

# The Development of the AngelList Online Syndication Model in Equity Crowdfunding and its Effects on Venture Capitalism and the Seed Funding Industry

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SUBMITTED TO THE MIT SLOAN SCHOOL OF MANAGEMENT IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE IN MANAGEMENT STUDIES  
AT THE  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

JUNE 2017

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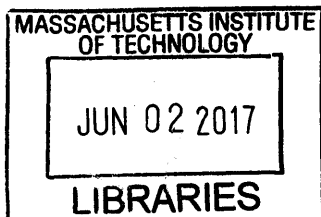
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# Executive Summary – Abstract

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Submitted to MIT Sloan School of Management  
on May 12, 2017 in Partial Fulfillment of the  
requirements for the Degree of Master of Science in  
Management Studies.

## **ABSTRACT**

AngelList developed online syndication to enable lead investors to collect backing investments from other individuals and professional investors. Online syndication, as part of equity crowdfunding, was expected to answer some fundamental issues of seed funding and possibly contribute to the disruption of the crowdfunding industry.

However, we observed that there is a shift in the platform's strategy towards institutional investors and that the platforms that was once believed to embody the future of equity crowdfunding follows another direction to go away from crowdfunding. It is becoming a back-office platform for traditional investors and focuses on new markets, outside of funding.

We argue that AngelList is going beyond a new form of equity crowdfunding to develop a digital solution that will bring online a wider concept and aims at becoming the startup platform, across all its non-core needs. However, this will require AngelList to cross-boundaries, and the Boston case example shows that the platform is not there yet from the geographical point of view.

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# Acknowledgments

First and foremost, we would like to thank all the people who contributed to this thesis, including Professor Catalini, who guided us during our research, the people we interviewed or surveyed, who gave us their precious time, and our friends and families, who supported us.

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# Introduction

## Motivations

The students conducting this research share a passion for entrepreneurship and aspire to use it in their future endeavors. Financing is a key element in today's startup success (W.R. Kerr, 2011) and a large proportion of startups are dependent on external capital (Robb and Robinson, 2012). In addition to being an essential aspect of entrepreneurship, the seed funding and the VC industry have also been growing for many years, to reach about \$69 billion and finance 8,136 deals in 2016 (NVCA, 2016). 2016 saw the highest amount of venture capital raised funds in at least a decade. Nearly \$42bn were raised across 253 vehicles during the year, well above the \$35bn raised over 255 funds in 2015 (NVCA, 2016). The industry is also experiencing substantial changes. These changes encompass the deal structure, their size, the role of the VCs and their positioning.

In parallel to these changes in the industry, we also witness the emergence of new and alternative fundraising vehicles like crowdfunding, be it in exchange for gifts (Kickstarter, Indiegogo, etc.) or in exchange for equity (AngelList, Wefunder, EquityNet). The internet has disrupted many industries, including equity crowdfunding. The rise of AngelList online syndication seems to bring an early glance at the path that the industry could follow in the future.

In 2015, \$160m were invested through online syndicates, a 53% increase with respect to 2014 (AngelList, 2016). Some of the lead investors manage such sizeable funds that they are comparable to micro venture capitals, getting involved in series A and B deals (AngelList, 2017).

Curious, and willing to keep a forward-looking approach to the fundraising industry, we decided to investigate online syndication to understand the inner functioning of the model outside of its native Silicon Valley. Using the unique network we can leverage by

being in Boston, one of the most prominent startup hubs in the world, we tried to determine how Boston-based investors were impacted by the rise of the two-sided platform. As a matter of fact, we conducted a large number of interviews to understand how online syndication is contributing to the trends shaping the future of the fundraising industry.

In April 2014, AngelList developed an additional model for syndication called the “Maiden Lane Model”: a structure is created, very much alike a VC fund, but investing in syndicates. In fact, syndicates are more and more financed by institutional money. For instance, CSC Upshot, a fund backed up by the financial advisory firm CSC Capital, raised \$400m to invest in syndicate managers on AngelList (Catalini, Wu and Laws, 2017). These changes move AngelList from a crowdfunding platform towards a platform for institutional investors, where the LPs can now invest in the business angels instead of investing in VC firms as they usually do (Dillet, 2014). This could heavily impact the seed funding industry (Primack, 2014) and we use this research to study further this new model.

## Paper Structure

We begin this paper with a brief introduction to the seed funding industry and review some interesting piece of literature that are relevant to our study. We briefly present AngelList and its online syndication model. We then describe the trends that have been recently followed and try to predict some of the potential outcomes for the platform. To illustrate these discussions, we use the Boston cluster as a case example and compare it to the other geographic areas to highlight differences.

## Methodology

### Data Gathering

- First, we reviewed papers related to the different topics we wanted to analyze and tried to find out where our contribution could have an impact on the existing research and the ecosystem around us.
- After more precisely defining the topic, we began conducting interviews. We conducted 45 interviews (List of interviewees in Appendix I).

*Table 1: Interviews Summary*

<b>Type of Interviewee</b>	<b>Number of Interviews</b>
Leads	29
Backers	4
Academics	5
Others	7
<b>TOTAL</b>	<b>45</b>

- We then analyzed data collected on AngelList to build a better profile of the Boston investors on AngelList and better define the Boston environment.
- We finally sent out a survey to the people we interviewed and collected about 100 answers (Questions and Results in Appendix II).

### Survey Sampling Methodology

We first gathered profiled from all the syndicate leads on AngelList and then tried to find their contact details online via search engine, LinkedIn, etc. We managed to collect

about 300 email addresses. After conducting interviews with a sample of syndicates we picked to get the most insightful discussions, we reached out simultaneously to all the email addresses and then sent a follow-up email to the people we did not hear from.

We also sent out the survey to a few (5-10) contacts thanks to the people we interviewed and who opened us their network. These people were contacted at the same time as the others.

Finally, we asked someone from NVCA to share the survey with institutional investors having a lead investor in their network.

Because of this process, we want to point out potential limits in the results:

- There will be a bias towards visible and well-known investors. Their email contact details can be found online and they are more likely to be recommended by someone because they have a greater network.
- There is a network effect creating a bias towards a same type of investors for recommendations (in terms of sector, geography, etc.).
- Our work on Boston and our location may have accentuated answers from investors having a link with the Boston hub.
- Since all the contact were made online, and the time constraint was significant (only 2 weeks to answer our survey), we believe people who are digital-friendly and who check their emails regularly will probably have answered in greater proportion.
- The response rate from the people we interviewed earlier was higher.
- The results gather about startup founders do not represent the community of pure founders but the community of founders who also invest in other startups.

# Literature Review

The purpose of this literature review is not to provide a comprehensive description of the seed funding industry but rather to highlight some relevant findings affecting this research.

It has been shown that choosing the right funding source is a challenge and that entrepreneurs must deal with information asymmetry, agency and transaction costs while looking for financing (Cassar, 2004). It is even more decisive for entrepreneurs to consider capital structure carefully, even more so because their decisions are used as a signal for external stakeholders (Ross, 1977). It is common for startups to combine different funding sources (Robb and Robinson, 2012). We divide our literature review into three parts: business angels, VCs, and alternative sources of investment, which are also options entrepreneurs consider when choosing how to fund their ventures.

## Business Angels

They are defined as individuals investing in early investment rounds, providing entrepreneurs with so-called "seed money". It has long been shown that business angels can be former successful entrepreneurs, professional investors, or even family and friends (Prowse, 1998). According to estimates, the amount of capital provided by angels could be as high as 11 times the one invested by venture capitalists (Reynolds, Bygrave, Autio, Cox and Hay, 2002) and their support is the dominant driver of the U.S economy (Timmons and Spinelli 2004). Nevertheless, the business angels' investment over VC investments ratio is cyclical and decreased over time. Today, there are about 300,000 business angels in the US, and about 400 angel groups, which sums up to \$24.1bn market in 2014 (Ortmans, 2016). On the other side, VCs invested up to \$58.6bn in startups in 2015 (NVCA, 2016). We aim to compare the common findings on business angels with what is observed on AngelList.

The "traditional" business angel is: male, around age 50, has a college degree, former entrepreneur and wealthy, as shown by multiple studies (Gaston, 1989; Freear, Sohl,

and Wetzel 1994; Van Osnabrugge and Robinson, 2000; Hill and Power, 2002; Benjamin and Margulis, 2001 and Amis and Stevenson, 2001).

As defined by the SEC, wealthy investors are individuals with +\$1m in net assets. Those investors are commonly called accredited investors.

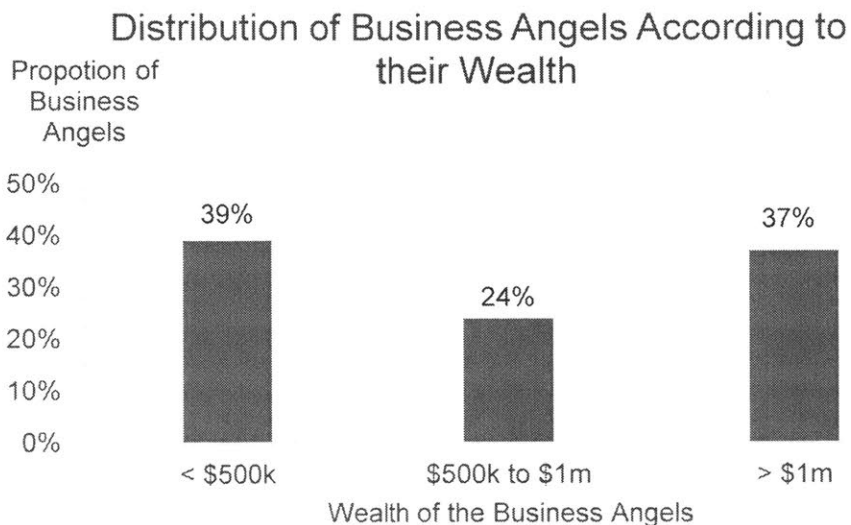


Figure 1: Distribution of Business Angels According to their Wealth

Sources: Gaston, 1989 (Note: these are nominal 1989 dollars)

Regarding investment size, it has been demonstrated that the average investment lies between \$50k - \$150k (Van Osnabrugge and Robinson, 2000). 65% of business angels favor local investments, i.e. less than 300 miles away (Benjamin and Margulis, 2001). For development stage, the majority (between 50% and 75%) of angels invest during the first two years in startups (Sohl, 2004). The due diligence done by business angels is less analytical and more personal than the one typically done by venture capitals funds (Van Osnabrugge and Robinson, 2000). Most angels (66-85%) have an active role in the startups they invest in (Van Osnabrugge and Robinson, 2000). We will compare these findings with the leads and backers on AngelList to see if they still apply.

Angel Investors often create expertise groups, to share the risk, have a higher investing power, expand their network and get to know more entrepreneurs. Angels have already

used online platforms, for example, [angelnetwork.com](http://angelnetwork.com) is an online community of business angels. However, studies tend to show that the multiplication of platforms could confuse entrepreneurs and that centralization could be beneficial (Aernoudt, 1999). Landström distinguishes between institutional VC and informal VC, and networks sometimes belong to the latter category (Landström, 2007).

## Venture Capitals

The difference between business angels and venture capitals is sometimes described as follows: "*Angels invest their own money; VCs invest other people's money*" (Hill and Power, 2002). This gives us some rather good criteria to differentiate between the two concepts. The investors (Limited Partners) in venture capitals funds can be endowments, pension funds, insurances or rich individuals (Prequin, 2014). We will show that these investors now have new options for investing thanks to AngelList, especially thanks to the development of the Maiden Lane model (see later).

The term *Limited Partners* synthesizes quite well the fact that they are not supposed to interfere with the startup management, a role that is reserved to General Partners (Samila and Sorenson, 2011). However, this as well is slowly changing in the syndication model, where LPs can directly get engaged in the operations.

Traditionally, venture capitalists are meant to fund startups that offer high risk and high rewards (Gompers, Lerner, 1999; Sahlman, 1990). VCs usually provide larger amounts of money and intervene later in the development of the startups than business angels (Cardullo 1999). Nevertheless, it seems that the trend is changing and that VCs and business angels are getting closer. We can observe hybrid models of venture capitals and business angels growing, with, for instance, the rise of the so-called "super angels" (Sudek and Wiltbank, 2011), individuals able to move several million by themselves (Manjoo, 2011). These investors appear to act more like expert investors than traditional business angels (Moran, 2010). On the other hand, we also observe micro VCs, small funds acting very much like business angels (Lerner, 2014). The difference between the two different notions, that was once clear to everyone, seems to be fading away.



According to the two following graphs, the amount of total VC-backed investments grew faster than the number of VC-backed deals between 2012 and 2015, indicating higher average investments per startup.

