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MAPPING MILAN FINTECH

LESSONS FROM A DATASET OF OVER 110 FINTECH COMPANIES AND THEIR FOUNDERS IN ITALY'S FINTECH HUB

endeavor INSIGHT

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ABOUT ENDEAVOR INSIGHT:

Endeavor Insight is the research division of Endeavor, a non-profit organization that supports high impact entrepreneurs across the world.

Its work seeks to answer three questions:

1. How do entrepreneurs reach scale at their companies?
2. How do entrepreneurs reach scale in local networks or ecosystems?
3. What can policymakers, philanthropic leaders, investors, support organizations, and other stakeholders do to empower more entrepreneurs to reach scale in their communities?

GLOBAL ENTREPRENEURSHIP RESEARCH NETWORK

The methodology utilized in this study builds on previous Endeavor Insight research supported by the Bill and Melinda Gates Foundation, the Omidyar Network, the Kauffman Foundation, the Inter-American Development Bank, the Heron Foundation, Foundation, as well as partners in the Global Entrepreneurship Research Network.

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EXECUTIVE SUMMARY

In early 2019, Endeavor Insight partnered with Fintech District and Endeavor Italy to assess the entrepreneurship ecosystem for financial technology companies in Milan. The purpose of the study was to provide a snapshot of the sector's current state, evaluate the industry's strengths and weaknesses, and enable decision makers to better understand and support local entrepreneurship in the sector. The recommendations in this report are based on 64 interviews with Milan fintech entrepreneurs that Endeavor Insight was able to conduct with support from Bip, as well as additional analysis of 113 local fintech companies. In addition, the team analyzed 159 linkedin profiles of local fintech founders. Fintech companies were defined as companies with a technological service or product dedicated to enabling financial services. The study concluded in the following key findings.

1 **Decision makers in the private sector and the public sector alike should focus on helping companies reaching scale.** A historic financial capital in Europe, Milan has seen a boom in fintech startup activity in recent years. Just as the banking sector entered a recession, a number of banking professionals, faced with constrained growth opportunities and slashed innovation budgets at their banks, teamed up with technology experts to start new companies, and over 80 fintech companies were started in Milan in the past five years. However, only 5 percent of these companies have reached scale and employ more than 50 people today.

Milan's difficulty to produce fintech companies at scale presents a significant challenge for the sector's future growth. In fact, according to European Commission's data on small and medium business in Italy, companies with 50 employees or more drive most of the economic growth in the private sector in Italy. Data from previous studies of the technology sectors of New York, Bangalore, and Mexico City, and other tech hubs around the world show the same trend. Furthermore, companies at scale, on average, tend to pay higher wages than other companies, and they tend to be more resilient in times of crisis. If decision makers wish to foster growth in the fintech sector, they need to dedicate resources to addressing the challenges that prevent founders from reaching scale.

2 **Fintech entrepreneurs identified access to capital, access to talent, and compliance with regulation as their top challenges in scaling their companies today. Based on interviews with 64 fintech entrepreneurs in Milan, the following are the three major challenges that make it hard to scale a company in the fintech sector today:**

- **Access to capital.** While many wealthy individuals are involved in early stage investments, few venture capital investors, both Italian and international, have expressed interest in fintech companies in Milan. Most local fintech companies' services are focused on the domestic market, addressing the inefficiencies of the Italian financial ecosystem, such as the long time that it takes to pay a vendor, or the cash-heavy nature of consumer finance. Exit options are extremely limited as well, which makes investors cautious.
- **Access to non-financial talent.** There is an abundance of banking talent in Milan, but there is a shortage of tech skills and managerial skills, and a shortage of people with past scaleup experience, as reported by interviewed founders. Senior executives and business development experts are in especially great demand. These needs differed widely by business model: consumer-facing companies were over 35 percent more likely to rate access to managers as a challenge compared to business-to-business founders.
- **Compliance requirements**. Founders in Milan reported that fintech activity, compared with fellow EU countries, is heavily restricted by regulation, and its lack thereof: the absence of a specific fintech regulatory framework is debilitating as the sector is governed by the general traditional financial services rules; this creates uncertainty and high compliance costs, while constraining the potential to innovate. 46 percent of the interviewed 64 founders - and over 60 percent of b2b founders - reported regulation as a major challenge.

3 **Network Analysis points to challenges and opportunities in the Milan fintech entrepreneurship community with long lasting implications for the sector's future potential.**

- **There is an absence of productive mentorship and angel investment connections between fintech entrepreneurs in Milan**. Research shows that mentorships and angel investment from a founder at scale makes a measurable difference in a founder's ability to scale and significantly improves their economic performance by number of employees. These types of connections are extremely uncommon among fintech entrepreneurs in Milan: only 3 percent of companies benefited from this type of support, whereas 58 percent of companies in the sample belong to a network organization like Fintech District, Italiafintech, or Endeavor. This could be explained by the fact that the sector is still young. With time, however, this may turn into a major challenge in the sector's ability to foster companies that scale in the future.
- **The fintech community has strong ties with the banking sector because of former employment.** Fintech companies and the organizations that help them are strongly connected to banks through former employment and investment connections. Over 40 percent of fintech founders worked in banking before, and over 30 percent as senior executives. 65 percent of investors and support organization leaders also come from banking. These connections are important resources for scaling companies: some of the most accomplished founders in the sector today benefited from business partnerships and equity investments from private banks.
- **Entrepreneurial networks are the most influential actors in the entrepreneurship community and they can become a vehicle to transmit resources.** The fintech sector in Milan is characterized by a tight knit web of peer-to-peer connections. Entrepreneurs know each other well, and they frequently co-operate with each other, often to advocate for legislative change. As a result, networks and advocacy groups are the most influential organizations in Milan. Because of their enormous influence on the entrepreneurship community, networks are important vehicles that transmit experience and resources that may address the challenges entrepreneurs reported.

4 **Decision makers in the public sector and the private sector who wish to support fintech entrepreneurship in Milan need to focus on four key areas.**

- **Channel resources to companies with a potential to scale**. More fintech companies need to reach scale in Milan for the sector to become productive in the long run. To help the sector, decision makers should not only focus on supporting startup activity, but also take serious actions to boost companies' scale up.
- **Foster relationships with international investors.** Decision makers need to follow the lead of scaling founders that were able to attract growth capital for their companies. They typically have done so by relying on their personal connections with Italians abroad, or by attending an accelerator abroad. Decision makers should actively cultivate connections with high performing accelerators and investment funds abroad and facilitate their entry into the Italian market.
- **Address the shortage of tech talent and non-financial managerial talent in the sector.** Decision makers need to focus their attention on the challenges that hurt growing companies the most. Through international recruitment events and programs to host qualified managers, decision makers need to foster non-financial talent in Milan.
- **Leverage entrepreneurship networks to foster angel investment and mentorship among entrepreneurs in the sector.** Entrepreneurship networks are the most influential organizations in the Milan fintech community today. Network leaders should use their prominence to build on the high levels of trust in the system, help entrepreneurs share resources better, and take over their role as leaders in the community.


Fintech District

RESEARCH QUESTIONS

The purpose of this study is to identify how fintech companies in the Milan metropolitan area are reaching scale, what are the greatest opportunities fintech entrepreneurs can leverage to grow and what are the main scale-up challenges decision makers can address. Endeavor Insight identified 113 fintech companies founded or headquartered in Milan, collected primary data with surveys and interviews with the founders of 64 of them, and secondary data from other publically available data sources like Linkedin and Crunchbase on additional 159 founders.

The fintech companies mentioned in the report are relied to a range of sub-industries: tech enablers, crowdfunding, credit, asset management, payments, insurtech, cybersecurity, and cryptocurrencies. 49 percent of the 113 companies in the dataset are business to business (B2B) companies; about 30 percent are business to customer (B2C) companies; and the rest are "business-to-business-to-customer" (B2B2C). These latter typically offer solutions targeting financial advisory businesses or banks, who would then apply them towards customer-facing solutions.

For the purpose of this report, the term "Milan" refers to the greater Milan Metropolitan Area, which includes the provinces of Milan, Bergamo, Varese, Monza, Como, Pavia, Lecco, and Lodi, an area with a total population of about 7.8 million people, and a labor force accounting about 3.7 million people. Of the 3.7 million working population, an estimated 3.2 million are employed in the private sector1. "Fintech companies" in this study are defined as "companies that have developed or offer a technological solution dedicated to enabling financial services", or as "technology companies whose corporate revenue is mainly linked to the financial services industry".

Three principal research questions guided the research process:

1. What is the current state of the fintech entrepreneurial community in Milan today?
2. What is the role of support organizations and other institutions in fostering entrepreneurship and economic growth in the sector?
3. Where do opportunities exist to further the growth of this community so that it can generate more jobs and wealth for the region?

CONTEXT

Former bankers were well positioned to start fintech companies, because they were grounded in the inefficiencies of the Italian financial markets and knew which ones could be addressed with technological solutions.

