheless, many of the incubators are heavily dependent on stable government funding.

• Paris faces particular limitations as a national capital: it has more responsibility because its role within France and it does not have as much agility to introduce innovative policies as its smaller brethren might.

Corporate

- R&D is a strong priority for many large French companies and partnerships are particularly valuable to bring a wide variety of expertise to a conundrum.
- Sometimes smaller companies are in fact more ideal within the innovation ecosystem because they are more agile in many ways.
- Now is a unique moment in history with much innovation happening in technology, in transportation and in data and companies are eager to be well-positioned to seize upon that and so are working with actors of all kinds to ensure that they are ready.

Other

• In many countries, immigrants are a key input into the innovation ecosystem. An easy pass to citizenship means an easier path to entrepreneurship and thus a much more vibrant immigrant innovation ecosystem. In France, it has not always been the case that there is an easy path to citizenship.

'France Economic Outlook.' *FocusEconomics*. July 24, 2018. <u>https://www.focus-economics.com/countires/france</u>

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