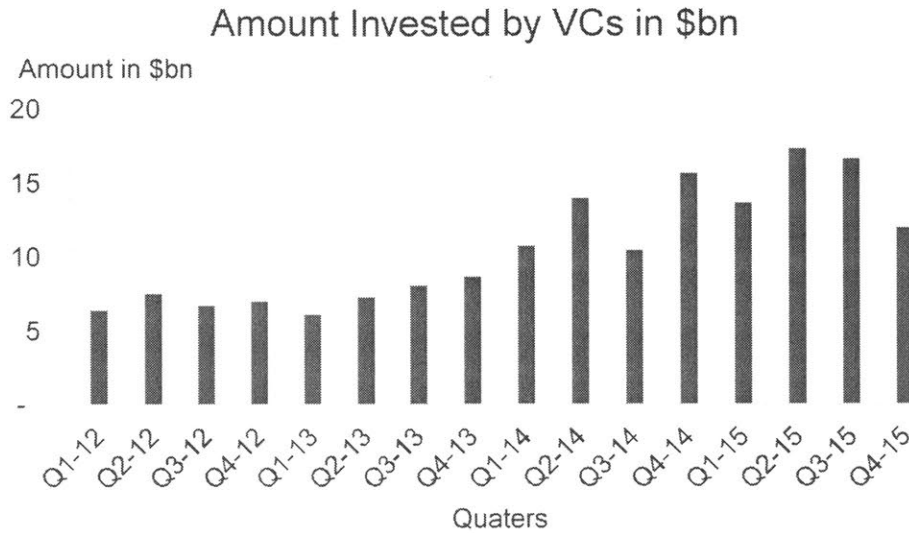


Figure 2: Amount Invested by VC in \$bn per Quarter

Source: PWC, and NVCA. MoneyTree Report. Rep. N.p.: n.p., 2016. Print

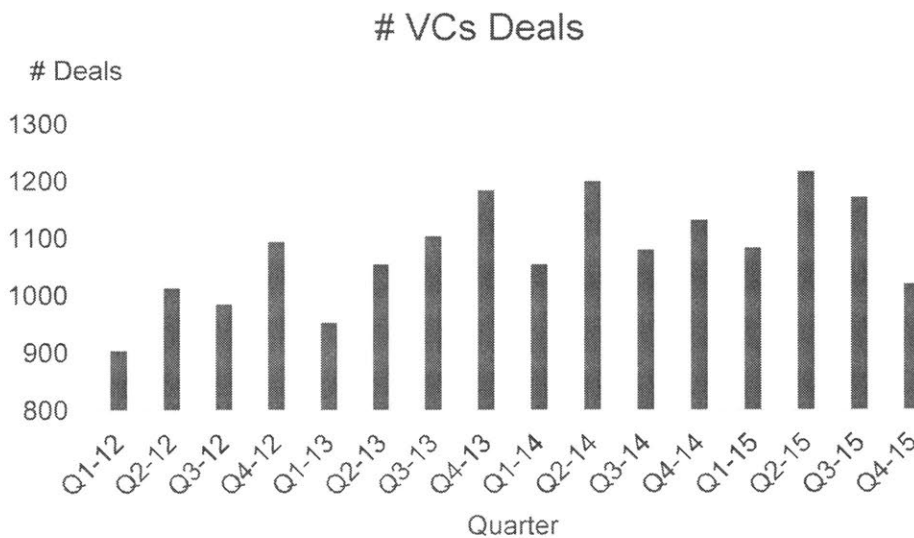


Figure 3: Number of VC Deals per Quarter

Source: PWC, and NVCA. MoneyTree Report. Rep. N.p.: n.p., 2016. Print.

As seen on the 2 graphs above, VC-backed investments have been increasing, faster than the number of deals. Hence one could wonder how the rise of new sources would affect this trend.

## Alternative Sources of Investments

It is shown that startups need less financing today than they did before. This is largely due to the rise of the internet (Graham, 2013) and because they can bootstrap their launch (Vanacker, Maingart, Meuleman, and Sels, 2011). As a result, entrepreneurs can retain more control, creating a new paradigm for investors (Graham, 2013). However, this is not the only effect of the internet on the seed funding industry. Most sectors have already been disrupted by the internet and startup financing is no exception. New forms of financing have been developing, potentially creating more challenges for traditional investors.

Among these new forms of financing, several are turning to the crowd. Peer-to-peer lending and crowdfunding are the two most popular concepts. The first peer-to-peer platform was Zopa in the UK in 2005, followed in the US by platforms like Lending Club or Prosper in 2006. In 2006, in The Netherlands, Sellaband, the first crowdfunding platform was launched in the disc industry. It was later followed by Indiegogo (2008) and Kickstarter (2009) for funding across a wider range of industries than the disc industry.

The crowdfunding space is experiencing high growth since then with 542 total crowdfunding sites in July 2015, for about \$34bn (Massolution, 2015). The World Bank estimated that crowdfunding would reach \$96bn by 2025 (InfoDev/The World Bank, 2013), compared with the average of \$30bn to \$40bn invested every year by the VC industry (NVCA, 2015).

### Distribution of 2015 Crowdfunding Investments in \$bn

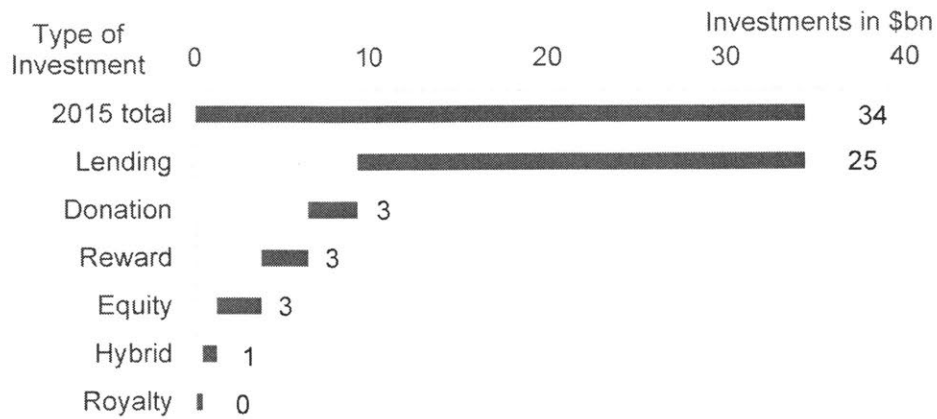


Figure 4: Distribution of 2015 Crowdfunding Investments in \$bn

Sources: Massolution 2015

### Total Crowdfunding Investments in \$bn

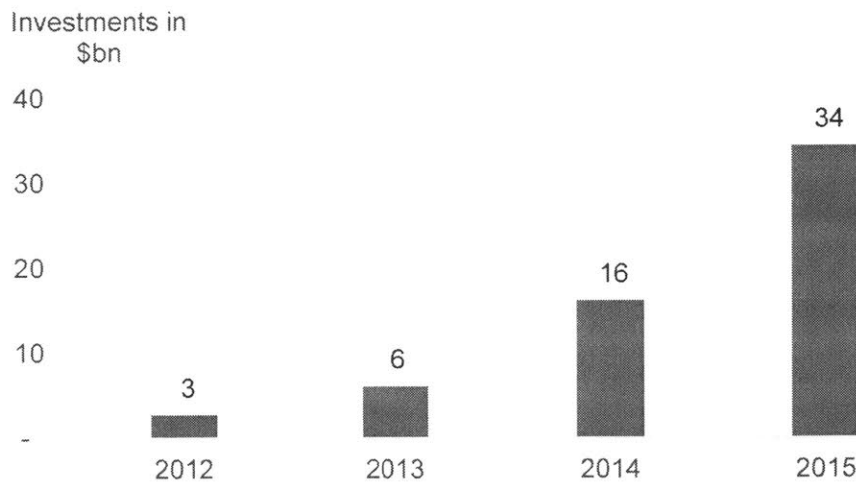


Figure 5: Total Crowdfunding Investments in \$bn per Year

Sources: Massolution 2015

A definition of crowdsourcing is suggested as follows: “an open call, mostly through the Internet, for the provision of financial resources either in the form of donation or in

exchange for the future product or some form of reward to support initiatives for specific purposes” (Belleflamme, Lambert and Schwienbacher, 2014).

Following the trend, another form of crowdfunding quickly developed: equity crowdfunding, first introduced by Grow VC Group, with a beta phase in 2009 and a full launch the year after, followed by ProFounder in 2011. However, regulation issues slowed down the development of equity crowdfunding. The signature of the JOBS act in April 2012 by Obama officialized it.

Equity crowdfunding has been expanding fast lately. We count 160 equity crowdfunding platforms in July 2015 (Massolution, 2015).

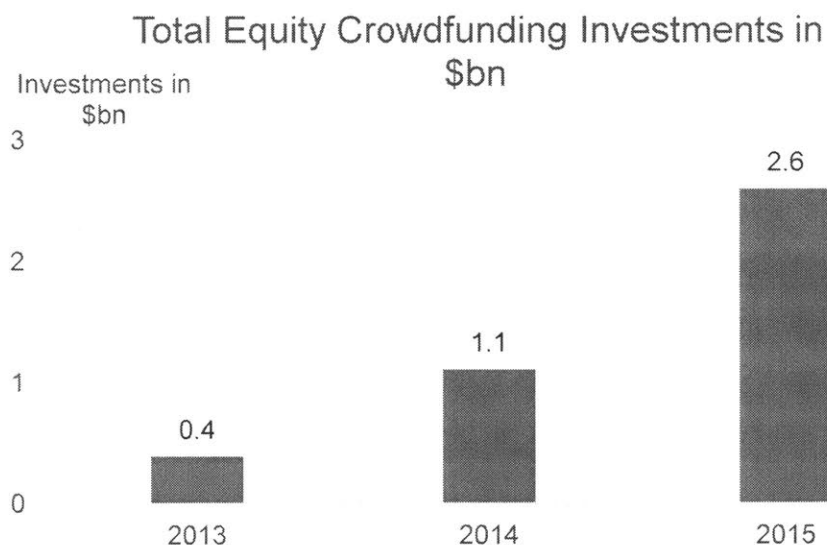


Figure 6: Total Equity Crowdfunding Investments in \$bn per Year

Sources: Massolution 2015

The US market (\$788m) also grew faster (301%) than the European market (\$178m) that grew at a rate of 145% in 2014 (Massolution, 2015).

### Total Equity Crowdfunding Investments in \$m per Region

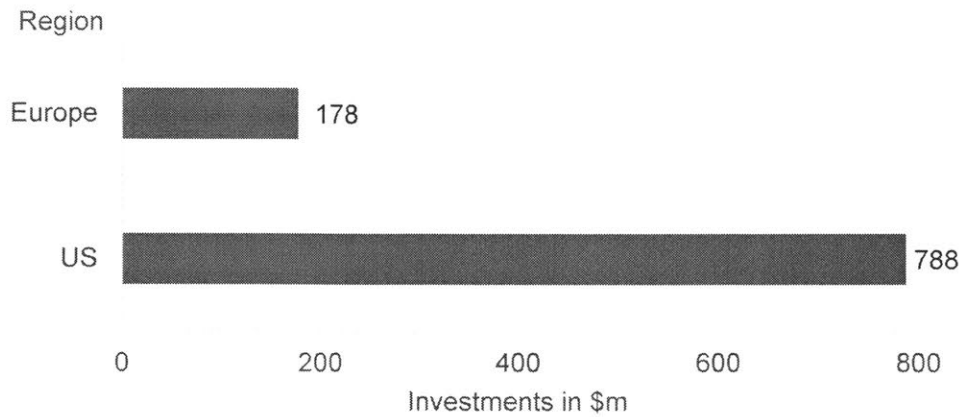


Figure 7: Total Equity Crowdfunding Investments in \$m per Region in 2014

Sources: Massolution 2015

Despite the great number of platforms, in 2014, the most significant part (75-90%) was raised on only seven websites.

### Distribution of Equity Crowdfunding Investments in \$m per Platform

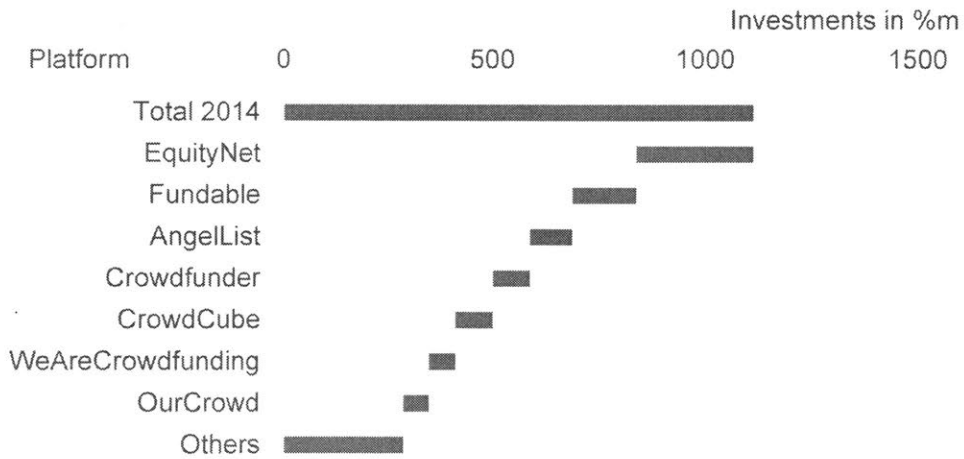


Figure 8: Distribution of Equity Crowdfunding Investments in \$m per Platform in 2014

Sources: Massolution 2015

The bulk of the amount was raised on US-based platforms (all of them are US-based but CrowdCube, based in the UK and Ourcrowd, based in Jerusalem).

It is important to put this in perspective because equity crowdfunding is only possible since 2013 (JOBS act). This impressive growth could continue for a while, and if the trend does not change (it almost doubles every year), equity crowdfunding could represent about \$35bn by 2020, possibly more than the venture capital. Another important aspect is that, as opposed to venture capital, equity crowdfunding can attract funds from non-accredited investors (Title III and Title IV of the JOBS Act), opening the doors to a wide capital market that VCs cannot directly tap into (Crowdfunder, 2016).

Some interesting papers have already been written on the topic of crowdfunding. Some aspects are particularly relevant to this research and we want to cover them briefly.

Crowdfunding is often associated with democratization (Catalini, Fiasco and Murray, 2016) however some studies tend to mitigate these preconceived ideas. For instance, it is demonstrated that friends and family play a central role in crowdfunding (Agrawal, Catalini and Goldfarb, 2013). There is also a strong bias towards projects associated with reputation and third party affiliation signaling (Klein, 2016). Platforms do not truly globalize access to capital and that the crowd remains most of the time local. For instance, data shows a 3,000 miles average distance between backers and startups in non-equity crowdfunding (Agrawal, Catalini and Goldfarb, 2013). However, the share of non-local investors in equity crowdfunding is high enough to show that there is an information flow outside of the project's original geographical cluster. It is also shown that the investment distribution on platforms is highly skewed; a few investors are backing a significant part of the projects, and a few projects attract most of the amount invested (Agrawal, Catalini and Goldfarb, 2016).

While some observed the rise of crowdfunding with an optimistic eye (Gerber, Hui and Kuo, 2012), others offered a different perspective and suggested that the crowd might

lack the skills to decide by itself, showing that experts could lead the due diligence on the projects to inform the crowd and guide their decision (Ibrahim, 2016). Similarly, a distinction is made between “pure” and “hybrid” forms of crowdfunding (Chen, Huang and Liu, 2016) to differentiate platforms on which experts help the crowd to make a decision.