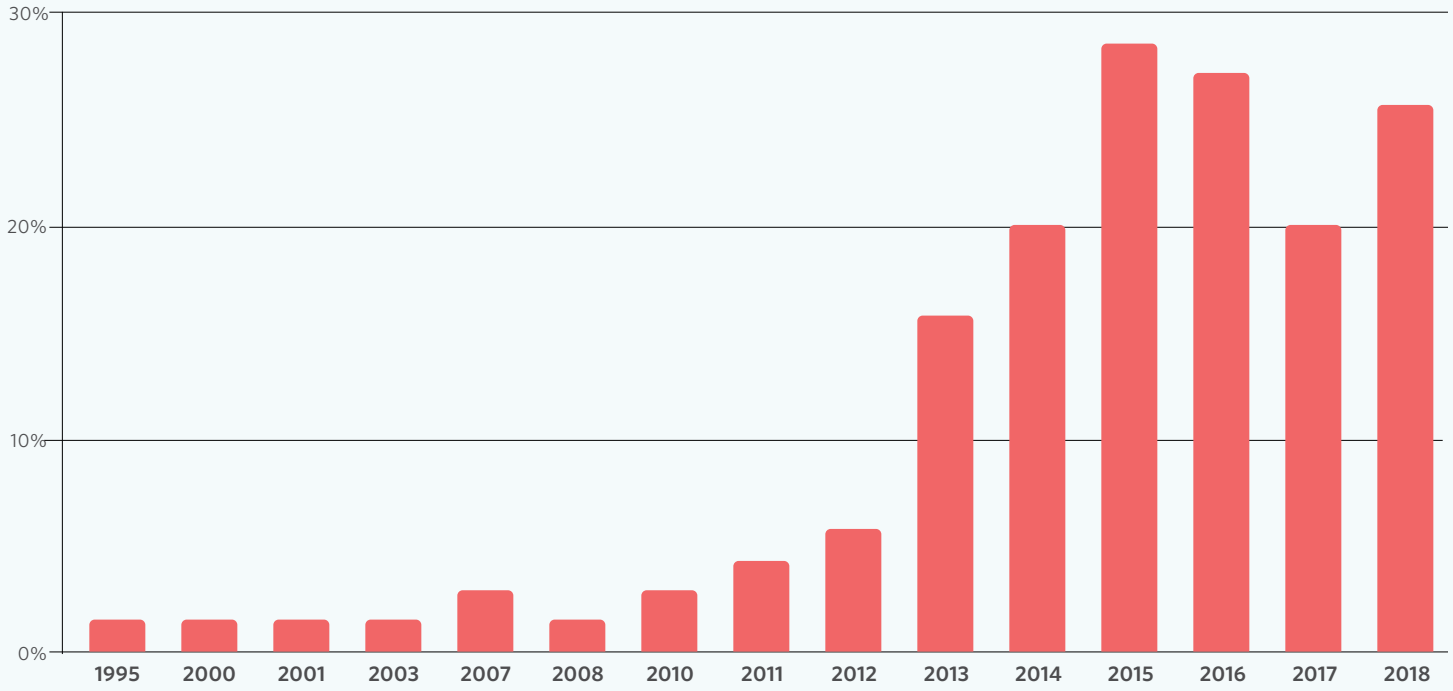
In 1494, the Franciscan friar Luca Pacioli published a mathematics textbook on arithmetic, geometry, and proportionality, describing for the first time in history an accounting method called "double entry accounting," a technique that Florentine merchants had long been using to keep track of revenues and losses. With that, Pacioli documented Europe's first financial innovation. At the time, the founders of the Florentine Medici Bank were just beginning to gain international prominence, and by the end of the 15th century Central and Northern Italy officially became the financial center of the continent. In the following centuries, nonetheless, a series of invasions from other prominent European powers stifled the further development of Italy's financial industry, at the advantage of other financial capitals, like London, Brussels and Amsterdam, that managed to quickly gain control of international trade routes.

Things began to change after the Napoleonic era, when Italy benefited from the introduction of a series of scientific and cultural innovations coming from the French Enlightenment, such as the introduction of structured local credit markets, the creation of notary law and foreclosure law and so on. Since then, Northern Italy as a whole - and particularly Milan - began reigniting their relative centrality in financial terms, a process that was that was funneled after the Unification of Italy. The nascent kingdom of Italy devoted growing investments in the industrial development of the country: this process coincided with the rise of the first private banks, such as Banca Sella, founded in 1886 in Biella. After the two World Wars, the war-torn country managed to start a spectacular season of economic renaissance, which lasted until the end of the century and was catalysed by the contribution of a network of solid financial actors, like Mediobanca and Intesa Sanpaolo. Northern Italy was able to capture this new type of economic development, making the country the second industrial power in Europe and of Milan the unmatched business capital of Italy.

Since then, Northern Italy has remained a prominent financial center in Europe. Over time, Milan gained prominence as Italy's financial capital, and today, it headquarters Unicredit and a significant portion of Intesa Sanpaolo's activities, two of Europe's biggest banks, about 170 smaller banks, and the Borsa Italiana. [2] A number of foreign financial institutions established headquarters in the Porta Nuova district: AXA, Bank of America, BNP Paribas, China Construction Bank, HSBC, and Accenture, among others. In total, there are an estimated 70,000 people employed in the financial services sector in Milan today. [3]

NUMBER OF NEW FINTECH COMPANIES FOUNDED BY YEAR

The past five years have seen an upsurge in new business activity in the fintech industry in Milan.



Source: Endeavor Insight. Sample size = 113 entrepreneurial financial technology companies founded in Milan.

In Times of Crisis, an Opportunity for Fintech

Being a city of 70,000 financial experts, Milan has been a relative latecomer to fintech. Up until the mid-2010s, there were only around 40 fintech companies in Milan, while the fintech ecosystems of London and Dublin were already flourishing, with companies like Transferwise and Stripe gaining traction across the world.

In the aftermath of the Eurozone financial crisis, Italy entered a prolonged recession. [4] Most banks slashed their innovation budgets, and a frustrated workforce was retained with hardly any salary increases or bonuses in sight. In 2016, PSD2, a European directive on payments clarified regulation around online payments companies in the E.U. Fintech companies were now allowed to make payments on a consumer's behalf without being registered and regulated as a bank. [5]

The banking crisis, coupled with the changes in regulation, were enough to convince many banking experts to spin off from their banks and start their own company. [6] Over 80 fintech companies were founded between 2014 and 2019, and the sector tripled in size. Former bankers were well positioned to start fintech companies, because they were grounded in the inefficiencies of the Italian financial markets and knew which ones could be addressed with technological solutions. In 2019, Endeavor Insight identified 113 fintech companies founded or headquartered in the area, who employed over 1,400 people overall.

Italy is a country of 4.3 million small businesses, and most of these businesses have constant cash flow problems.

Unique Opportunities in the Italian Economy: SMEs, Payments, and Private Wealth

Because of their ties with the financial sector, fintech founders were well versed in the market opportunities available in the Small and Medium Enterprises (SMEs) space, counting 4.3 million businesses in Italy, among which 4.1 millions are small (i.e. below 10 employees)[7]. Several SMEs have cash flow problems linked with payment time, which, according to official government data, range between 70 and 80 days.[8] Experts interviewed for this study typically quoted a timeframe longer than 90 days, especially when working with the Public Administration. With around €180 billion bank loans and bonds funding mostly reserved to medium-size companies, small and micro companies show stagnant growth in financing and appear to be largely underserved by traditional financial institutions.[9]

In this inconvenience, fintech company founders were quick to recognize the opportunity to facilitate the waiting period with online factoring services.[10] Others tapped into the opportunity to convert Italian customers to credit cards. 85 percent of point of sale operations still take place in cash in Italy, but the rate of adoption for other payment methods like credit cards and e-wallets is growing twice as fast as the European average.[11]

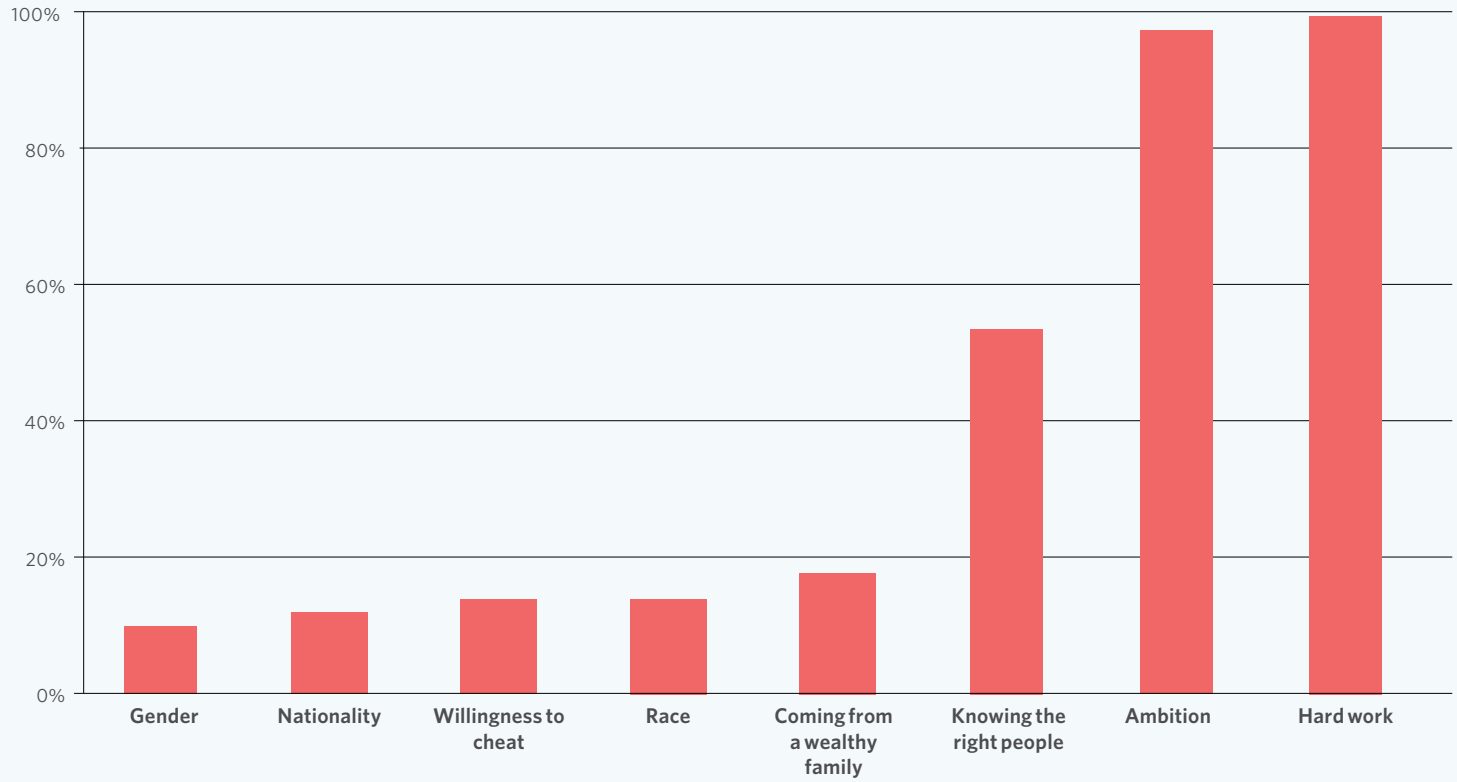
Milan has another important asset that allowed its fintech industry to flourish. Italy has one of the highest amounts of private wealth in the world, and high net worth individuals are becoming an important customer segment for the fintech sector. These customers are conservative in their financial habits, and rarely interact directly with fintech solutions. [12] Instead, their bankers and financial advisors do, and a number of fintech solutions are targeting these advisors as a customer base, complementing advisory services with machine learning solutions. [13]

Founders perceive Milan as a valid alternative to other fintech hubs both within Italy and Europe. Compared with other Italian cities, doing business in Milan has some unique advantages as it is recognized as Italy's financial capital, providing extensive business opportunities for fintech companies. Further, Milan-based companies have an ecosystem advantage due to proximity with most of Italian large corporates and investors. Compared with other European cities, Milan has a vivid international and entrepreneurial ecosystem and a competitive advantage in terms of cost of doing business, talent and quality of life. Interviewed founders showed a commitment to Milan: more than 75 percent mentioned that they planned to continue living in the city either for longer than three years, or indefinitely.

Fintech founders also perceive Milan as a meritocratic community, where qualities like hard work, ambition and creativity are valued significantly more in the industry than coming from the right family or having the right connections. Nearly a hundred percent of respondents believed that ambition and hard work impact one's chances of getting ahead, whereas less than 20 percent believed that non-meritocratic factors like race, nationality, or class mattered. It is important to mention here that respondents may have been biased towards their personal perspective: in a community where less than 10 percent of entrepreneurs are women, it is perhaps not surprising that less than 10 percent believe that gender is irrelevant on the road to success.

PERCEPTIONS OF MERITOCRACY AMONG FINTECH FOUNDERS IN MILAN

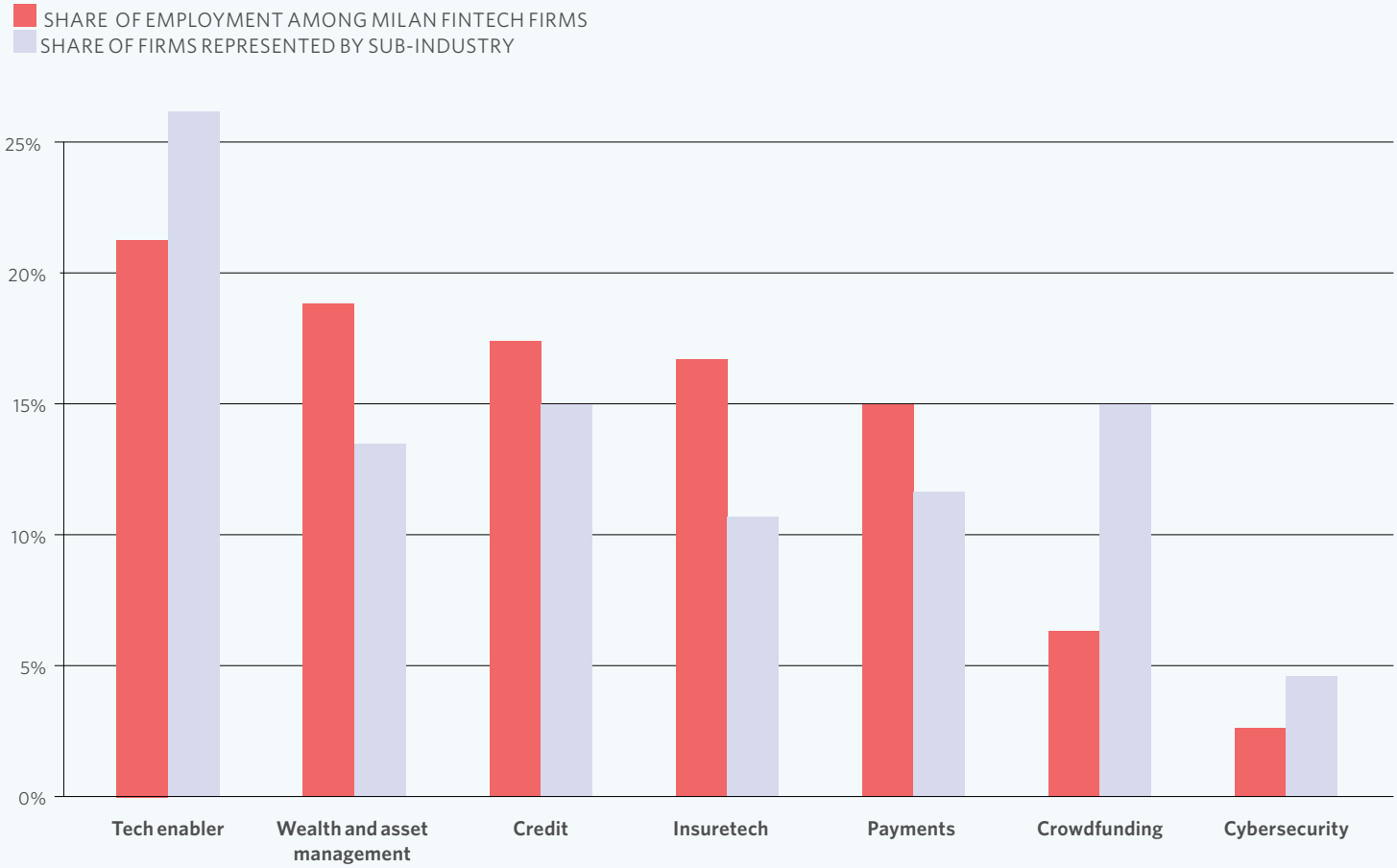
Percent of founders who believed the following factors were very important or essential to being a successful fintech entrepreneur in Milan.



Source: Endeavor Insight. Sample size = 64 fintech founders in Milan interviewed for the study.

NOT ALL FIRMS CONTRIBUTED EQUALLY TO THE GROWTH OF THE MILAN FINTECH COMMUNITY.

Wealth and asset management, insuretech, and payments companies outperformed their peers by their share of employment relative to their number.



Source: Endeavor Insight. Sample size = 113 entrepreneurial financial technology companies founded in Milan between 1995 and 2019.

SCALE AND DYNAMISM: ARE FINTECH COMPANIES SCALING IN MILAN?

While the number of new startups has exploded in Milan for the past decade, entrepreneurs are facing significant constraints in scaling their companies over a certain level. Among the estimated 113 fintech companies in the sector today, only 5 percent employ more than 50 people, and none of them were founded in the past 5 years. The largest fintech companies like Moneyfarm and Satispay employ slightly more than 100 employees. Successful fintech companies founded around the same time like N26 in Germany, Revolut in the UK, or Nubank in Brazil employ an order of magnitude more. Further, there were only six acquisitions in the sector to date. Fintech companies are starting up, but they are not scaling.