These new systems are similar to the venture capitalist model since people invest money (the LPs) based on the decision of others (the GPs). Similarly, syndicated deals help bridge the information gap that exists in the traditional equity crowdfunding industry because the level of information available on platforms is not comparable with the one available to venture capitalists (Agrawal, Catalini and Goldfarb, 2016).

Overall, one can argue that the lines across the seed stage investment environment are getting blurrier. Equity crowdfunding platforms are getting closer to see more and more similarities with venture capitalism while the latter are using these platforms as a new tool for funding startup. Among the VC funds present on AngelList, we can cite some like Spire, Shyp, Tradesy or Sprig (AngelList, 2016).

Table 2: Key Characteristics of the Different Financing Alternatives

	<b>Business Angels</b>	<b>Venture Capital</b>	<b>Online syndication</b>
<b>Funding source</b>	Angel's own money	Investors (LPs)	Both
<b>Number of deals per year</b>	One every two years	5-10 per year	Average 3.5 expected deals per year per syndicate
<b>Typical investment per company</b>	\$25-250,000; average \$50-75,000	\$1-10 million; average \$4 million	Average backing investment of \$250K
<b>Company stage</b>	Small, startup, early stage	Larger, expansion stage	Seed to series B
<b>Geography focus</b>	Usually near (within two hours) of home	Usually nationwide, sometimes regional	Usually near the leads
<b>Industry focus</b>	No focus, but prefer industries they know	Often focus on one or two industries	Tech
<b>Source of deals</b>	Other angels, friends and business contacts	Proposals submitted, other VCs	Personal network
<b>Decision maker</b>	Experienced entrepreneur, 50 years old	Professional, MBAs, committees, 40 years old,	Former entrepreneur, 30 to 40 years old
<b>Due diligence</b>	Minimal, informal, subjective	Extensive, formal, analytical	Most often minimal
<b>Investment structure</b>	Simple, common stocks	Complex, convertible preferred stocks	TBC: Pre-defined by AL
<b>Involvement</b>	Hands-on	Strategic, board seats	Limited
<b>Investment horizon</b>	Longer, five or more years	Shorter, three to five years	Expected long, no enough data yet
<b>Exit strategy</b>	Less important, long term investment horizon	Important, IPO or sell the company	Looking for big hits
<b>Return on investment expectations</b>	20-30%, but don't have a predetermined ROI	Expect 30-50 ROI	46% for syndicate upper quartile based on 2013 investments

Sources: Updated from Van Osnabrugge, & Robinson ([2000] pp. 106-110), Benjamin & Margolis ([2001] pp. 32-33); Hill & Power ([2002] pp. 24-26 61-61 249) National Venture Capital Association website at [www.ncva.org](http://www.ncva.org), Gaston (1989, pp. 14-27, 44-78), Freear, Sohl, and Wetzel, 1994



In this context, the present paper aims to analyze the dynamics of online syndication on AngelList and compare the online syndication with the rest of the industry. The goal of this study is to understand how AngelList is most likely to evolve and if it will impact the seed funding industry. We will use Boston as a case example to build predictions based on a real-life example.

# Legal Aspects

As for the Securities Act of 1933, equity crowdfunding is considered as a security and is subject to extensive and time-consuming registration with the SEC. Registration can be very expensive for startups, with costs estimated between \$300k and \$500k. Crowdfunding and even more online crowdfunding was not the norm when the Securities Act was issued in 1933. Hence, the rules are quite ambiguous and the online platforms that facilitate equity crowdfunding might be considered brokers (Bratford, 2012).

To be qualified for the securities act exemptions and not be seen as brokers, platforms should comply with some constraints. For instance, platforms should be made available to everyone, actively work to prevent any conflict of interest, and restrain themselves from providing any financial advice.

Crowdfunding gained popularity in the 1990's. It was primarily used to fund NGO's then more artistic projects to finally reach the startup ecosystem (Hemer, 2011). To respect the Securities Act, crowdfunding did not trade equity but offered rewards to the investors. For instance, most projects on Kickstarter, one of the leading reward-based crowdfunding in the US, offer an early adopter version of their product to their investors.

However, most projects do not deliver the promised results or suffer from extensive delays. Moreover, there is no obvious way to tie the remuneration of investors to the performance of the firm. Thereafter few professional investors, business angels and VCs use reward-based crowdfunding to invest in startups. Pressure was raising for new crowdfunding regulations.

And then came the JOBS act.

President Obama signed the JOBS act on April 5, 2012, and democratized equity crowdfunding. The JOBS act is organized around two main titles, Title II and Title III.

Title II removes the Securities Act rule 506 on general solicitation of accredited investors. Now a small business can publicly state it is looking for financing and reach out to accredited investors. Moreover, Title II makes registration with the SEC much easier and greatly decreases transaction costs. Hence, business angels and VCs that used to invest offline can now bring their network online and get additional financing from the crowd on the platform. Title II gave birth to the online syndication model, which is the subject of this study. With the JOBS act, companies can now raise up to \$50m and do not have to register with the SEC if they raise less than \$1m in a 12-month period. However, businesses must still file some documents with the SEC and provide annual updates.

Nevertheless, Title II of the JOBS act only opens up crowdfunding to accredited investors. It is Title III of the JOBS act that completely opens the doors to the crowd. Title III was not accepted by the SEC as easily as Title II. The American institution feared that low-quality money from non-expert would be invested in non-quality businesses and drive the economy down. About 12 states, observing the long time needed by the SEC to enforce Title III decided to write their own laws as of 2015 (Ibrahim, 2015).

In fact, it took about 4 years to the SEC to publish the regulations described by Title III. On May 16, 2016, Title III finally goes into effect and non-accredited investors can participate in the equity financing of startups (Catalini, Fazio and Murray, 2016). However, Title III also puts a certain amount of restrictions on the investments. First, there cannot be syndicates. Second, the startups cannot raise more than \$1m from not accredited investors. Moreover, every non-accredited investor can only invest per year 10% of their annual income, assuming they make more than a \$100k net a year or are worth more than \$100k. Investors who earn less than \$100k a year can only invest the minimum of \$2k and 5% of their annual income. Those limits take into account investments made on all platforms combined.

In addition, with Title III, going public becomes automatic for businesses that get financing from at least 500 non-accredited investors or reach \$25M in assets value (Cunningham, 2016).

Crowdfunding platforms take different approaches towards non-accredited investors.

*Table 3: JOBS Title III Adoption by Different Crowdfunding Platforms*

Platforms	Founded	HQ	Accredited investors only
Seedrs	2009	U.K.	No
Crowdfunder	2011	U.S.	Yes
Crowdcube	2011	U.K.	No
SyndicateRoom	2012	U.K.	Yes
CircleUp	2012	U.S.	Yes
Wefunder	2012	U.S.	No
FundersClub	2012	U.S.	Yes
OurCrowd	2013	Israel	Yes
AngelList	2013	U.S.	Yes

Sources: Equity Crowdfunding, Jacob Cohen, Cate Reavis, John D'Agostino, David Shrier, 2016

When structuring the deal, equity crowdfunding platforms had to find a legal structure to gather a large number of investors. Today, most deals are structured via an SPV (Special Purpose Vehicle). The SPV is legally separated from the startup and continues to exist even if the company goes bankrupt. The SPV is particularly helpful to manage a large pool of different investors.

AngelList introduced SPVs to raise money for follow-on rounds. The money is kept in the legal entity and pro-rata invested it in future rounds. Moreover, AngelList found here a way to make some money, since the extra funds from an SPV are invested back in AngelList's own fund.

# Introduction to AngelList

While the classic venture capital model is sometimes criticized by experts (Austin, 2009), new models have been developing and among them, AngelList emerges as a particularly promising alternative.

The company was founded by Naval Ravikant, a young Indian from Delhi who moved to the US at 9 years old and studied at Dartmouth College before moving to the Silicon Valley. There, he created Epinions, a successful startup that was then sold to Ebay. After this transaction, and feeling he was not fairly compensated, he decided to launch a blog called “Venture Hacks” that was meant to help fellow entrepreneurs to obtain better deals from VCs. It quickly evolved in a comprehensive directory of startups and business angels and finally took the form of the two-sided platform that we know today as AngelList. The platform also makes it possible for startups to recruit on a global scale across a wide variety of capabilities and positions. An important aspect that is raised by many people using the platform is that AngelList is “startup centered”, and keeps the entrepreneurs at the center of its value proposition.

In 2013, AngelList introduced online syndication, following the recent changes in regulation enabling it (i.e. the JOBS act). Since then, experienced investors called “leads” can invest in a startup and be followed by a large group of “backers” to increase the size of the investment. The structure constituted by the leads and their backers is called “syndicate”. Interestingly, AngelList does not use all the provisions described in the JOBS act, and tends to move away from it, as it does not allow investments by non-accredited investors.

The AngelList FAQ gives the example below to illustrate the syndicate concept:

*“Sara, a notable angel investor, decides to lead a syndicate. The syndicate investors agree to invest \$200k total in each of her future deals and pay her 15% carry.”*

When Sara makes her next investment, she offers to invest \$250k in the company. She personally invests \$50k and offers the remaining \$200k to her syndicate.

If the investment is successful, the syndicate investors first receive their \$200k, after which every dollar of the syndicate's profit is split 80% to the syndicate investors, 15% to Sara and 5% to Angellist Advisors. Angellist Advisors is a venture capital exempt reporting advisor with the Securities and Exchange Commission, and a subsidiary of Angellist."

In 2016, Angellist syndicates invested \$190M in 460 Startups (Angellist, 2017). The growth was slower than in 2015 (+63% increase in total investment in 2016 vs. +17% in 2015). The same could be said about the number of startups Angellist syndicates invested in. The syndicates invested in 460 startups in 2016 (4% increase with respect to 2015) and 441 in 2015 (81% increase with respect to the 243 startups in 2014). On the other hand, Angellist kept the efforts to increase the number of active syndicates which grew from 170 in 2015 to 301 in 2016 (Angellist, 2017).

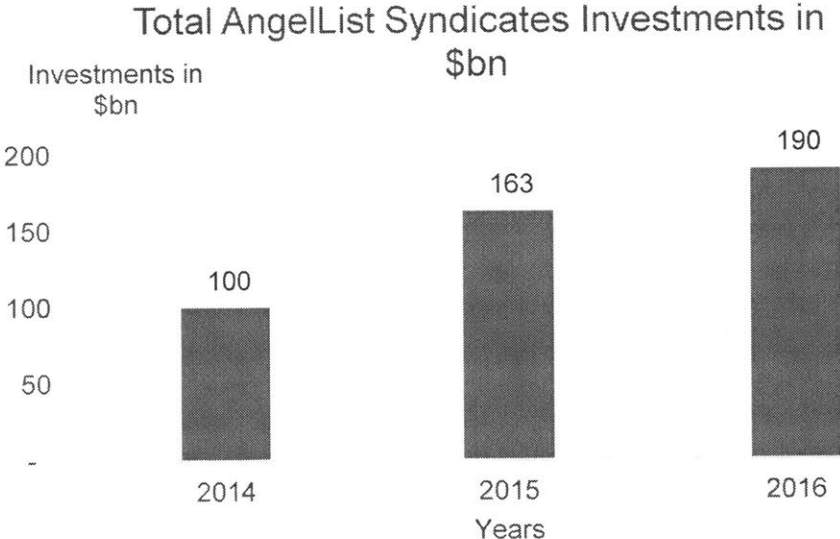


Figure 9: Total Angellist Syndicates Investments in \$bn per Year

Sources: Angellist 2017

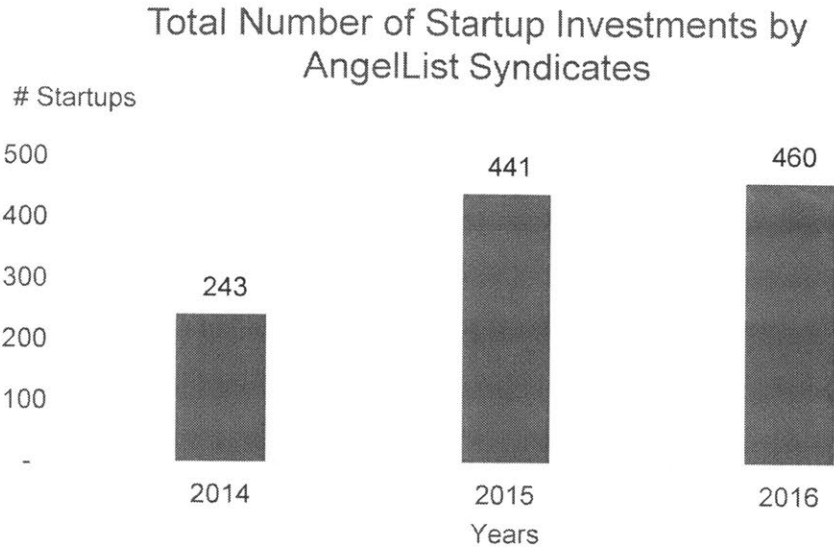


Figure 10: Total Number of Startup Investments by AngelList Syndicates per Year

Sources: AngelList 2017

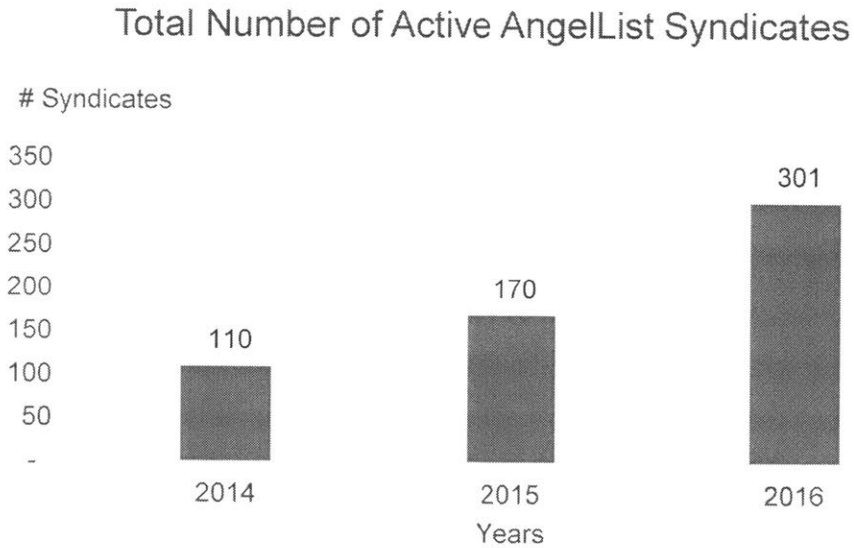


Figure 11: Total Number of Active AngelList Syndicates per Year

Sources: AngelList 2017

Syndication has not been invented by AngelList, the concept had been used for a long time by angel investors and venture capital firms (Lerner, 1994). Today, this model is



being applied to crowdfunding (Agrawal, Catalini and Goldfarb, 2015). However, the seed funding industry is not the only one that pursued this path. The birth of online syndication reminds of several concepts that already existed before AngelList in other industries.

In private equity the concept of Fundless Sponsors (Shaw, 2008) shares common characteristics with online syndication. The idea is that a lead individual is taking care of the first step of the deal (sourcing, due diligence, etc.) but does not have the capital to invest. When they need it, they raise money from PE firms. This model is somehow similar to online syndication, in which lead investors pursue the due diligence without being able to invest alone the entire amount.

In market finance as well, the mimetism of experts had already been investigated by eToro, a trading platform, on which investors can copy another investor's strategy. The platform was created in 2007, several years before AngelList.

## A Glance on AngelList Lead Investors

We tried to understand the profiles across populations of investors. How different are investors on AngelList? Who are they? Why do they invest? How much can they invest?

We took a glance at these questions because they help us better understand certain aspects of the inner functioning of AngelList. However, the purpose of this study is not to conduct an extensive analysis of the investors' profiles and we will remain brief with this regard.

It is interesting to notice that most individuals leading a syndicate (alone or within a structure) are former entrepreneurs. Almost 90% of individuals leading syndicates in teams are former founders. Similarly, about 80% of individuals leading syndicates alone are previous entrepreneurs. This is valid for all regions.

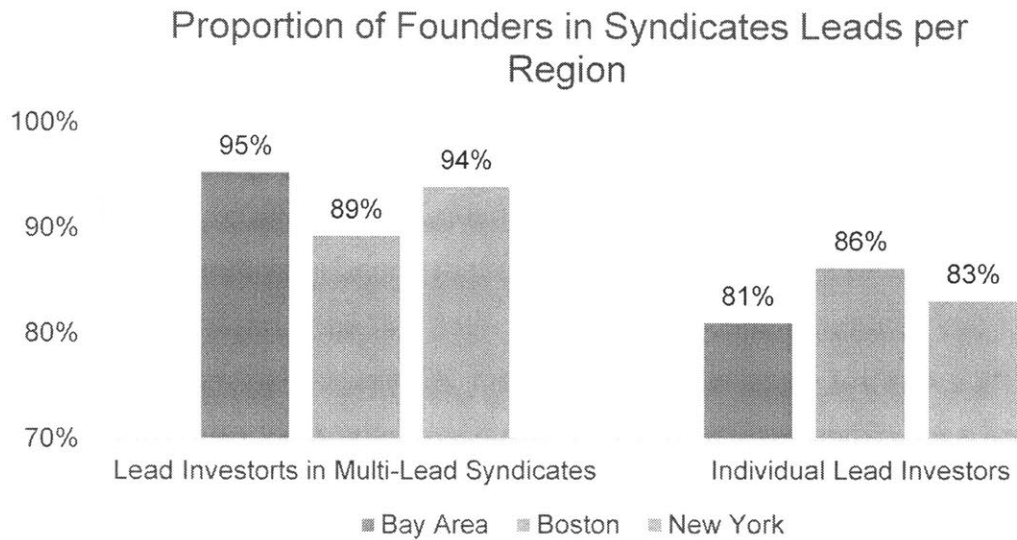


Figure 12: Proportion of Founders in Syndicates Leads per Region

Sources: AngelList.com

## Investment Size

Investing in a VC requires a significant amount of capital because the minimum ticket for being an LP is quite high. The investment in a syndicate begins at \$1k per deal while the minimum ticket to invest in a VC is around \$100k+ (Heyming, 2009). Using AngelList helps smaller investors to gain exposure to the seed funding market while they would otherwise not really be able to do so.

Interview Quote: *“Let’s say you made some money before and you have about \$500k you can invest. This is not enough to invest in most VCs, and if you want to invest directly in a startup, you will not be able to invest in many different deals, with AngelList, you can follow different deals, and diversify your investments, like a micro-VC, which is great, that’s the sweet spot for AngelList investors”* (Lead Investor).

An interesting consideration is that most startups do not really need AngelList to raise their funds. Often, the round on AngelList is made on top of a more significant deal (usually series A or B).

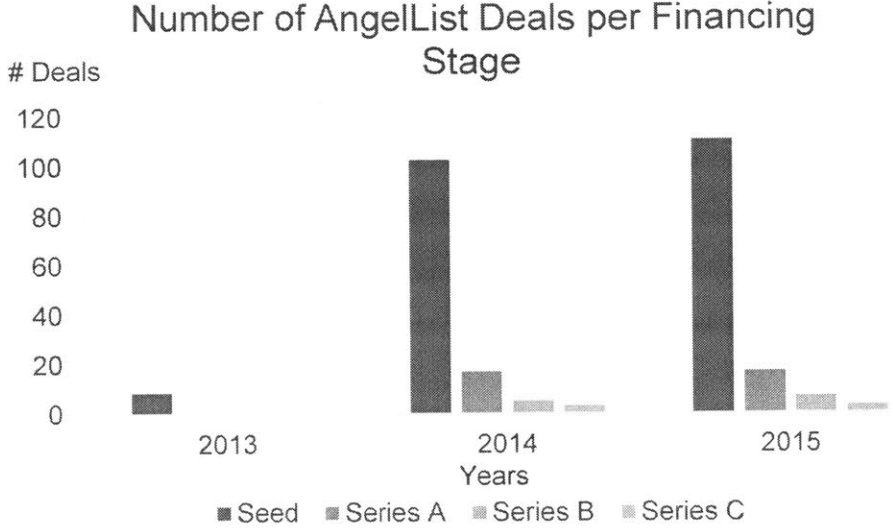


Figure 13: Number of AngelList Deals per Financing Stage per Year

Sources: AngelList.com

While AngelList, used to be very startup-centric, it seems that here, the real value is for the small investors and business angels.

## The investment returns on AngelList

The typical life-cycle for a venture fund or a Business Angel investments is about 3 to 7 years. To assess the return of AngelList, we must wait for a significant number of deals to be exited. AngelList published numbers about the returns of the 2013 syndicates, which look quite promising. However, it is still early to assess the real returns of the AngelList syndicates. Performance is not yet defined: to turn the investment profitable venture capitalists need to turn the illiquid stakes in a private company into a realized return (Gompers and Lerner, 2001).

Numbers published by AngelList for 2013 syndicates:

- 46% of unrealized returns at the end of 2015 vs. 15% for top quartile VC/PE, 1.7% for the median and -7.9 for the bottom quartile.
- 2.4x unrealized multiple at the end of 2015.
- \$11m invested in total, for a current value of \$25m and \$556m follow-ons.
- These numbers include 61 startups, of which 82% are still active and 36% already went through up-rounds.

These overall returns will be decisive in defining the trends for next years. Higher returns will be associated by more interests since rational investors will invest in markets with the best return perspectives.

Four examples are worth mentioning here:

**Beepi:** only 5 months after its creation, the online used car marketplace raised \$72.7 million in series B. Among the investors, were Sherpa Ventures and Foundation Capital. The deal was made at a \$200m valuation. From the \$73m investment, Gil Penchina invested \$2.8m with his online syndicate (Del Ray, 2014). However, the company announced its bankruptcy in late 2016 (Primack and Kokalitcheva, 2017). This could have a negative effect on the momentum behind big AngelList deals.

**Cruise Automation:** the autonomous driving technology was the first exit for over a billion dollar after using equity crowdfunding. It raised \$200k on AngelList before being bought later by General Motors for over \$1bn in cash and stock (Primack, 2016).

**Dollar Shave Club:** the razors e-commerce raised close to \$160m in VC funding with rounds first led by Venrock and then by Technology Crossover Ventures for later stages (Primack, 2016). In 2016, Unilever announced that it was buying Dollar Shave Club for \$1bn in cash. The Santa Monica based company went from seed capital in 2012 to a D round in 4 years. A few AngelList investors joined the investment in Michael Dubin's venture (AngelList, 2017).

**Twilio:** the cloud communication platform created in 2008 also raised funds from AngelList investors before it went public in June 2016 under the ticker TWLO (Levingston, 2016).

In an interview, AngelList Partner Lee Jacobs declared about Cruise Automation, Dollar Shave Club and Twilio that: *"These three deals earned a return for approximately 170 individual investors. It is reasonable to assume the investors in these syndicates would not have been able to access these investments otherwise, given their willingness to pay carried interest to the syndicates in order to access them"* (Griffith, 2016).

## Expected Purposes of Online Syndication

Observing the impressive growth of equity crowdfunding and even of crowdfunding in general, one might wonder to what extent online syndication can contribute to fueling the growth even further to develop this booming market.

Throughout our interviews, we have identified a certain number of key elements of online syndication. First, it leverages the benefits of syndication in venture capitalism (Lerner, 1994), while, at the same time, helping seize opportunities offered by crowdfunding (Agrawal, Catalini and Goldfarb, 2014), such as visibility, additional capital, early proof of concept with feedback, etc.

According to research papers, online syndication could also answer the lack of expertise that the crowd can have by providing experts to guide their decisions (Ibrahim, 2016).

There is also a question about the community impact of crowdfunding in the model of online syndication. This one of the traditional strengths of crowdfunding platforms. Kickstarter embodies this particularly well, with a strong ability to mobilize a community of backers around new projects (Kuppuswamy and Bayus, 2015).

However, can the lead investors create a strong community of backers that will support startups' expansion? This help could take many forms:

- Backers can become first clients or users, thus, helping by both providing feedback and generating early cash-flows.
- Backers can also provide startups' founders with connections from their network.
- Backers can use their expertise to answer questions and help starters to make the right decisions or even going as far as helping in operational activities.

Finally, one of the expected values of the online syndication model was its potential ability to democratize angel investments by creating a global and digital equity crowdfunding platform on which investors could follow angel investments experts in total

transparency. This phenomenon happened on stock markets as well, where the proportion of investors grew as the access to investing was made easier while the proportion of people investing in startups today remains small. Between 2013 and 2015, about 300,000 US citizens made angel investments while about 117 million Americans owned stocks (Long, 2015). One might thus expect the profiles of the backers to be moving towards less well-off populations.

In the next paragraphs, we discuss the extent to which these initial expectations were met and potential reasons for the observed gaps.

## What did we observe in practice?

Our interviews, our survey and our research enabled us to gain a better understanding of AngelList reality. It seems that these initial expected impacts can be mitigated today. We cover some of them first by looking at the platform's ability to create a community of backers and then to democratize early-stage investing.

### 1) Community

One of the strengths of crowdfunding is that the crowd has a considerable power and can contribute to the development of a business. As mentioned earlier, this could take several forms in the case of online syndication. We tried to understand to what extent this applied to AngelList.

According to our interviews, a significant part of the lead investors help their startups. It seems that the numbers are comparable with those we would have in the case of traditional business angels.

However, this is not true for backers. Most of them are passive investors, following a few syndicates that they trust. It does not seem that they invest with the idea that they could help the entrepreneurs but rather because they believe their investments could be profitable.

In fact, according to our survey, only 10% of the backers just follow the syndicate they trust. Most backers put some efforts in choosing the startups they are interested in. 35% of the backers choose startups from any syndicate while 48% of them declare picking startups they are interested in from syndicates they trust (Survey<sup>1</sup>).

Moreover, 68% of the respondents decide to follow a syndicate because they already know the lead investors. Other main reasons to follow a syndicate are to have access to startup the syndicate invest in (for 50% of the respondents) and the online reputation of the syndicate (for 36% of the respondents).

Interview Quote: *“Most of the backers never reach out, and I don’t reach out either. In my opinion, this is the job of the entrepreneur. Of course, AngelList can contribute somehow, but they already made it easy to communicate with all the investors. Apart from that, it is the starters’ job to create a momentum around their project, keep people posted and ask for help when they need it”* (Lead Investor).

We also noticed that although the community of lead investors is composed of entrepreneurs, who certainly have a lot to give to young entrepreneurs, this may be less true for backers, who are less involved, and do not always have a strong expertise in the sector they invest in. In addition, a part of them have no entrepreneurial experience. Many also invest in startups that are not geographically close or just invest in too many projects to be able to follow up and spontaneously contribute.

Interview Quote: *“Many of the investors like us have great experience and can give you a few advices, but still, things really changed since we were in the entrepreneur’s shoes and we are quite far away from their daily life and problems. It is not always easy for us to contribute, even if we would like to, we don’t know what we could do, we wait for them to ask, and frankly, they often don’t”* (Lead Investor).

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<sup>1</sup> Survey Question 8 asked to backers only, 48 Respondents



## 2) Democratization

Several elements make us confident that AngelList will not be the killer-app that democratizes investing in early stage companies.

First, AngelList decided to focus only on accredited investors, which prevents the platform to tap into a wider investor pool. Secondly, the platform is strongly skewed. AngelList shows promising results but they remain highly driven by a limited number of people. The crowd is in fact not the true explanation behind AngelList's accomplishments. In the two next paragraphs, we discuss those two points in more details and illustrate them with examples and data.

### Non-accredited investors

As we explained earlier our brief legal analysis, AngelList does not make full use of the legal options offered by the JOBS Act since it decided not to open the platform to non-accredited investors.

Some people at AngelList did not share the founders' vision and believed in crowdfunding by unaccredited investors (which is not possible on AngelList). Paul Menchov, former head of fundraising architecture at AngelList and Kendrick Nguyen, former general counsel at AngelList started republic.co in 2016. Republic.co is an equity crowdfunding platform designed for unaccredited investors. It has been created with the adoption of the Title III of the Jobs act and has been thought to take advantage of the new rules.