Milan's difficulty to produce fintech companies at scale poses significant challenges for the sector's future growth, because companies that scale drive most of the economic growth in a country. Companies with 50 or more employees across all sectors represent less than 1 percent of Italian businesses in the private sector (all sectors), but they account for a third of the job creation and over half of the revenue generation in the private sector. [14]

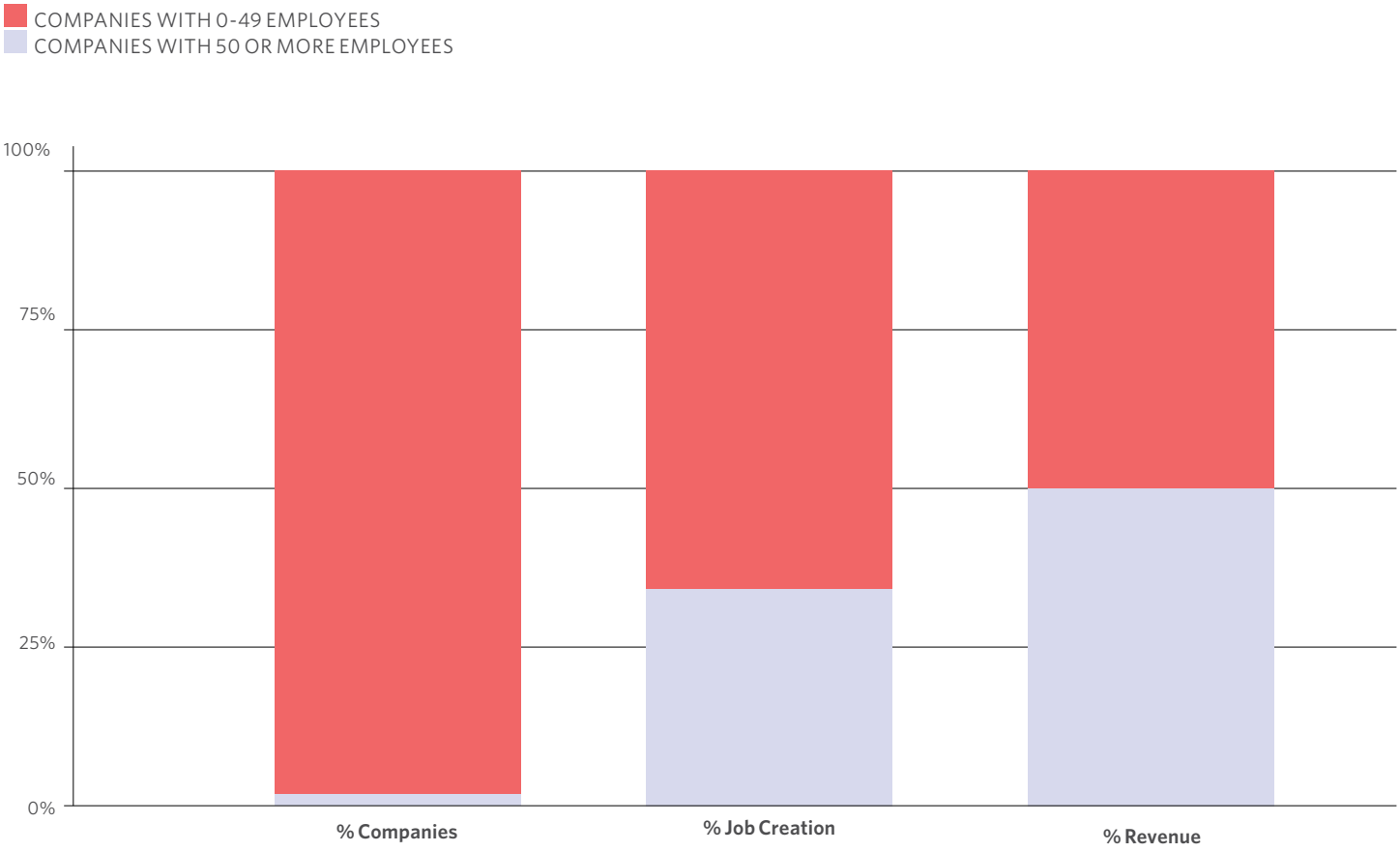
Other studies of tech entrepreneurship conducted by Endeavor Insight show similar trends in New York, Bangalore and Mexico City. Research from across the world has demonstrated that companies at scale also tend to pay higher than average wages, and they are more resilient in times of crisis. [15]

What makes it so hard to scale a fintech company in Milan today? Decision makers who want to help the fintech sector grow need to identify and address these constraints. Fintech entrepreneurs who are working to scale their companies today are the best source of this information, and when asked about what were their greatest challenges in scaling a company, they pointed out three issue areas.

Among the estimated 113 fintech companies in the sector today, only 5 percent employ more than 50 people, and none of them were founded in the past 5 years.

ECONOMIC CONTRIBUTION AMONG ITALIAN COMPANIES IN THE PRIVATE SECTOR BY COMPANY SIZE

Less than 1 percent of companies have 50 or more employees in Italy, but they account for over 30 percent of the jobs and over half of the revenue created by Italian companies in the private sector.



Source: European Commission Factsheet on Small and Medium Enterprises, 2017.

CHALLENGES: WHAT ARE THE GREATEST CHALLENGES THAT PREVENT FINTECH ENTREPRENEURS FROM SCALING IN MILAN?

CHALLENGE 1

ACCESS TO CAPITAL.

Access to capital was one of the highest rated challenges among interviewed entrepreneurs: almost half of the interviewed founders rated access to financial capital either as a major obstacle or a very severe obstacle. Interviewed entrepreneurs mentioned the following reasons.

1.Banks rarely make equity investments in the fintech sector. Equity investments and acquisitions in the fintech sector were uncommon among both banks and their corporate investment arms, even of the ones with the largest innovation budgets. This resistance to equity investments could be linked to corporate culture and organizational complexity. Further, such deals might not be attractive to founders due to valuation and potential operational limits in collaborating with other banks.

2.For many international investors, Italian fintech companies are overly focused on solving Italian problems. Italian investors interviewed for this study explained that international investors could provide additional growth capital for fintech entrepreneurs, but they act cautiously because they are unfamiliar with Italian financial consumer habits and the inefficiencies of financial markets that most fintech companies are addressing. Before they would invest in Italian fintech companies, they look for previous investment activity on behalf of domestic investors, but domestic investors have rarely invested in the sector.

3. The prospects of having a profitable exit are uncertain. One of the main drivers of venture capital investors is the likelihood of an exit. Fintech in Milan does not have a history of successful exits, with only six known cases of full acquisitions, of which only Neutrino, a cybersecurity company, sold for over USD 10 million to San Francisco-based Coinbase.[16] As Italian banks have a limited appetite for startup acquisitions, exits would be more likely to happen on the international market. However, as most fintech initiatives focus on solving problems that are specific to Italian markets, the appeal for international players is limited as well.

CHALLENGE 2

ACCESS TO NON-FINANCIAL TALENT

Access to talent ranked similarly high among the challenges that founders mentioned.

1. Non-financial talent and senior executive positions are hard to fill in fintech. There are about 70,000 financial services professionals working in Milan, but interviewees reported that other types of talent are hard to find. When asked about the hardest positions to hire for, over 70 percent of respondents brought up non-finance related positions, with the most prominent hiring issues related to marketing and data science. High-growth entrepreneurs particularly struggled to find the right senior executives or business development experts: about 40 percent of them brought this problem up.

2. Milan founders are competing for talent with tech companies across Europe. With a fluid workforce willing to move abroad (28,000 graduates left the country in 2017 alone), Italian companies have to compete for talent with tech companies all across Europe. When fintech founders are trying to scale in Milan, the companies they compete with for tech talent and managerial talent are success stories like Cabify and Glovo and American tech companies like Uber, Netflix, and Tesla which established European headquarters in Amsterdam. [17]

Companies with sufficient budget have chances to win this game and some are even succeeding in targeting the former employees of other European companies.

These types of challenges vary widely by business model, as illustrated by the chart on the following page: consumer-facing companies were over 30 percent more likely to report challenges related to hiring qualified managers as other companies than others, while business-to-business founders were more likely to struggle with regulatory challenges-

CHALLENGE 3

REGULATION

While consumer protection and regulatory measures known as "Know Your Customer" and anti -money laundering measures are a common constraint on fintech companies all around the world, Italian companies have to navigate a particularly complicated supervisory landscape. This complexity results partly from the combination of national legislation and EU-mandated directives that need to be interpreted and applied. This is the case across all 28 EU member states, but it may impact the Italian fintech ecosystem even more severely.

The fintech regulatory framework in Italy does not separate new players from established institutional ones. As a result, Italian companies operate in a general atmosphere of uncertainty which translates into high operational costs.

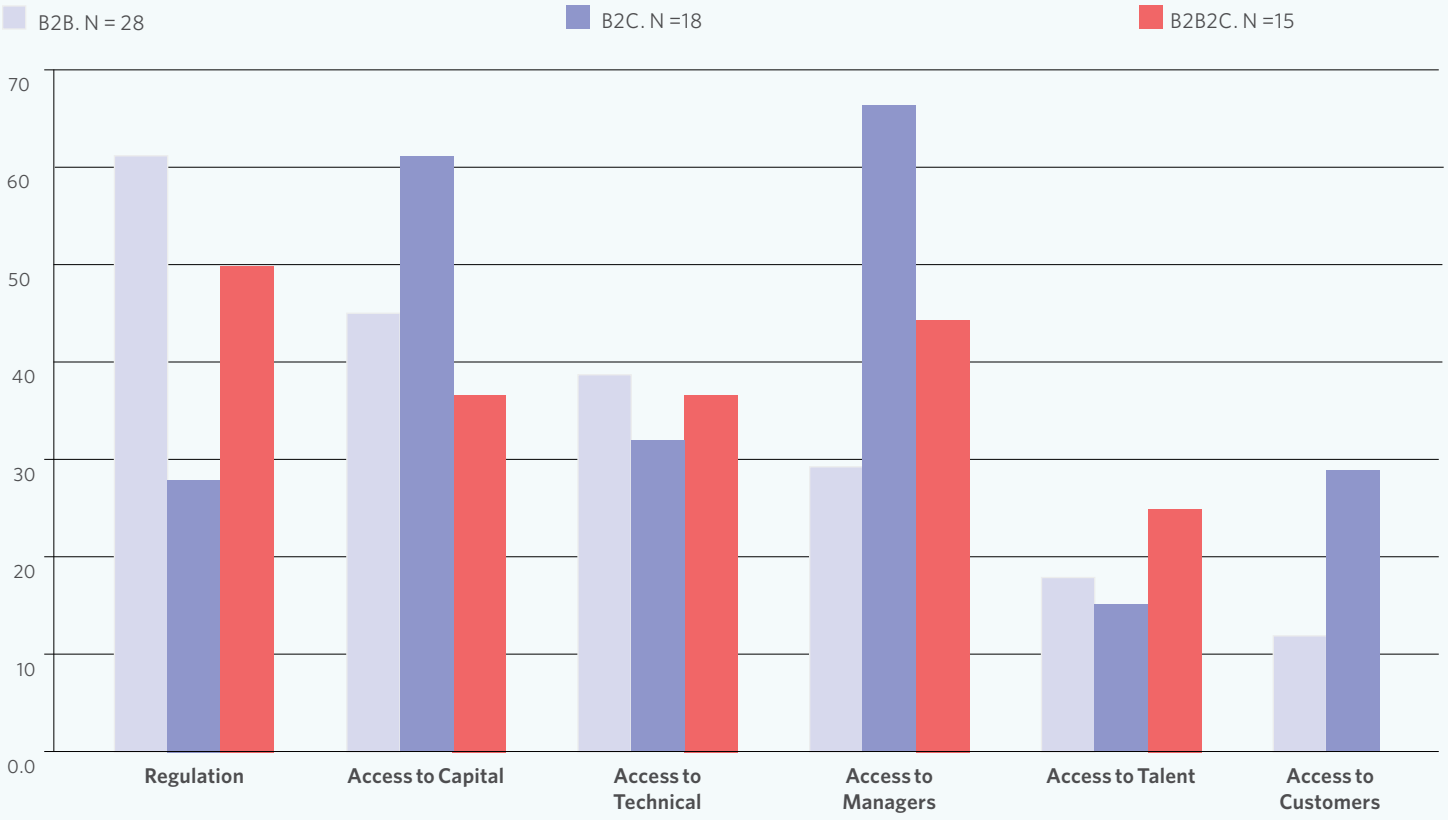
The conspicuous absence of legislation means that fintech players fall within the jurisdiction of several existing financial services regulatory bodies such as the European Securities and Markets Authority, Bank of Italy and Consob, and this translates into high compliance costs for fintech companies. More than a safety measure, these costs are inevitable to obtain and maintain the authorization from regulators.

As soon as a directive on payments or lending is adopted in the EU, the Italian Central Bank needs to get to work to translate it into Italian legislation, and communicate the coming changes.

When a new European directive is adopted, Italian legislators need time to ratify it. This causes an atmosphere of uncertainty where Italian fintech companies sometimes spend months developing technology that may not comply with the coming legislation. Companies need to retain large compliance teams because Banca d'Italia needs to authorize the organization structure for companies in the financial services and that needs to involve a compliance team. One founder reported that in his first year of operations, there were three compliance officers on his 17-people team. [18]

THE HIGHEST RATED CHALLENGES OF FINTECH FOUNDERS IN MILAN BY BUSINESS MODEL TYPE

Percent of respondents who rated the following issues as a "severe" or "very severe" challenge.



Source: Endeavor Insight. Sample size = 64 responses by Milan fintech founders.

CREDIMI'S FOUNDING STORY

When Credimi founder Ignazio Rocco quit his consulting career of twenty years in 2015, he had his eyes on the fintech industry as a potential investor, not an entrepreneur. With his experience at BCG, and before as a banking professional, he developed a strong understanding of financial markets in Italy. His fascination with technology was more of a personal matter. He was a baby boomer whose childhood was marked by the experience of sending a man to the moon, and he always advocated for innovative tech solutions in his work as a consultant, but his expertise stopped here.

As a first step, Ignazio began to study the best performing fintech companies of the time, such as Lending Club and Funding Circle, to learn about their approaches and growth strategies. He began to recognize patterns in their techniques, models, and know-how that closely tied into his experience as a banking professional. He realized there was a demand for the same services in Italy, and he returned to Italy with the resolve to start a fintech company focused on SME lending.

The timing was perfect. At that point there was no other fintech lending firm in Italy, and no one else was trying to serve the enormous Italian SME market. The hardest part, he knew, was going to be to build the right team. Cognizant of his inexperience in tech, he began searching for a cofounder to complement the team. A friend introduced him to Jacopo Anselmi, a 27-year-old anti-abuse strategist at Google, and once he was on boarded, they convinced Sabino Costanza, a talented project leader at BCG, to become their third cofounder.

Then, Ignazio left on a five-day trip to San Francisco and tracked down every qualified Italian expat he could think of to convince them to go back to Milan and join what was Credimi. He had a good case to make to them: they were going to build a truly collaborative company, and he allocated a correspondingly high portion of the company's cap table to prove that he was serious. At some point, he met with the Italian consul in San Francisco to convince him that it was in his best interest to help Credimi find the best Italian talent in town.

Fundraising was a simpler matter thanks to Ignazio's connections from his previous career, but Credimi was going to need a lot of capital to navigate the strict Italian regulatory landscape. As a long term strategy, the team applied for a lending licence early on, which was going to be a costly procedure for a small company. So, instead of raising a seed round, Ignazio, Jacopo, and Sabino sought to raise 8 million dollars right away. For this, Ignazio gathered a coalition of outstanding angel investors, which included Alessandro and Mauro Benetton, Paolo Merloni, Lorenzo Pelliccioli, the Venesio family, owner of Banca del Piemonte, BCG Global Chairman Hans-Paul Bürkner, a number of Tikehau Capital partners among which Jean Pierre Mustier, who later became Unicredit's CEO (At that point, Mustier sold his shares in the company to avoid conflict of interest.), Giovanni Landi, Massimo Tosato and Dante Roscini, which then become President of Credimi.

Credimi was launched in 2017. Two years later, it is the largest digital lender in continental Europe, and it is managing 700 million Euros in lending. In 2018, they raised 10 million euros in follow-on financing, one of the largest rounds in Milan fintech to date. Together with a number of other first movers, Ignazio helped found Italia Fintech, an organization to advocate for a regulatory framework that would ease the burden on young fintech companies in Milan. As today Credimi operates in Italy only, but the founders see an opportunity to expand their operations globally.

NETWORK ANALYSIS

Network analysis suggests that the fintech entrepreneurship community in Milan has a unique character, and it can be leveraged to support the sector's growth in the future.

To identify opportunities in order to strengthen the fintech sector in Milan and to help more companies reaching scale, Endeavor Insight used network analysis to analyze connections between entrepreneurs and support organizations in the sector. Endeavor Insight mapped six types of connections between entrepreneurs and organization who support them: serial entrepreneurship, former employment, mentorship, investment, acceleration or network membership. These connections illustrate the ways in which local founders take knowledge and other resources acquired from founding one company and use it to help launching another.