Everyone can invest on Republic.co. However, there is a limit on how much people can invest. The limit is defined in Title III of the JOBS act. Individuals can invest up to the greater of \$2k or 5% of the minimum of their annual income or net worth.

The burden is higher for companies though. Republic.co estimates the legal and other fees at about \$10k. In fact, startups must pay \$1.5k to iDisclose, a partner to

Republic.co. iDisclose is an online platform that provided a suite of legal documents to entrepreneurs. In addition, 5% of the proceeds of the fundraising go to Republic.co. The platform also charges 2% on following-on rounds. This might still be a bit too expensive for startups who raise around \$50k on Republic. For instance, Yummy successfully raised about \$66k in October 2016. The cumulative amount of fees is likely to sum up to about 20% of the proceeds. No doubt the model will be more attractive when the platform will be more established and the startups will be looking for higher financing.

The business model of Republic.co is very different from AngelList's. The former makes money by taking a commission of the funds raised online while the latter takes a carry on the exit of the startups. AngelList's vision is more geared toward the long-term and the most successful startups. In fact, AngelList tries to be involved in the deals of the future big hits and unicorns. Republic.co is not established enough to make such a bet.

## Is AngelList Skewed Towards the Top Investors?

Becoming a successful lead investor on AngelList is not easy. It requires a huge amount of work, connections and a little bit of luck.

For instance, Jason Calacanis, one of the most successful lead investors on AngelList acquired notoriety by investing in Uber in its early stage. Henceforth, he built on this raising notoriety to grow his syndicate, and has as of February 2016 made 120 investments online and claims up to \$4.6m in syndicate backing. Moreover, Jason has just raised \$10m for his new fund, Launch Fund, and plans to invest in 100 startups in the next 3 years.

Having a strong selling point is necessary to successfully open a syndicate. In fact, many well-connected and wealthy investors fail to open a syndicate. Some investors have no online network and must put an extra effort to bring their pool of investors to the online crowdfunding platforms and sometimes they fail. For investors who did not invest early stage in a unicorn, or did not work in the most-recognized startups nor have backup from a top institutional investor, the process can be challenging.

In addition, most lead investors declare to join AngelList because they know the founders or another lead investors. This confirms the fact that online syndication is moving toward a more closed system, geared toward an already established community.

However, this must be balanced by a thorough understanding of the drivers behind this “privatization” of deals. It seems that AngelList is somehow victim of its success and that its quality deals are rapidly oversubscribed. There is certainly a strong network effect playing in the deal allocation but the reason behind the trend comes from the fact that many investors are jumping on the same deals and fight to get access to the investment and that creates chaos while privatization enables to slow things down and keep control on deals allocation to make sure things happen smoothly.

Looking at the backers and their motivations helps to further understand this phenomenon. Many people are driven to AngelList by their existing networks. In fact, about 66% of the backers joined the platform and invested in a syndicate because they already personally knew the lead investor (Survey<sup>1</sup>). Furthermore, about half of the backers back a syndicate because they want to invest in a company featured by the syndicate (Survey<sup>2</sup>). In other words, half of the backers invest in syndicates without a strong interest in specific companies. From one part, this validates the online syndication model. The due diligence work is done by lead investors, and backers trust them enough to put their money at risk without deeper diligence on their side. On the other hand, syndicates are more and more becoming mini-VC’s. Some backers, who are accredited investors but not wealthy enough to invest in real funds decide to back syndicates and play the role of Limited Partners. This is confirmed by the fact backers barely provide help and advice to the startup. Leads and entrepreneurs do not ask for much effort and help from the backers, who become passive investors, i.e. Limited Partners.

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<sup>1</sup> Survey Question 9 asked to backers only, 28 Respondents

<sup>2</sup> Survey Question 9 asked to backers only, 28 Respondents

The data confirm this tendency. The graph below represents the cumulative percentage of total syndicate backing (How much money did backers give the syndicate for their investments) as a function of the population of investors, ranked from the investors with the highest backing to the investors with the lowest backing.

The graphic shows that the distribution of backing in the investors' community follows a 60-20 rule. The 20% most backed investors' control 60% of the money on AngelList. Moreover, notice the high steepness of the curve for the top investors. The 3% top investors manage about 25% of the backing on AngelList. These findings are consistent with research conducted in 2016 about AngelList. It showed that the median number of backers in deals successfully closed was 29 whereas the maximum was 141, and that median investment amount was \$2,500 while the maximum was \$860,000 (Agrawal, Catalini, and Goldfarb, 2016).

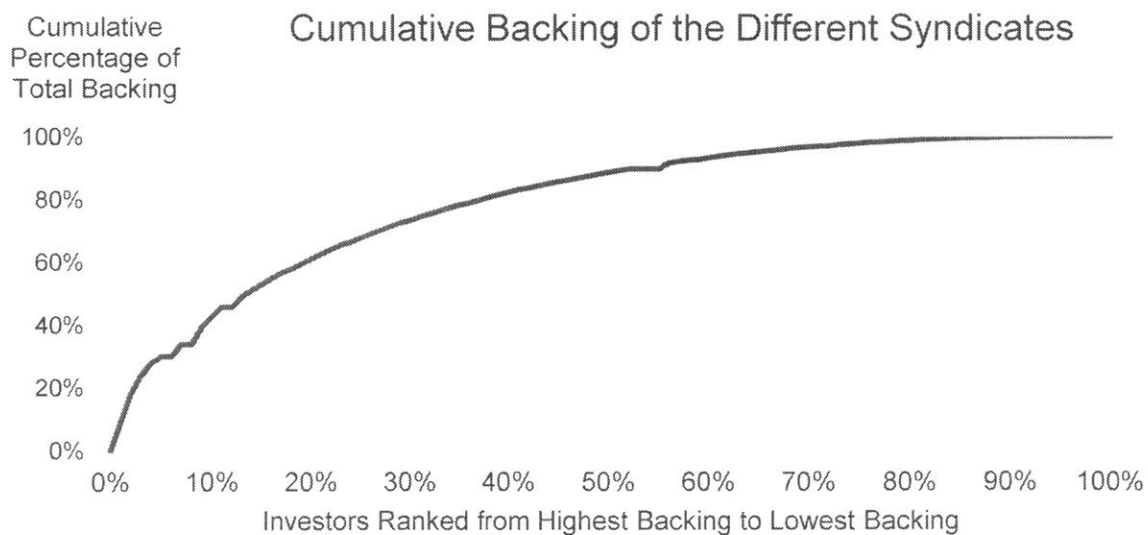


Figure 14: Cumulative Distribution of the Percentage of Total Backing by Investors Ranked from the Highest Backing to the Lowest

Sources: AngelList.com

The top 5 investors are shown in the table below. We find both individual lead investors and entities run by more than one investor. The distribution is less skewed than what it was in February 2015, where the top lead investor (still Gil Penchina) had about 3.5 times more backing than the 5<sup>th</sup> most backed syndicate (Agrawal, Catalini and Goldfarb, 2016).

Table 4: Backing in \$m for the top 5 Lead Investors

Lead Investors	Backing in \$m
Gil Penchina @ Flight.vc	7.7
Tim Ferriss	5.3
Jason Calacanis	4.6
Arena Ventures	4.4
Brendan Wallace	3.7

Sources: AngelList.com

Moreover, the distribution of backing among syndicates with an individual lead investor is not the same as the one among syndicates with more than one lead investor (referred to as entity in the following).

First, individual lead investors (syndicates managed by only 1 person) control about 67% of the backing funds on AngelList. We would expect this figure to go down in the coming years, as AngelList is steering toward institutional investors.

Second, the distribution of backing is more skewed for entities than for individual lead investors. As seen on figure 16 below, very few individual lead investors (3%) gather more than \$2M in backing, to be compared with 11% of entities having more than \$2m in backing. Similarly, the part of entities with less than \$500k in backing (69% of entities) is significantly higher than the percentage of individual lead investors under the \$500K threshold (59% of individual lead investors). In other words, there are 2 different types of entities who open syndicates on AngelList. The majority of them only invest on a

single deal or want to advertise themselves on AngelList. The remaining (about 10%) have the networks and the means to open significant syndicates and invest high amounts of money. Fewer individual investors have what it needs to have the same impact as those top entity syndicates. In fact, just the most recognized individual lead investors open very large syndicates. Among the remaining individual lead investors, many try to open larger syndicate and invest on many deals but do not have the means to gather more than \$1m in backing. For instance, 29% of individual lead investors and only 11% of entities have between \$500k and \$1m in backing.

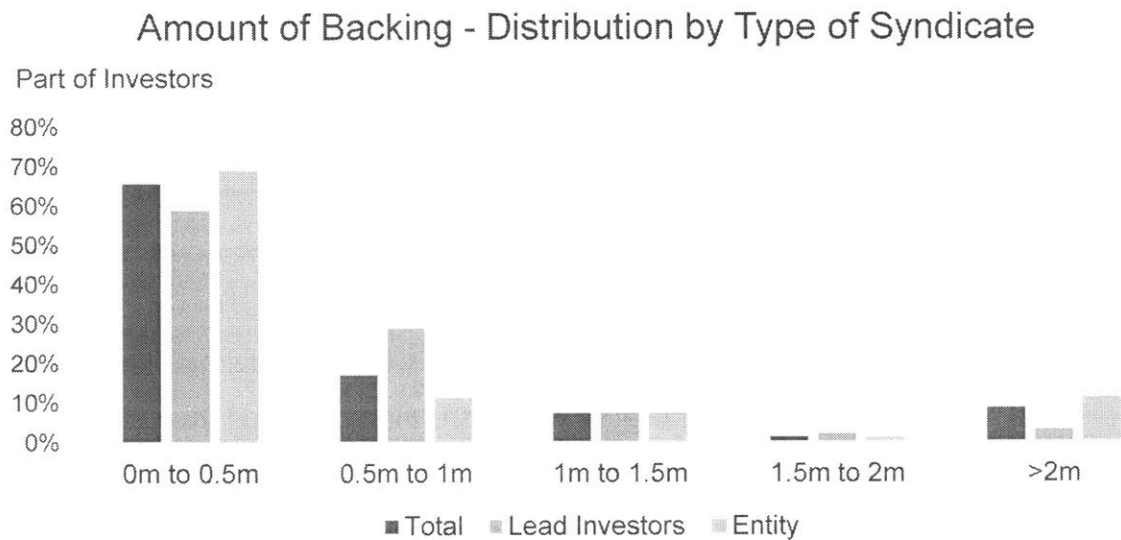


Figure 15: Distribution of the Amount of Backing by Type of Syndicate

Sources: AngelList.com

The number of startups on AngelList has been growing rapidly and having access to them is an attractive reason to join AngelList. However, it seems that the most important is not only to get access to as many startups as possible but also to be able to differentiate between them to identify the best investments (Hochberg, Ljungqvist and Lu, 2007). The increase in the number of startups must be followed by an increase in transparency and readability of the potential to really bring substantial value to the investors, and this is not always guaranteed. Moreover, strong network effects occur,

and seeing startups on AngelList is not sufficient to get an access to the investment rounds.

Interview Quote: *“On AngelList, deals are either oversubscribed or undersubscribed”*  
(Lead Investor).

AngelList has been shifting strategy and focusing on top lead investors and attracted several institutional investors (Maiden Lane, CSC Upshot, etc.). The new orientation changed the role AngelList plays for entrepreneurs and investors. The following paragraph will show how investors today mostly use AngelList as a back-office platform to manage their investments.

## The Shift in AngelList Strategy

### A Game Changer or a Back-office?

There is an advantage in using the platform because it simplifies the process while still giving an access to significant amounts to startups, reducing the transaction costs. For multiple people we interviewed, this is one of the main reasons to use AngelList. The interface is practical and convenient and the process is made simpler. If this is the case, this shows that there is no disruption in seed funding per se and that AngelList's success can partly be explained by its convenient user experience.

It seems that this has slowly been taking over all the other reasons to join AngelList and that many investors consider it to be the most important. In fact, 61% of lead investors use AngelList as a back-office platform to run their investment operations (Survey<sup>1</sup>). It is top motivation for lead investors to join AngelList. More detailed answers are available in Appendix II.

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<sup>1</sup> Survey Question 4 asked to backers only, 64 Respondents

Interview Quote: *“For us, AngelList is just a back-office tool, it is nice, it works well, it saves us a lot of time but it does not disrupt the way we do things, it just makes the process more convenient”* (Lead Investor).

Interview Quote: *“AngelList makes things much faster, something that would have taken me up to months can be done in 2 weeks. That is what we like. We do the same thing as before but faster, and that simplicity is a core strength of AngelList”* (Lead Investor).

It also seems that this is the case only for smaller investors. Indeed, small business angels usually consider the paperwork to be tremendously reduced and the process improved. On the other hand, bigger investors, with more resources consider it to be quite a burden because they usually pay a law firm to structure the deal for about \$10k and do not need to take care of anything. It is only attractive for those who do not have much resources and would have to take care of it by themselves.

There are also “structural” reasons to use AngelList:

- Deal by deal carry
- Angels now have a new way to take advantage of pro rata terms (Eldon, 2013)

One of AngelList’s big selling points to investors, known as backers, compared to investing as an LP in a fund is the absence of management fees. Backers just forego a 20% carry (same to what they would have paid in a fund). 15% goes to the lead investor and 5% goes to AngelList. Nevertheless, this model might not be attractive to the top lead investors, who spend a lot of time sourcing deals online, do not receive management fees and hence cannot pay themselves a salary. There is only one of the top lead investors, Gil Penchina, who managed to negotiate a deal with AngelList and will be paid some management fees. Therefore, the online syndication model seems to slowly move towards more traditional models.



## From Public Equity Crowdfunding to a Private Platform

AngelList recently witnessed an increase in the proportion of institutional investors at the expense of business angels. The way deals are made on AngelList changed too in the last couple of years. Deals used to be made in a very classic “equity crowdfunding” way (Loizos, 2016). A deal would be advertised on the platform by a syndicate lead who would mobilize his backers. Three layers of backers participate in the deal financing on AngelList:

- 1) **The initial investors and your close network:** this is a significant part as the network plays a great role. It has been shown that for crowdfunding, the ability to raise a lot of money fast increases your chance to raise later, and that this first part mainly comes from your relatives (Agrawal, Catalini and Goldfarb, 2013).
- 2) **The people you work to get:** this is the “marketing campaign” around the deal to attract additional investors. The lead investor will talk to people around them and in the industry to attract more investors.
- 3) **The unknown investors:** some investors decide to follow the deals because they somewhat hear about it and got interested. For instance, it might have been displayed on AngelList page. Some backers decide to join and back up the syndicate even if the latter didn’t actively reach out to them do not have connections with them. This additional money is the underlying hypothesis for crowdfunding; the ability to tap into a large capital market of people who like an idea, believe in it and want to fund it.

Today, this has changed, because of AngelList pushes toward more privacy in the deals. It seems that the third type of backers has been slowly disappearing and is now tremendously reduced, while it was a fundamental aspect that made AngelList a crowdfunding platform. Once again, we explained earlier that this is partly driven by AngelList’s success and its need to control the oversubscription to the deals. They want to go for a more curated approach on the deals.

The desire to go along a new path where deals are negotiated in private, between carefully selected investors, and without publicity to “random” investors.

Because of these trends, we tend to think that AngelList has been following a new path that changes its positioning from a crowdfunding platform to the default back-office platform for early stage investors and changing its target from small Business Angels willing to back a lead investor to bigger institutional investors.

It seems that AngelList plays the role of a global VC, where investors (backers, institutional investors, etc.) play the role of the LPs and the syndicates play the role of the GPs.

However, a question remains: if things continue to move in this direction, are investors going to proceed deal by deal or just invest in syndicates and follow all the deals?

As Paige Craig puts it: *“The best equity crowdfunding platforms are (or will be) sharing true performance and historical data on their investors and a lot more. The VC world right now is very murky. As the startup ecosystem participates in these Crowdfunding platforms and shares data to the public, as well as the LPs, investors, and founders, will finally get honest access to everyone’s performance.”*

This very much sounds like AngelList has been pushing for; more transparency between stakeholders, so that they can function in a simplified set-up.

## The Institutional Investor Rise

One of the most predominant considerations is the larger focus of AngelList on institutional investors. The platform appears to be moving away from the crowd to focus more on institutional investors. We can mention some of them such as Maiden Lane, CSC Upshot, Accomplice and the BOSS syndicate, Y Combinator, 500 startups, etc.

- 1) Funds as a syndicate: institutional investors create a syndicate that they lead just like an individual would.
- 2) Funds of funds (funds investing in syndicates): in this case, large investments funds invest across syndicates to access a wide variety of deals, but they do not lead the syndicate themselves.

The motivations for institutional investors are not entirely clear. We identified some:

- 1) **Exposure and visibility:** as said earlier, the platform has grown to become a default place and being on the platform is a way to exist in the online seed funding world. Moreover, investors want to remain agile to jump early on new opportunities, several are on AngelList just to see what is going on and if the platform is disrupting the way they can do things.
- 2) **More small deals and diversification:** investors join the platform because it helps them invest in many more deals and diversify, without going through the due diligence, etc. However, this applies to a minority of the institutional investors as many of them are big enough to invest as LPs or to conduct due diligence and invest bigger amounts by themselves. Once again, there is a sweet-spot for AngelList.
- 3) **Follow-on rounds:** however, the most important aspect seems to be the exposure to more deals that will happen in a later stage. Institutional investors use the platform to buy diversification and visibility. They build relationships with early stage startups, entrepreneurs and the syndicate leads to make sure they will have exposure to follow-on rounds, the one which they will make real money on.

An insightful parallelism can be made with peer to peer lending, that followed a similar development over the years, slightly before equity crowdfunding. Lending Club, one of the biggest platforms in peer to peer lending is a strong case. Some people first announced the rise of peer to peer lending as a big change in the banking industry, putting at risk the traditional banking players, and announced the end of the classic banking era as we know it (Herlin, 2015). However, it is not quite what happened in

practice. Traditional banks were not replaced by such platforms at all. It is rather the opposite that happened. Banks and institutions struck deals with the platforms and integrated these services. In early 2016, Lending Club made a \$300m deal with the Canadian National Bank (Dufour, 2016) and they extended to up to \$1,3bn, end of 2016 (Arsenault, 2016). Some leading private banks are also getting interested in the topic, Goldman Sachs for instance, launched its own, called Marcus (Goldman Sachs, 2016). We observe an interesting trend; the banking industry absorbed those initiatives and integrated them in its inner functioning, it does not seem to be a substantial threat to the industry but more a modification of the way it functions.

The question of competition between AngelList and the traditional seed funding industry is central to understand the future of AngelList. Paige Craig, Founder and General Partner of Arena Ventures has an interesting take on the topic: *“I don’t see equity crowdfunding as a tool, but rather a place for a true partnership where a fund or VC works in partnership with equity crowdfunding platforms to produce a new form of venture finance. Funds bring stability, deep pockets and predictability; they are managed by teams of dedicated investing experts who spend every waking moment finding great founders and helping them scale their companies. At the same time, equity crowdfunding opens startup funding to rest of the world – letting engineers, finance pros, real estate, entertainment, small business and Fortune 500 execs participate in the next wave of innovation. When you combine the stability and expertise of a VC firm with the enthusiasm and rich experience of the crowd you get a powerful new force in the funding ecosystem. I don’t know what to call this new model but we believe in it so much it’s exactly what we’re doing at Arena Ventures.”*

According to him, both worlds are complementary rather than substitutes. There are synergies to be created and the institutional investors can contribute to the development of equity crowdfunding and platforms such as AngelList.

There is also a question of transition from individuals to small VCs. Naval Ravikant declared in a TechCrunch interview that some investors use AngelList as a platform before launching their own companies.

- Interviewer: *“People can lead seed rounds; they can form SPVs. Why aren’t more VCs using AngelList instead of raising funds the old-fashioned way? “*
- Naval Ravikant: *“We’re not really built for that. For starters, we don’t support management fees. We also don’t support custom [limited partner] documents; you’d have to go cookie-cutter with our Syndicates model. What we are starting to see is people who [build a track record and graduate to their own fund], though that’s kind of a failure for us.”*

However, when we observe top investors of AngelList, they stay on the platforms, which seems to indicate that they continue to find value in the value proposition of AngelList despite their track records (AngelList, 2017).

## Is AngelList “Uberising” the Seed Funding Industry?

During our interviews, several people compared AngelList to the Uber of seed funding or of startups in general. We tried to reflect on that question to better understand the underlying reasoning behind those claims. From a certain point of view, one could argue that AngelList is playing the role of a two-sided platform where any investors can now invest in startups without expertise or due diligence.

A good example to shed light on this matter are the “follow-me investments” by syndicates inviting backers to follow them for at least a few deals. This is going in a direction where investors follow the syndicates, without looking at the deals, and there is no deal-by-deal decision from the backers.

Going even further AngelList created startup index funds to expose someone's portfolio to startups. Investors can keep a well-diversified investment strategy do not need to commit amounts that are too significant.

Interview Quote: *"A wealth management bank could be interested in offering some exposure to startups in an investment portfolio, depending on the investor's preferences, choosing a sector, a geographical area, etc."* (Entrepreneurial Finance Professor at HEC Paris).

This is made possible by AngelList funds investing in multiple startups, which offers a certain diversification. Doing so opens new perspectives for an individual investment strategy. This means that a whole new range of investors could find interest in AngelList funds.

As shown by Harry Markowitz, Nobel Prize in economics for 1990, portfolio optimization is possible thanks to diversification, because it reduces unsystematic risks. On the other hand, investing in startups opens a very typical high-risk/high-returns assets base, with scarce but high returns (Gompers and Lerner, 2001).

If this trend continues to evolve in this direction, we can imagine that startups investing would become an "everybody" investment similar to what stocks became, because small investors could buy some shares in startup index funds. Of course, the question of accredited vs non-accredited investors for those funds will remain important to define to what extent these types of investments will spread as other stock investments did in the past.

It is also important to mention that some experts do not see the surge of angel investing in the population with a positive eye.

Interview Quote: *"Not everybody understands investing. I don't think it is a good thing that everybody invests money in risky assets. The stock market is already offering risky*

*assets, but startups are different. People tend to focus on the bright side, but for every success in seed funding, you have plenty of failures, and it is important to communicate on this to make sure people understand what they are getting into because when people don't, this increases the instability in the global economy. Think about 2008, it's exactly what happened, a lack of transparency and greed are the root causes of the financial crisis"* (Entrepreneurial Finance Professor at MIT).

There is also a debate among investors to know if the investing-sophistication is really related to the money a person has. So far, investor accreditation depends on individuals' worth, which is not the best representation of someone's ability to understand financial mechanisms.

Overall, it seems that AngelList is mainly focusing on accredited investors, but the startup index funds trends offer interesting perspectives as it opens seed funding to an even wider investors' pool.

# Looking Forward

AngelList has recently been going on a new path, and developed a recruiting tool that enables startups to find employees in a fast and convenient way. This, at first sight, is not related to the initial core business of AngelList, which is focused on seed funding. We argue that this is part of a more transversal strategy that AngelList is slowly revealing.

## How Does AngelList's Recruiting Tool Fit in the Strategy?

AngelList developed a recruiting tool to help startups find employees. The platform is free for anyone to use. During an interview with TechCrunch, Naval Ravikant revealed some promising numbers: *"[The close rates on match] is between 1 percent and 2.5 percent, judging by the percent of candidates who update their profile later with a new employer who was introduced to them on AngelList. Over the last two months, there have been around 200,000 active candidates, so we think [our hit rate is] between 800 and 2,000 hires a month."* AngelList website announces that about 25,000 companies use the platform to recruit people. Moreover, +4,400 companies used the tool successfully.

These numbers are promising because it makes AngelList the largest hiring platform for startups. However, it seems quite far from seed funding, the core business of AngelList.

We tried to understand how this fits into the global strategy of AngelList. Interestingly, Naval Ravikant does not announce that he wants to help startups raise funds, but rather that he wants to *"take away all the pain points from the entrepreneurs so that they can focus on building their product"*. This helps understand how the tool has an important role to play in the value proposition of AngelList.

Further research also shows that AngelList expects the tool to account for more than 50% of AngelList revenues in the future (Loisos 2016). Indeed, AngelList already offers a service called A-list, which grants help from AngelList to find the right employees using the platform. They charge \$10k for every successful hire (AngelList 2016).



## What is next?

During an interview, Naval Ravikant mentioned a project called “AngelList Enterprise” that would connect small companies with big enterprises, which are in fact, potential clients or partners (Loisos, 2016). This is again part of the assumption, that AngelList can reduce the entrepreneurs’ burden and take away all the non-core activities, and that creating a directory of big companies is not part of it. This also opens interesting doors for the future of the platform.

There is also a possibility for using all the data collected by AngelList. AngelList could for instance:

- Forecast which markets VCs and Business AngelList are gaining interest in.
- Predict which deals will be successful (according to our interviews, there may already be some work done on this part).
- Develop actionable advices for entrepreneurs to increase their odds of success.
- Etc.

The data includes the time spent on every page by different investors, the number of visits, the number of clicks, etc.

Interview Quote: *“Just imagine how rich all this data is. They are the default marketplace for startups and people generate tons of data that can be used to make the seed funding environment more efficient. They are in a great position to contribute and have a great impact.”* (Lead Investor).

Finally, one may argue that any non-core activity for startups could eventually be replaced by AngelList. This includes support services (legal, accounting, etc.), third party services and recruiting (design or adverting agencies, etc.).

# Challenges of the Online Syndication Model

## Geographical Diversity of AngelList Syndicates' Investments

One of the purposes of our interviews and survey was to understand how AngelList investments and backing are spread across the United States.

We notice a clear bias towards Silicon Valley. As seen on the map below, the Bay Area is from far the region that attracts the most backing on AngelList. New York comes second and Boston is a solid 3<sup>rd</sup> power. Almost nothing is left for other locations.

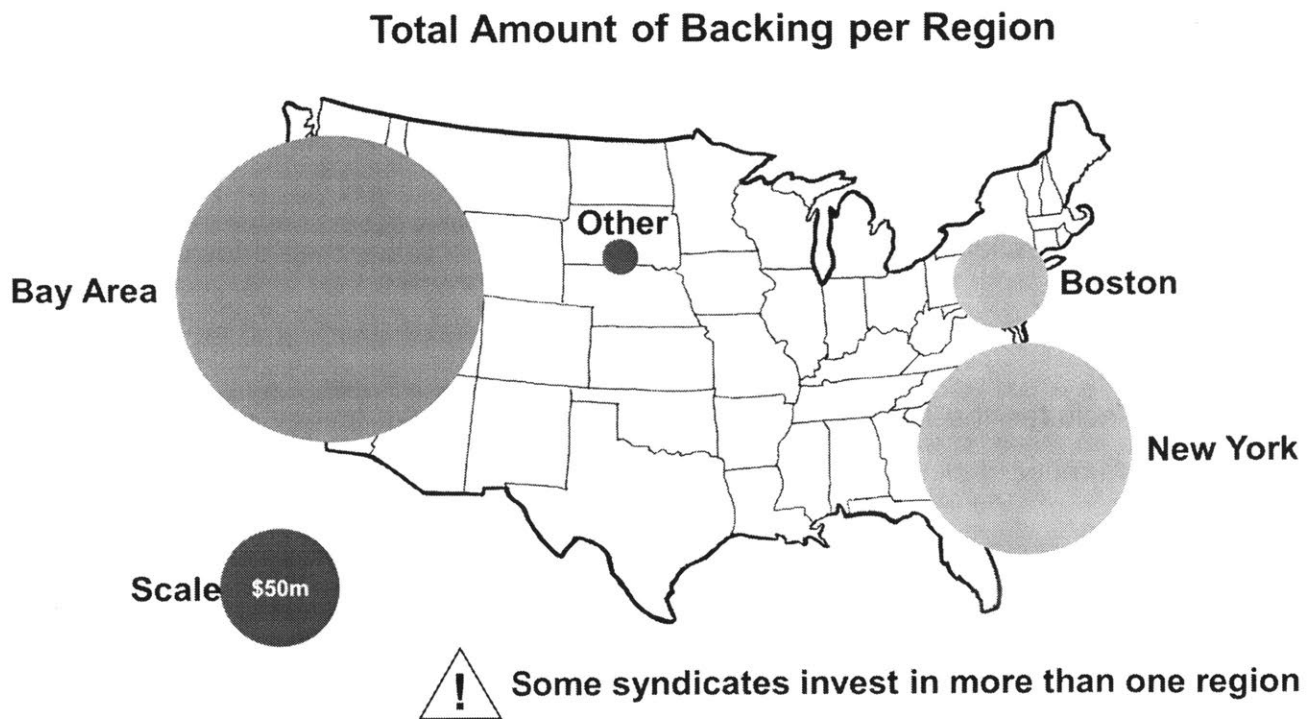


Figure 16: Total AngelList Backing in \$m per Region

Sources: AngelList.com

We highlight several reasons for this:

1. There is a progressive expansion outside of Silicon Valley (where AngelList was initially created). As a matter of facts, there are more projects outside of Silicon Valley today than there were before. We can reasonably assume that this trend will continue in the future.
2. Silicon Valley is the biggest center of activity for startups and seed funding, especially in the tech industry. There is no surprise that AngelList is biased in that sense. However, the expansion is still not a good reflection of the worldwide startup environment and we might expect AngelList to continue to grow outside of the Valley.
3. Silicon Valley is a label that investors and startups like to use. If they can choose between different locations, they are likely to opt for Silicon Valley when possible. Even when it is not the main location, there is a certain credibility associated with being in Silicon Valley.
4. There is a cultural effect that has often been raised in our interviews. Silicon Valley is more likely to welcome disruptive ideas and people will adapt faster in general. It seems that the startup community was also just quicker to pick-up on such trends and changes to embrace AngelList and welcome its benefits.