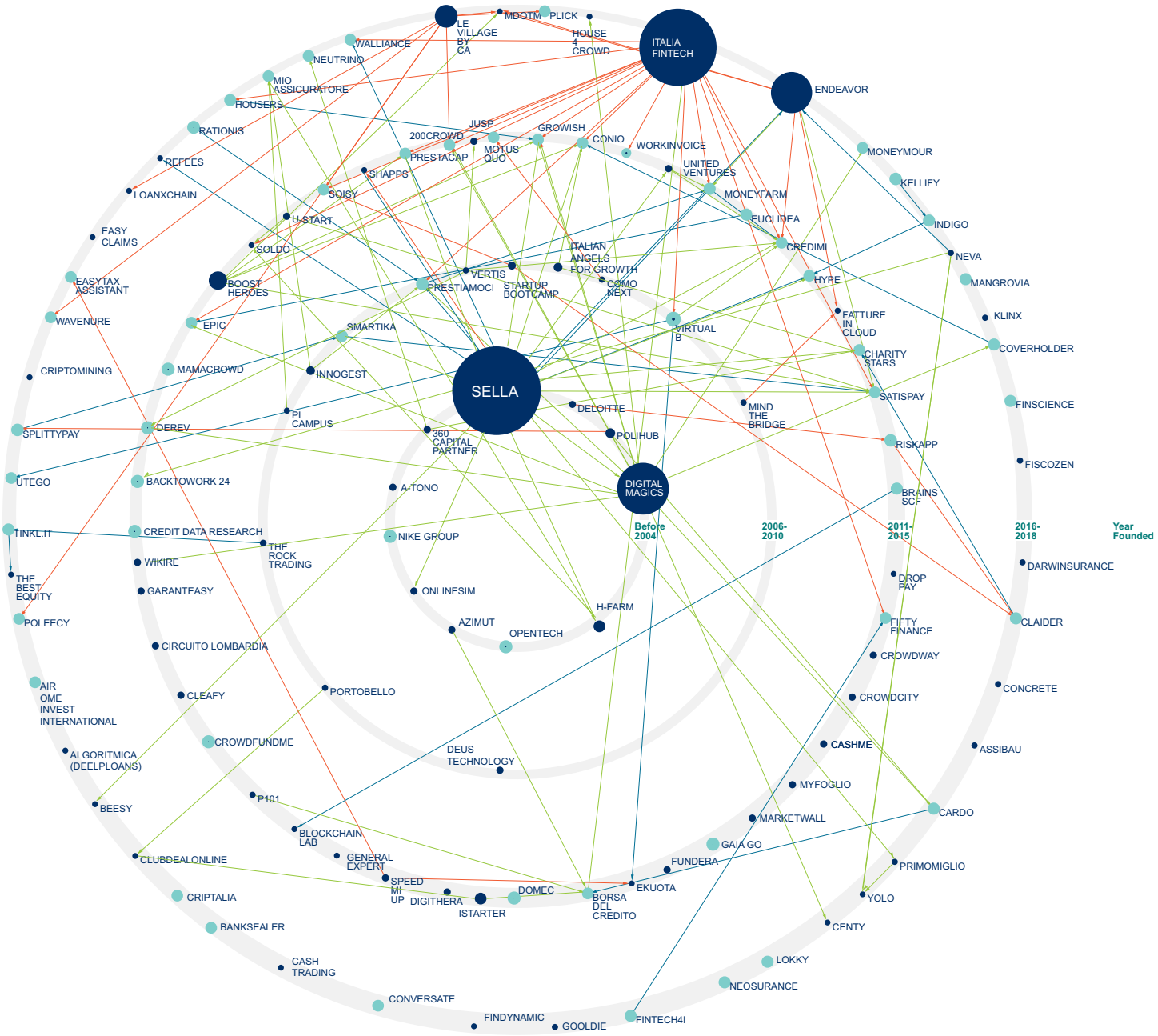
This snapshot of the entrepreneurship community is a useful tool to follow the flow of people, capital, and information in the fintech sector, and identify network characteristics with long lasting implications for future productivity. Certain connections between entrepreneurs drive productivity, while others impede growth. Former employment at a scaleup company with 100 employees or more, as well as mentorship, investment, and support from experienced founders who built or operated companies like that is associated with two to threefold chance of becoming one of the most prominent employers among companies founded in the same year. At the same time, receiving support or mentorship from someone with no experience in entrepreneurship lowers a founder's chances of becoming a top employer. [19]

Over time, connections shape entrepreneurship communities through patterns of influence. Influential actors transmit their values through the network. Some networks help good practices to spread through a robust support system for scaling entrepreneurs. Other networks are clicky and dysfunctional. Within these latter, resources do not reach the entrepreneurs who could generate employment and revenue for their communities.

For instance, Bangalore is a spectacular case of entrepreneurial success, where the most influential actors — measured by their closeness centrality in the network — are experienced entrepreneurs and where reaching scale is highly valued in the entrepreneurship community. On the other hand, as demonstrated by the case of Nairobi's tech ecosystems, if the most influential actors are people with no experience in reaching scale with their companies, other characteristics are going to be valued in the network, and the community, as a whole, will be less productive as measured by the number of jobs it generates.[20]

The social network map across the page represents the employment, serial entrepreneurship, mentorship, support, and investment connections that exist in the Milan fintech ecosystem. Founders are represented with their most prominent company. To demonstrate the importance of networks, all companies in the Fintech District community are highlighted in a light blue halo.

The fintech entrepreneurship community in Milan has a unique character, and it can be leveraged to support the sector's growth in the future. There were a total of 101 connections between companies in Milan, but its most influential actors were investors, networks, and accelerators, who are working to support entrepreneurs grow in Milan.



YEAR FOUNDED:

- BEFORE 2004
- 2006-2010
- 2011-2015
- 2016-2018

ACTORS:

● ENTREPRENEURIAL COMPANIES AND SUPPORT ORGANIZATIONS

The size of the circle reflects the number of connections originating from the founders of each company or the leaders of each organization. Founders and leaders are represented by their most prominent company or organization.

CONNECTIONS:

- EXPERIENCE: Former employment or serial entrepreneurship
- SUPPORT: Mentorship or program participation
- INVESTMENT: Angel or venture capital

HIGHLIGHTS:

Organizations in the Fintech District community are highlighted in a light blue halo.

LESSON 1

THE NUMBER OF ANGEL INVESTMENT AND MENTORSHIP CONNECTIONS BETWEEN ENTREPRENEURS IS LOW.

When entrepreneurs connect to each other through mentorship and angel investment, they have a beneficial multiplier effect on economic growth of their communities as they share resources and knowledge. In particular, mentorship and angel investment from a founder at scale makes a measurable difference in a founder's ability to overcome challenges and achieve scale with their own company.

These types of connections are extremely uncommon among fintech entrepreneurs, investors, and support organization leaders in Milan - only 3 percent of companies benefited from this type of relationship. Among 113 entrepreneurial fintech companies in the area, only 4 were connected to each other through mentorships or angel investment, which might be a major challenge in the sector's ability to foster companies that scale in the future.

There are a few possible explanations for the low number of productive connections. The sector is very young, and there are other sources of seed investment available to new entrepreneurs.

The table below helps to provide benchmarks for the Milan fintech community from three other cities where fintech entrepreneurship is prominent: Nairobi, Istanbul, and New York. Importantly, the quantity of connections in itself is not enough to help a community grow; connections to qualified entrepreneurs who have successfully grown a company have a more focused impact on company performance.

In Milan, accomplished founders are strongly connected to each other through network membership in organizations like Fintech District, Italia Fintech, and Endeavor. With time, these connections may pave the way for more angel investment and mentorship among founders.

	MILAN	NAIROBI	ISTANBUL	NEW YORK*
Estimated Age of Sector	15 years	20 years	30 years	30 years
Interviewed Founders	64	278	220	700
Total # of Entrepreneurial Companies in Sample	113	660	800	2600
Number of Connections	101	494	758	1949
% Mentorship or Angel Investment	7%	21%	25%	60%
% Angel Investment	3.80%	2.80%	15%	44%
Total Jobs Created by Companies in Sample	~1,400	~7,300	~25,000	~53,000

Source: Endeavor Insight.
*The New York Tech Map was conducted using a previous methodology that was limited to mapping connections between founders only, excluding other stakeholders.

LESSON 2

NETWORKS ARE THE MOST INFLUENTIAL ORGANIZATIONS IN MILAN FINTECH.

The fintech sector in Milan is characterized by a tight knit web of peer-to-peer connections. Entrepreneurs know each other well, they are generous with their connections, and they frequently co-operate with each other to advocate for legislative change in Italy and the EU. In fact, over 72 percent of entrepreneurs reported that they could get the number of an influential entrepreneur they wanted to meet that same day.

Trust was also very high among respondents: approximately 80 percent of respondents reported that they trusted other fintech entrepreneurs either somewhat or completely. These levels are very high not only compared to other groups, like investors or politicians, but also in comparison to some of the other entrepreneurship communities where Endeavor has conducted research. For instance, in Mexico City, less than 35 percent of surveyed entrepreneurs mentioned that they trusted their fellow entrepreneurs by the same measure.

High level of trust towards peer entrepreneurs could explain why the most influential actors in the fintech community are networks like Fintech District, Italia Fintech, and Endeavor.

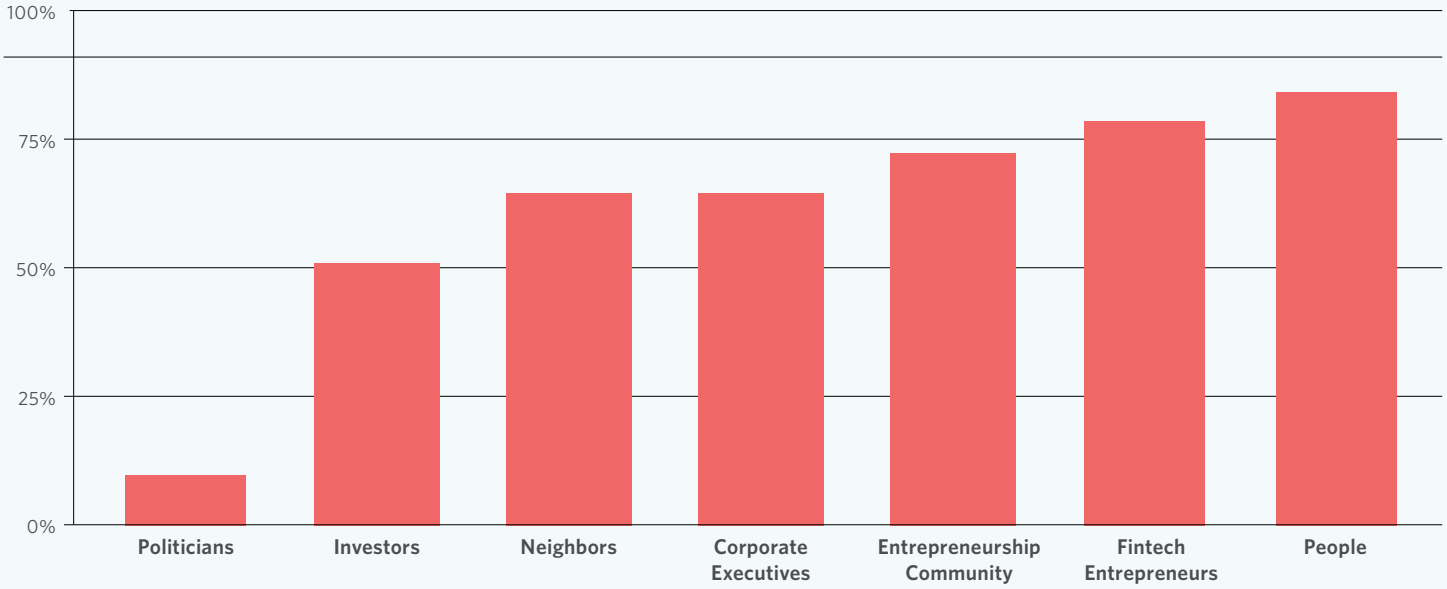
The membership of these networks includes some of the biggest names in the sector like Credimi, Moneyfarm, and Satispay, which allows less established founders to connect with more experienced ones. Knowing someone or running into them during social events has not been demonstrated to have the same beneficial impact for a company's growth as mentorship or angel investment, but networks can be leveraged to build these more productive types of connections between entrepreneurs.

These networks are important vehicles to transmit information in the sector, and they could be further leveraged to disseminate resources and advice for scaling entrepreneurs. All three networks are led by people with significant previous experience founding or leading for profit companies at scale, and research suggests that organizations led by people experienced in entrepreneurship are substantially better at helping other entrepreneurs growing their companies. [21]

A potential explanation for the prominence of networks over other types of connections in the Milan fintech community is the high levels of trust in other entrepreneurs, and the relatively low levels of trust in institutional investors, as demonstrated by the chart below.

FOUNDERS DEGREE OF TRUST IN SELECTED STAKEHOLDER CATEGORIES

Responses to the question: Do you trust each of these groups completely, somewhat, not very much or not at all? Percent of respondents who trusted the following groups somewhat or completely.



Source: Endeavor Insight. Sample size = 64 responses by Milan fintech founders. The question was adapted from World Values Survey.

LESSON 3

THE FINTECH COMMUNITY IS CLOSELY CONNECTED TO THE BANKING SECTOR THROUGH FORMER EMPLOYMENT.

Through former employment and investment connections, Milan fintech entrepreneurs and the people who support them are closely connected to the banking sector. Among 159 fintech founders with employment histories in the study, over 40 percent percent had previous work experience in banking, insurance, or consulting, and over 40 percent of these latter as senior executives. The careers of support organization leaders mirror this trend: over 60 entrepreneurship support organization leaders come from a banking career.

However, despite these connections, founders mentioned that collaboration with banks could be difficult as work flows are lagging behind the accelerated timeframes of entrepreneurial companies. Further, profit sharing contracts with a specific bank could crowd out other financial institutions.

Scaling companies can benefit from the community's close ties to the banking industry. Some of the fastest growing fintech companies (such as Credimi, Soisy and Satispay) were able to scale their operations that used these connections, channeling them into business partnerships and in some cases, even equity investments from private banks. (Interviews). Evidently, the industry's ties to the banking sector are a resource that can be further leveraged to get more fintech companies to reach scale in Milan.

RECOMMENDATIONS: HOW CAN DECISION MAKERS IN THE PUBLIC SECTOR AND THE PRIVATE SECTOR SUPPORT FINTECH ENTREPRENEURSHIP IN MILAN?

FOCUS SUPPORT ON COMPANIES WITH A POTENTIAL TO SCALE.

Despite the explosion in the number of fintech startups over the past few years in Milan, only 5 percent of companies were able to employ 50 or more people. A few sub-sectors, like credit, asset management, and payments contributed a disproportionate share of the jobs in the sector, while others, like crowdfunding, underperformed compared to the level of startup activity in them. While keeping supporting startup activities, decision makers should take serious actions to boost the scaleup of companies which could have the ability to driving economic growth.

FOSTER RELATIONSHIPS WITH INTERNATIONAL INVESTORS.

Based on the interviews conducted for this study, fintech company founders have struggled to raise funding. Banks rarely invest in fintech because they typically do not have the organizational culture, the M&A budgets, or the speed to do so. Italian venture capital investors are cautious because of the exigent capitalization and compliance requirements that minimize prospective multiples, and international investors are cautious to enter the Italian market because of their unfamiliarity with market specificities. Founders who were able to raise capital from international investors, especially if not at growth stage yet, did so by relying on an Italian diaspora and attending international accelerator programs. Decision makers should follow the lead of these entrepreneurs and work to foster connections abroad to increase access to international capital among Italian fintech companies.

ADDRESS THE SHORTAGE OF TECH TALENT AND NON-FINANCIAL MANAGERIAL TALENT IN THE SECTOR.

Company founders are the best source of information to identify the constraints to growth in a sector. Fintech founders in Milan reported throughout the study that finding the right tech talent and managerial talent is difficult in a competitive European landscape, where founders have to compete for talent with companies in Madrid, Berlin, and Amsterdam. Decision makers who wish to support growth in the fintech sector need to invest in fostering a talent pool of highly qualified non-financial workforce in Milan. Other than economic and tax incentives, examples from other markets include international job fairs to attract tech talent to the city and immersion programs for product and project managers hosting qualified employees with former experience working for scaleups elsewhere in Europe.

LEVERAGE ENTREPRENEURSHIP NETWORKS TO FOSTER ANGEL INVESTMENT AND MENTORSHIP AMONG ENTREPRENEURS IN THE SECTOR.

Entrepreneurship networks like Fintech District, Italia Fintech, and Endeavor were by far the most influential organizations in Milan based on number of their connections to other organizations. Despite an overwhelmingly collaborative culture in Milan, there is a lack of productive mentorship and angel investment connections among fintech entrepreneurs. This is normal for a nascent entrepreneurship community, but for the sector's future sustainability, networks should work to facilitate connections that go further than networking and leverage the high levels of trust and tight peer-to-peer collaboration to move capital and talent in the system.

ENDNOTES:

1 Istituto Nazionale di Statistica. "Labour Market Areas." 17 Dec. 2014. https://www.istat.it/en/archive/142790

2 S&P Global Market Intelligence. " Europe's 50 Largest Banks by Asset." 11 Apr. 2019. https://www.spglobal.com/marketintelligence/en/news-insights/trending/7NsXjB8GspSSHHkvF0LgYA2.

3 B. Hive. "General Overview and Fintech Landscape in Milan, Italy." https://static1.squarespace.com/static/578f3f1d15d5db7814d05191/t/5afec97d575d1f4238c312a8/1526647176575/Milan%2C+Italy+Report+.pdf.B. Hive.

4 Ewing, Jack. Pianigiani, Gaia. "Italy Falls Back Into Recession, Raising Concern for Eurozone Economy." *The New York Times.* 6 Aug. 2014. https://www.nytimes.com/2014/08/07/business/international/italy-falls-back-into-recession-raising-concern-for-eurozone-economy.html.

5 Eur. Lex. "Payment services in the EU." 24 May 2016. https://eur-lex.europa.eu/legal-content/EN/LSU/?uri=CELEX:32007L0064.

6 Endeavor Insight Analysis.

7 Istituto Nazionale di Statistica. "Businessess and Employees." 11 Nov. 2019. http://dati.istat.it/Index.aspx?DataSetCode=DICA_ASIAUE1P.