Interview Quote: *“There is a big culture gap between the Silicon Valley and other places when it comes to startups, funding and entrepreneurship. It is unique, I have never experienced anything that was close to the atmosphere there: it is fast-changing, optimistic and ambitious. It is completely different and that makes a big difference. On the other side, places like New-York or Boston are more down to earth and more realistic, there are pros and cons”.* (Lead Investor)

What we notice as well is that several other hubs are developing today, like NYC, Boston, etc. Apart from the numbers of investments in each location, another question we investigated is to what extent investors would be interested in projects that are not located geographical area they live in or usually invest in.

Studies tend to confirm that business angels have a stronger interest in startups located nearby. This is largely due to their desire to meet the entrepreneur and assess the quality of the team and the startup (Wiltbank and Boeker, 2007). Similarly, crowdfunding shows relatively small average distances between backers and projects. As a matter of fact, the first part of the funding comes mainly from friends and family (Agrawal, Catalini and Goldfarb 2011).

In the case of investments led by a syndicate on AngelList, we might argue that the location could have a different effect since data are shared online and the due diligence can be made based on them. Nevertheless, according to our survey, a majority (68%, Survey<sup>1</sup>) of backers joined AngelList to invest in leads they already knew personally. Hence, it is not obvious then that online syndication helps to get funds to new and unserved regions.

Several reasons were highlighted during our interviews:

1. Most investors have an emotional attachment to their region and want to support it
2. Investors want to meet the entrepreneurs and conduct a face-to-face due diligence
3. Investors know better their own region, they know better the entrepreneurial conditions and this helps them better value the startups
4. They can better help startups that are close to them and deliver more value
5. The deal flow often comes from their network and is thus geography dependent

For backers, the geography dependence is weaker but still exists. We believe this can be explained by similar factors. The geographical perspective is further explored in our Boston case example later in this paper.

Interestingly, our interviews also revealed that creating a syndicate outside of the big hubs can be a frustrating experience. Some investors tried to create a syndicate in

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<sup>1</sup> Survey Question 9 asked to backers only, 28 Respondents

unserved regions, found deals to invest in, successfully performed the due diligence but were stopped back by AngelList. Their deals did not fit with what AngelList was looking for. One might thus argue that AngelList participates in mitigating development outside of the Silicon Valley. AngelList could, when it will appear appropriate, push for more independent syndicates outside of the big hubs, and more specifically in the Midwest, the region still being challenge for the US seed funding industry (NVCA, 2016).

## Lemon Market

People take decisions based on available information. When if the information is not the same on every side of a transaction, there are information asymmetries (Stiglitz, 2002). To deal with them, signaling is essential and this applies in seed funding as well. Startup track record is either weak or non-existing and this causes big information asymmetry (Cumming and Johan, 2008). As a matter of fact, investors use signaling to assess the quality of an investment.

If we apply this theory to AngelList, one could argue that being on AngelList is a signal in itself, showing that the startup cannot raise money from traditional funding channels. This adverse selection explains why some call AngelList a “lemon market”.

Interview Quote: *“There is a risk of stigma for the startups looking for funds on such a platform. If it could raise money easily, it would not need to use the platform. However, AngelList has been doing a great job to prevent this trend and position itself as a “default place” for startups and investors, mitigating these risks”.* (Lead Investor)

It was shown that 90% of startups fail (Griffith, 2014), and startups could use this kind of platforms to fool the public, or even for fraud as some already argued (Cortese, 2013), in particular because the crowd is sometimes unsophisticated or irrational (Heminway, 2014). This is one of the reasons that led AngelList to only accept accredited investors on the platform.

As many startups use AngelList as a complementary source of funds, this signal often comes from the institutional backers that follow the investments. You can raise money easily on AngelList if you are already backed by first-tier VCs because people trust them to only invest in the best startups.

However, as one of our interviewees puts it: *“why is this first-tier VC not investing the whole round by itself if the investment is so good?”*

To reduce the information asymmetry, entrepreneurs must share information that is sometimes confidential and puts startups in a difficult position.

# Case study: Boston Ecosystem

While the Silicon Valley is undoubtedly the US center of entrepreneurship and fundraising with 303 deal counted in 2016 (NVCA 2016), the East-Coast duo of NYC and Boston is well known for being second in line with respectively 199 and 132 deals (NVCA 2016).

Many bright entrepreneurs study and graduate every year in Boston. The city gathers many top engineering and business schools. The diverse pool of talents is here to work on the next world-changing ideas. However, not all those talents remain in Boston after graduation. Looking at LinkedIn statistics until 2017<sup>1</sup>, among 13,102 MIT alumni that declare to work (or having worked) in entrepreneurship, 2,452 declare living in Boston while 1,736 declare living in the Bay area (keeping in mind that a majority of Alumni just declare living in the United States). The same pattern for Harvard University alumni. For 16,478 Harvard Alumni working (or having worked) in entrepreneurship, 2,633 still live in Boston and 1,865 moved to the Bay area. Overall, Boston still retains a large pool of talents and there is potential for building an ecosystem.

But talent is not enough to create an ecosystem. Many entrepreneurs move to the Bay area to have access to the best resources, the best VCs, meet the other entrepreneurs, build a credibility and attract more talents.

How can online syndication help Boston enhance its ecosystem? What initiatives have been taken to create an equity crowdfunding community in Boston?

## Boston and AngelList

The greater Boston Area has certainly many active investors on AngelList. 24% of the investors involved in leading a syndicate declare investing in the Boston area (among other locations). As a matter of comparison, 84% of those individuals declare investing

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<sup>1</sup> Figures on March 30, 2017

in the Bay area and 54% declare investing in New York. Boston is the 3<sup>rd</sup> equity crowdfunding pole in the US but is clearly outpaced by New York and the Bay area.

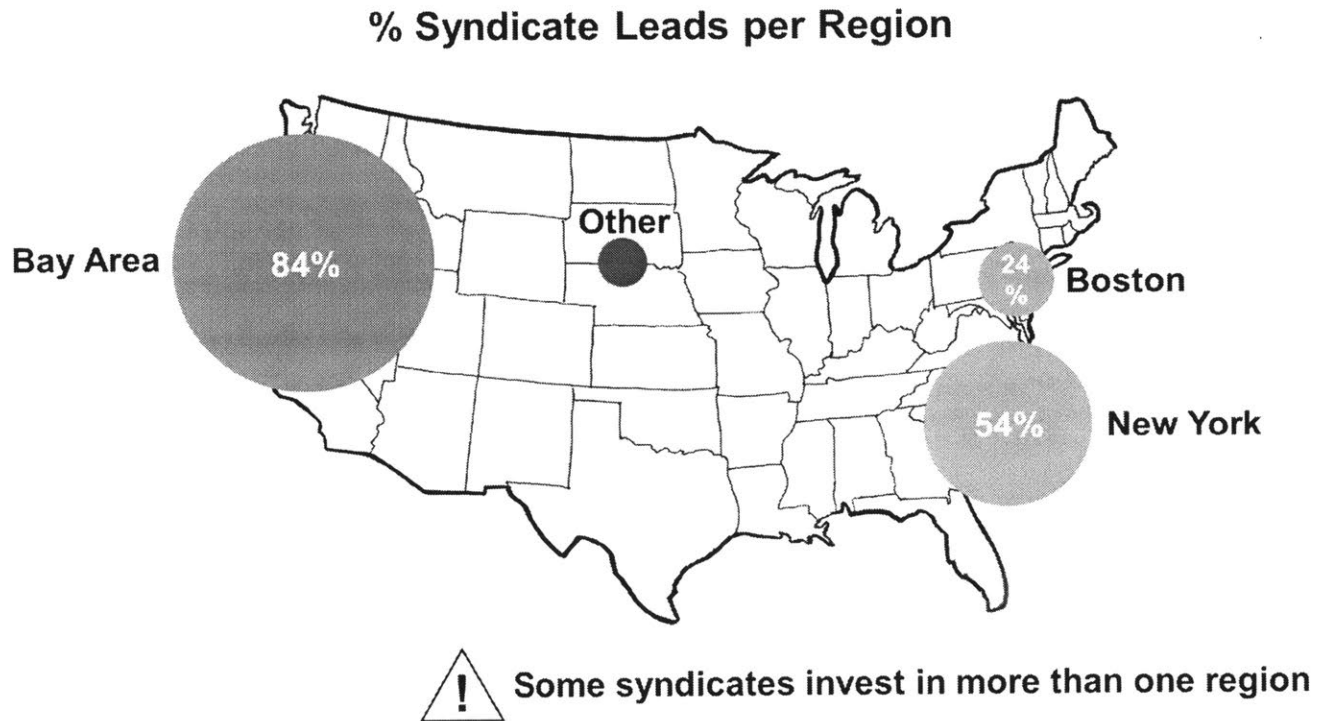


Figure 17: Distribution of the Syndicates per Region

Sources: AngelList.com

Moreover, looking at the distribution of backing per region, the proportion of syndicates with less than \$500K in backing is higher in Boston (68% of syndicates) than in the Bay area or in New York (63%). One should be in mind though that the difference is not statistically significant. The difference could be explained by either of the following:

- Boston syndicates do fewer deals
- Boston syndicates do smaller deals



## Amount of Backing - Distribution by Region

Part of Syndicates

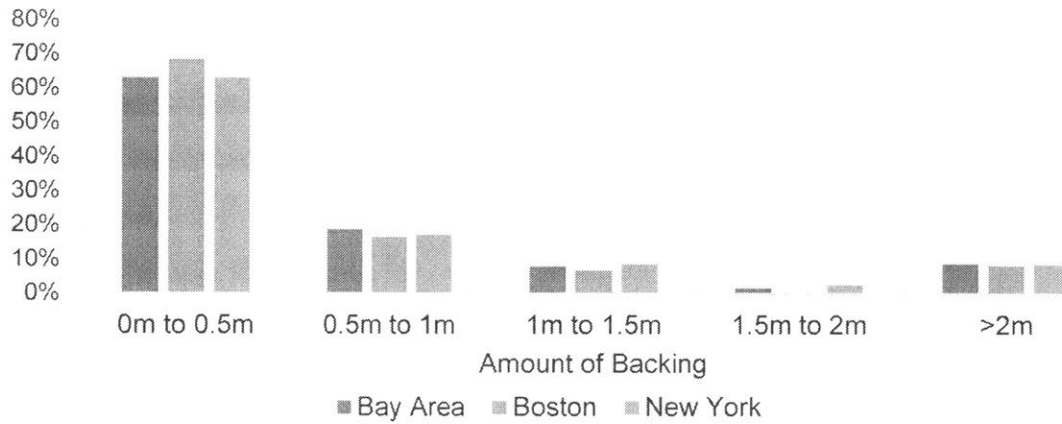


Figure 18: Distribution of the Amount of Syndicate Backing by Region

Sources: AngelList.com

Do Boston syndicates do fewer deals on average? The graphic below represents the expected number of deals per syndicate per year, divided by region. The Boston region has more syndicates expected to do 5 or fewer deals a year (78%) than the Bay area (74%) or New York (75%). Hence, yes, Boston syndicates are slightly expected to do fewer deals per year than syndicates in the Bay area or in New York.

## # Deals - Region

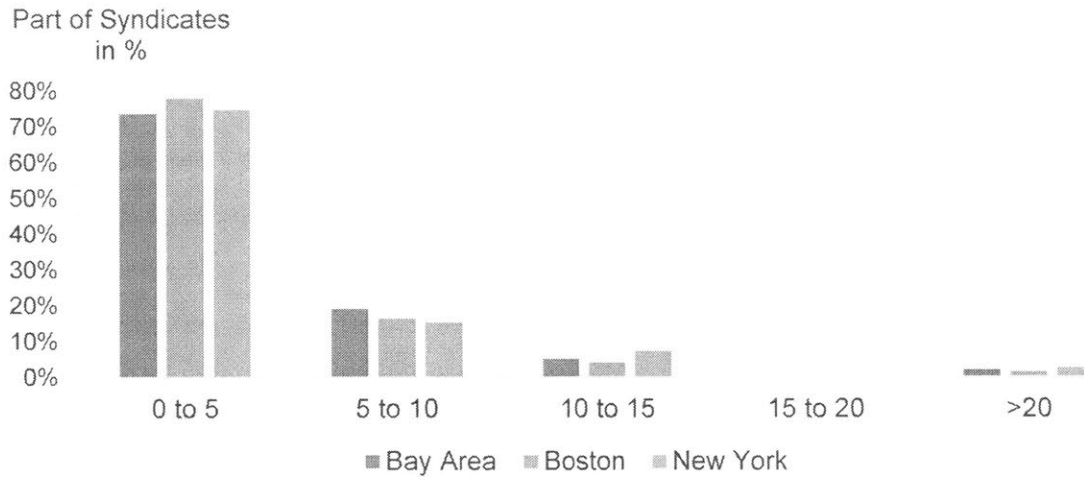


Figure 19: Distribution of the Number of Deals per Syndicate by Region

Sources: AngelList.com

Do Boston syndicates invest in smaller deals on average? The graphic below represents the typical backing investment (i.e. how much do backers invest on one single deal) for the different regions. There are fewer Boston syndicates with less than \$250k in typical backing investment (49%) than in the Bay area (67%) or in New York (60%). On the other hand, there are much more Boston syndicates in the \$250k to \$500k range in Boston (47%) than in the Bay area (27%) and in New York (31%).