8 Cerved. "Protests and Payments Companys." Mar. 2018. https://know.cerved.com/wp-content/uploads/2018/03/Osservatorio-sui-protesti-e-i-pagamenti-delle-imprese-4q2017.pdf.

9 PwC. "Specialty Finance Challenger Banks in Italy: reshaping the lending landscape?" Apr. 2019. https://www.pwc.com/it/it/industries/banking-capital-markets/fs-top-trends/docs/toptrends-specialtyfinancechallenger.pdf.

10 Fintech District. "Credimi: interview with Gianmarco Molinari." 3 Sept. 2018. https://www.fintechdistrict.com/credimi-gianmarco-molinari/.

11 Rinaldi, Roberto. "Payments & the Digital Society Sessione Le banconote e la gestione efficace del contante." *Capo del Dipartimento Circolazione Monetaria e Bilancio della Banca d'Italia.* 22 Nov. 2017. https://www.bancaditalia.it/pubblicazioni/interventi-vari/int-var-2017/Rinaldi_22112017.pdf.

12 Endeavor Insight Analysis.

13 Banca D' Italia. "La ricchezza delle famiglie e delle società non finanziarie italiane: 2005-2017." 9 May 2019. https://www.bancaditalia.it/pubblicazioni/ricchezza-famiglie-societa-non-fin/2017-ricchezza-famiglie-societa-non-fin/index.html.

14 European Comission. "2017 SBA Fact Sheet & Scoreboard." http://ec.europa.eu/ec.europa.eu › attachments › translations › renditions › native 2017 SBA Fact Sheet France - European Commission.

15 Endeavor Insight Analysis.

16 Berman, Ana. "Coinbase Bought Neutrino for $13.5 Million, Acquisition Contract Allegedly Shows." *Cointelegraph.* 7 Mar. 2019. https://cointelegraph.com/news/coinbase-bought-neutrino-for-135-million-acquisition-contract-allegedly-shows.

17 Endeavor Insight Analysis; Iamsterdam. "Tech Industry in Amsterdam." https://www.iamsterdam.com/en/business/key-sectors/ict.

18 Endeavor Insight Analysis.

19 Morris, Rhett & Lili Török. "Fostering Productive Entrepreneurship Communities." Endeavor Insight. 30 Oct. 2018. endeavor.org/fpex.

20 Ibid.

21 Ibid.

METHODOLOGY:

GLOSSARY:

- **Angel investment:** an investment in a company made by an individual, not on behalf of a business or investment firm.
- **Entrepreneurial firms:** for-profit businesses that are started by individuals who possess ownership and control of the firm. This excludes businesses that began as either government entities or subsidiaries of larger companies.
- **Local companies:** businesses that were founded or are currently headquartered in the Milan metropolitan area.
- **Mentorship:** a connection through which a mentee will meet the mentor at least three times for a minimum of 30 minutes to discuss critical business issues.
- **Metropolitan area:** the boundaries of a city's metropolitan area are defined using local input.
- **Serial entrepreneurship:** the activity of founding of a company by someone who previously founded one or more companies.
- **Software companies:** firms where the primary business activity is either software development, fintech, or e-commerce.
- **Spin-off:** a company started by a former employee of another company.
- **Startups:** companies founded no more than three years earlier.
- **Target companies:** entrepreneurial firms founded or currently headquartered in the city's metropolitan area and in the software industry.
- **Top performer:** a company in the top decile of all local, entrepreneurial companies founded in the same year based on its number of employees.

SAMPLING FRAME:

Companies were considered "targets" and included in the sampling frame if they met the following criteria:

1. The company is local.

Companies were included if they were:

a) Founded in the Milan metropolitan area, or

b) Currently headquartered in the city's metropolitan area after they were founded elsewhere.

Target companies also included businesses that have closed after being founded or headquartered in the metropolitan area, and those that have been acquired after being founded or headquartered in the area.

2. The company fits the definition of a financial technology company.

Financial technology companies were defined as companies that have developed or offer a technological solution dedicated to enabling financial services, or as technology companies whose corporate revenue is mainly linked to the financial services industry.

3. The company is entrepreneurial.

Entrepreneurial companies are those started by individuals. This excludes businesses that began as either:

a) Government entities, or

b) Local divisions of corporations based in other cities.

DATA COLLECTION:

The data collected for this project comes primarily from surveys and interviews with local entrepreneurs and stakeholders.

This study began by identifying "VIP entrepreneurs" and other stakeholders who had an in-depth perspective on the sector (Heads of venture capital firms, government officials, etc.) in each city. VIP entrepreneurs selected for interviews were identified based on:

A) Scale – i.e., the current largest companies in the sector, or

B) Influence – i.e., companies that have made large exits, received a large investments, or were otherwise noteworthy or influential.

The preliminary interviews, which were mostly in person, focused on these important stakeholders. The responses helped establish a list of the sector's most "influential organizations," i.e., organizations with outsized influence. It also provided critical data on the challenges, city characteristics, and each industry's entrepreneurial scene that helped inform later analysis.

The resulting primary company list formed a basis for the study, along with additional companies identified through other sources including databases such as Pitchbook, D&B Hoovers, and Crunchbase, as well as the portfolio companies of investors and entrepreneurship support organizations operating in the city. Only target companies moved forward for further investigation, i.e., those founded or headquartered in the mapped city, entrepreneurially founded and in the selected industry, and those fitting the aforementioned criteria on scale and influence.

Entrepreneurs from the target list received invitations to fill out an online survey or set up an interview (either in-person or over the phone).

This mass outreach campaign used standard questions, but the interviews were adapted to be more conversational.

The survey has remained relatively unchanged over the past few years, with only minor updates to reflect city-specific factors and to address areas where entrepreneurs have been most reticent about sharing data. Endeavor maintains confidentiality, and collected data is accessible only to Endeavor and its research partners.

In order to ensure that the company list was comprehensive, a secondary list of companies was compiled from those mentioned in the interviews and surveys that were not already on the primary list. The secondary list also included additional companies sourced from the portfolio companies of those associated with the new mentions. The secondary list also included new companies found on LinkedIn while collecting data on entrepreneurs and companies. These secondary targets then received invitations to complete surveys and interviews. The research and outreach process was repeated multiple times depending on the size of the city.

NETWORK ANALYSES:

The network analysis process within an entrepreneurship community typically lasts 6-9 months, from the preliminary data gathering to the concluding analysis.

Previous research by Endeavor Insight has found that there are **four main connection types among entrepreneurs** that drive the growth of an industry. For analyses that only include connections between entrepreneurial tech companies, these are:

1. Angel investment;
2. Mentorship;
3. Serial entrepreneurship; and
4. Former employee spinoffs.

For analyses that also included support organizations and other stakeholders in the sector, these same four connection types were used while expanding the scope of the first two. Angel investment included all forms of investment. Mentorship was expanded to include any type of entrepreneurship support from a stakeholder in the sector, such as an accelerator or a business plan competition.

To learn about these connections within entrepreneurship communities, the surveys and interviews discussed above focused on five core questions:

1. Who invested in your company? (This includes both angel and institutional investors.)

2. Who was your mentor during the growth and development of your company?

3. Have you founded other tech companies in your city?

4. Which of your former employees have gone on to found tech companies in your city?

5. In which entrepreneurship support organizations has your company participated?

The survey and interviews also asked about work and education history. LinkedIn provided data to fill in the gaps for founders who did not respond. The responses to these questions formed an edge list of connections among organizations, along with a corresponding set of four types of outbound connections. The edge list then informed all subsequent network analyses and created the network map visualizations in D3.

For all network analyses, **each founder was assigned to only one company or organization**. Where an entrepreneur had founded multiple companies, his or her most prominent company represents his or her influence in the analysis and on the map. This was based on an index of founding date, number of employees, total investment, and exit sizes. Where an entrepreneur had founded an investment firm or support organization, it was the company entity that took precedence (if they founded one), followed by the founder's investment firm, followed by the accelerator or support organization.

The size of an organization's influence in the network was based on directed closeness centrality for unconnected graphs. In other words, the size of an organization was a function of the number of first-, second-, third-, etc. degree connections that the organization and its entrepreneurs had to others in the network.

There was no limit to the degrees of separation that factored into the centrality score. For example, if one mentor led to a chain of mentorship among entrepreneurs, the original mentor's centrality score will increase even if the mentor only directly mentored one entrepreneur. All connections on the map were weighted equally. Financials and employee counts did not factor into an organization's centrality.

Connections accrue to an organization based on the time period in which the connections occurred. Where the year of a connection was unknown, two different approaches informed the date used in the study. Where year information for a former employee, investment, or founder connection was missing, it was assumed that the year of the connection between the source and the target companies was equal to the year the target company was founded. To estimate a mentorship relationship start year, authors reviewed mentorship relationships.

Companies were only included in the analysis if it was possible to identify their founding year. For companies whose employee count could not be determined, authors used the median number of employees for companies founded in the same year, where companies founded over ten years ago were combined into one cohort. Companies that were no longer operating were included in the analysis if it was possible to find enough data to target them. For companies that were acquired, the number of employees at the time of acquisition were used.

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