## Typical Backing Investment - Distribution by Region

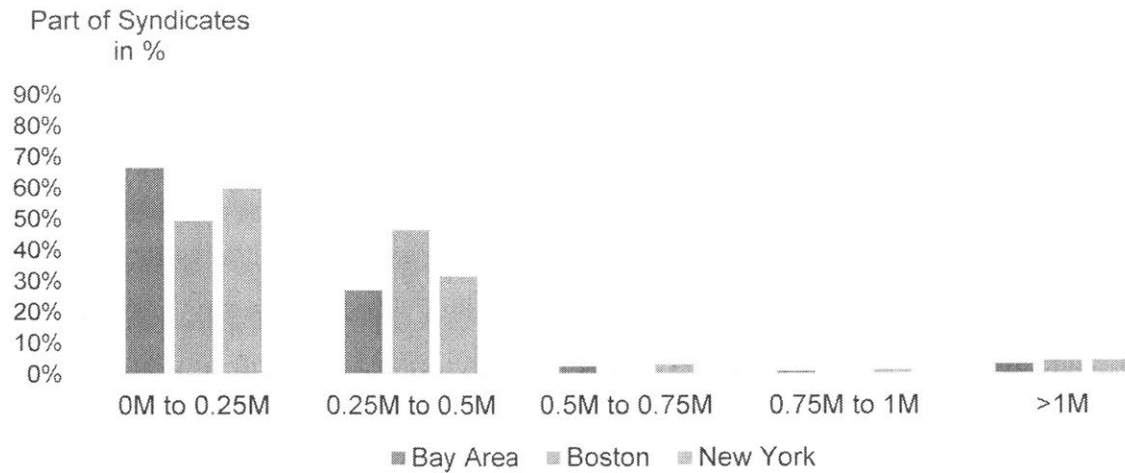


Figure 20: Distribution of the Typical Syndicate Backing by Region

Sources: AngelList.com

What is so particular about the Boston ecosystem that makes the deals size higher than in the Bay area or New York (again, the difference not being statistically significant)? AngelList still gathers a small sample of investors, and some private initiative, especially by the VC firm Accomplice, helped the Boston ecosystem and increased the average backing size. The following section goes over the Boston initiatives to take advantage of the AngelList platform, with a focus on the BOSS syndicate.

## Case Study BOSS

Observing the fast development of online syndication and startup financing on AngelList in Silicon Valley, Boston-based investors rapidly decided to follow suit and give Boston-based startups a chance to take advantage of the new model.

50 entrepreneurs with sufficient financial resources to invest as Business Angels were gathered to form syndicates. An investment fund called Accomplice engaged to back them up with an additional \$250k to show their support, without any further due diligence, in case one syndicate decided to invest. So far, they have invested in 38 startups that led to 3 exits.

The BOSS syndicate started in December 2013, during a dinner organized by the VC firm Accomplice. Accomplice invited several successful Boston entrepreneurs. The objective of the dinner, and thereafter of the BOSS syndicate is to enhance Boston ecosystem. They decided to use the AngelList platform to manage the investments. AngelList takes care of most of the legal documentation of the deal, which makes the back-office easier for Accomplice. Moreover, the aim was to use AngelList as a soundboard to attract backers and more money to Boston. Finally, Accomplice is an investor in AngelList. Accomplice's founder, Jeff Fagnan, has a seat on AngelList's board. By accepting to almost blindly invest alongside their entrepreneurs, Accomplice bets that those entrepreneurs will be able to spot early on the future successful startups that are born in Boston, and will convince them to stay in the area. In fact, Accomplice requires that the startups are located in Boston.

Some of the entrepreneurs had never invested on AngelList before. They had to get used to the platform. The BOSS initiative does not require a lot of effort and involvement from the entrepreneurs. They encounter many opportunities and meet many promising teams in their daily operations. BOSS gives them the means to leverage those opportunities to get a higher allocation for the startups they want to invest in. For instance, a typical BOSS syndicate would invest about \$25k in the startup, get \$250k in backing from Accomplice and a few other hundreds of dollars from their AngelList

backers. Among those backers are usually other BOSS lead investors. Those entrepreneurs managed to create a community, trust each other and invest alongside each other.

By investing as lead investors on AngelList, BOSS entrepreneurs get a carry on the investments, hence a much more interesting financial reward than what they would have had if they invested alone. The carry is 15% for the lead investors, and 5% for AngelList.

The objective of the BOSS syndicate is to invest in 250 Boston startups in 10 years, hence a \$63m investment by Accomplice (\$250k in every startup). After a bit more than 2 years, Accomplice invested in 38 startups.

Among the 38 investments made by the BOSS syndicate, 3 led to an exit.

- **AllClasses:** AllClasses is an education startup founded in 2013 in Boston by two former MIT Sloan MBAs, Stephen Marcus and Chad Lovell. AllClasses is a search engine for online classes. It has been acquired by Noodle Education in 2015 for an all-shares deal (undisclosed amount). Noodle Education also offer access to a wide range of online classes and is headquartered in New York. BOSS invested in AllClasses' seed round, alongside Michael Baker (ex-Nokia).
- **Mapkin:** Mapkin is a GPS application that incorporates locals and drivers' tips and advice. It was founded by Marc Regan, a former student of the Worcester Polytechnic Institute and Jacob Wasserman, a Boston University alumni. Mapkin was acquired by MapQuest in May 2016.
- **ThriveHive:** ThriveHive is a 360-marketing platform that builds customer marketing plans for their clients. It was founded by Max Faingezicht, Adam Blake (2 previous MIT Sloan MBAs), Bryan Pedlar and Nic Mendoza. BOSS invested alongside Art Papas in the second seed round of the startup in August 2015

(Seed round of \$2.5m). Less than 1 year later, in March 2016, ThriveHive was acquired by Propel Marketing for \$11.8m.

Accomplice, via the BOSS model, aims at enhancing the model ecosystem. But is there some adverse selection in the model designed by Accomplice? Some investors argue that if the startups selected by the BOSS syndicate were that good and promising, Accomplice would have invested much more and negotiated a higher allocation. Thereafter, getting founded by the BOSS syndicate (and hence not by Accomplice) could send a negative signal to the market.

## Why Is There No BOSS Somewhere Else?

Building a virtuous startup ecosystem requires several special ingredients. First, it needs human resource, people, and schools to generate the great ideas that might make tomorrow a better world. Second, it requires financing, money to help individuals build efficient organizations and achieve their goals. A nice environment with an appropriate culture helps too. It is no surprise that San Francisco with its welcoming weather and startup-centric dynamic and New York with its well-known fast-paced lifestyle are two leading startup hubs. In addition, governmental help and support can boost the ecosystem and make a great difference. Finally, it should give access to a large market.

Some places have most of those ingredients, make the effort to try to build an ecosystem but fail to grow as fast as desired. Santiago, in Chile, is a great example. The city is very welcoming and the government works hard to improve the entrepreneurial ecosystem. They launched Startup Chile, a program that welcomes and finances foreign entrepreneurs to come and build their venture in Chile. Moreover, it opens the Latin American market and provides resources to entrepreneurs. However, the startups did not manage to scale as fast as expected. The Latin American market is not as integrated as it first appears. Second businesses are not as ready to welcome new technologies as in the US. Furthermore, the country lacks entrepreneurial stories, former local individuals who managed to build large ventures and inspire the young generation.

*Interview Quote: "Building BOSS took time and effort, it is clear that there might be other cities following us in the future but for this, people need to commit and trigger the action. We did it, and know we are here, but people should not expect this to happen by itself if no one wants to stand for its local startup community, then Silicon Valley will remain the one and only place". (BOSS Lead Investor)*

Boston is a strong case that has significant pros for a sound startup development. Importantly, Boston leads the biotech race, mainly because it can build upon large firms

implemented in the city. Boston can become a large entrepreneurial hub, and BOSS is trying to accelerate its growth.



## Conclusion

The online syndication model was once described as a potential solution to the information asymmetry between entrepreneurs and investors in equity crowdfunding. Lead investors run the due diligence and embody credibility and trust which are needed to attract backing investors. We argue that the model partly succeeds to solve this problem but that AngelList is following another path.

First, angel investing is not available to everyone. In contrast, reward-based crowdfunding platforms like Kickstarter gather participation and support around their campaigns. The largest equity crowdfunding platform, AngelList, did not open its investments to non-accredited investors. In other words, only the wealthiest individuals who already have access to investment funds can invest via AngelList syndicates. In addition, analysis of the syndicates on AngelList show that the top lead investors gather most of the backing on the platform. This means that only a small part of those wealthy individuals account for the bulk of AngelList activity, which brings the platform even further from investment democratization. Furthermore, most backers join the platform because they already know one of the lead investors. Thus, the online syndication model on AngelList is more a replica of offline networks than a real revolution to democratize startup equity access to the crowd.

AngelList is shifting its strategy and focusing more and more on institutional investors. Maiden Lane is a \$25m fund that has been created to invest on AngelList syndicates. CSC upshot raised \$400m to invest on syndicates. This institutional money has created a new fund-of-fund model that shows the little interest that AngelList has in going for the crowd while it can focus on bigger investment players.

AngelList also takes advantage of its large access to startup to create new services like its new hiring platform. According to its founder, AngelList will generate a greater value with the recruiting tool than from its financing platform in the future. There are thus strong reasons to believe that AngelList has been getting further from the crowd and

that it will continue to do so in the future to exploit what it considers a bigger and broader opportunity, becoming the default digital platform for startups.

Despite these promising perspectives, we argue that AngelList still faces challenges ahead. The most obvious for us is that the online syndication model does not create substantial new opportunities in more isolated locations and most successful lead investors are still located in very few top entrepreneurial hubs. A city like Boston was able to use AngelList to boost its ecosystem but it is not clear how the model can be replicated. Overall, the geographic expansion of AngelList and its syndication model remains mitigated.

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# Appendix

## Appendix I: Interviews List

*Table 5: Interviews List*

<b>Name of Interviewees</b>
Brian Sugar
Vinay Seth Mohta
Dan Hutchison
Walt Doyle
Louis Coppey
Diego Philippi
Fabrice Grinda
Tom Fallows
Jeffrey Schox
Will Gornal
Diane Hessian
Shruti Gandhi
Ethan Rigel
Ed Roman
Jeremy Conrad
Johan Hombert
Mike Miller
Dave Williams
Michael Daugherty
Nicholas Seet
Michael Beller
Elies Campo
Josh Schanker
Will Cordes
Nicholas Moran
Gore Bolton
Matthew Rhodes-Kropf
Sophie Manigart
Gil Penchina
Phil Nadel
Michael Hirshland
David Goldberg

Sonny Mayugba
Piotr Wilam
Maryam Haque
Bernard Surlemont
Zach Coelius
Jeff Gargiulo
Jeff Fagnan
TJ Mahony
Ishan Sachdev
Yoav Shapira
Richard Dulude
Corey Thomas
Grégory Hédó



## Appendix II: Survey Results

### Question 1: To everybody, 97 respondents Are you? (Multiple Answers)

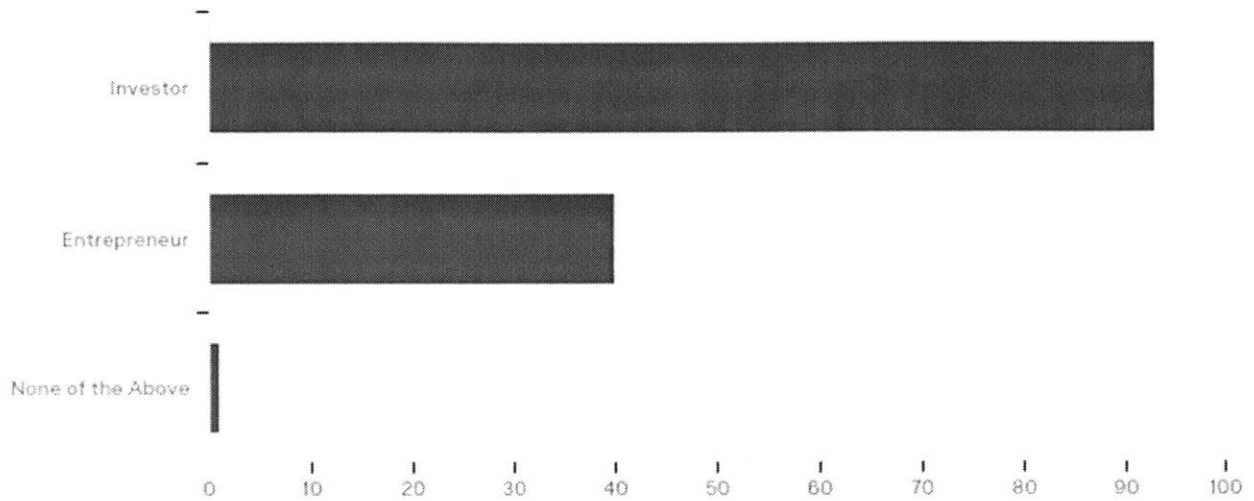


Figure 21: Survey Results, Question 1

Table 6: Survey Results Details, Question 1

#	Answer	%	Count
1	Investor	95.88%	93
2	Entrepreneur	41.24%	40
3	None of the Above	1.03%	1

**Question 2: To entrepreneurs only, 37 respondents**  
**As an entrepreneur, (Multiple Answers)**

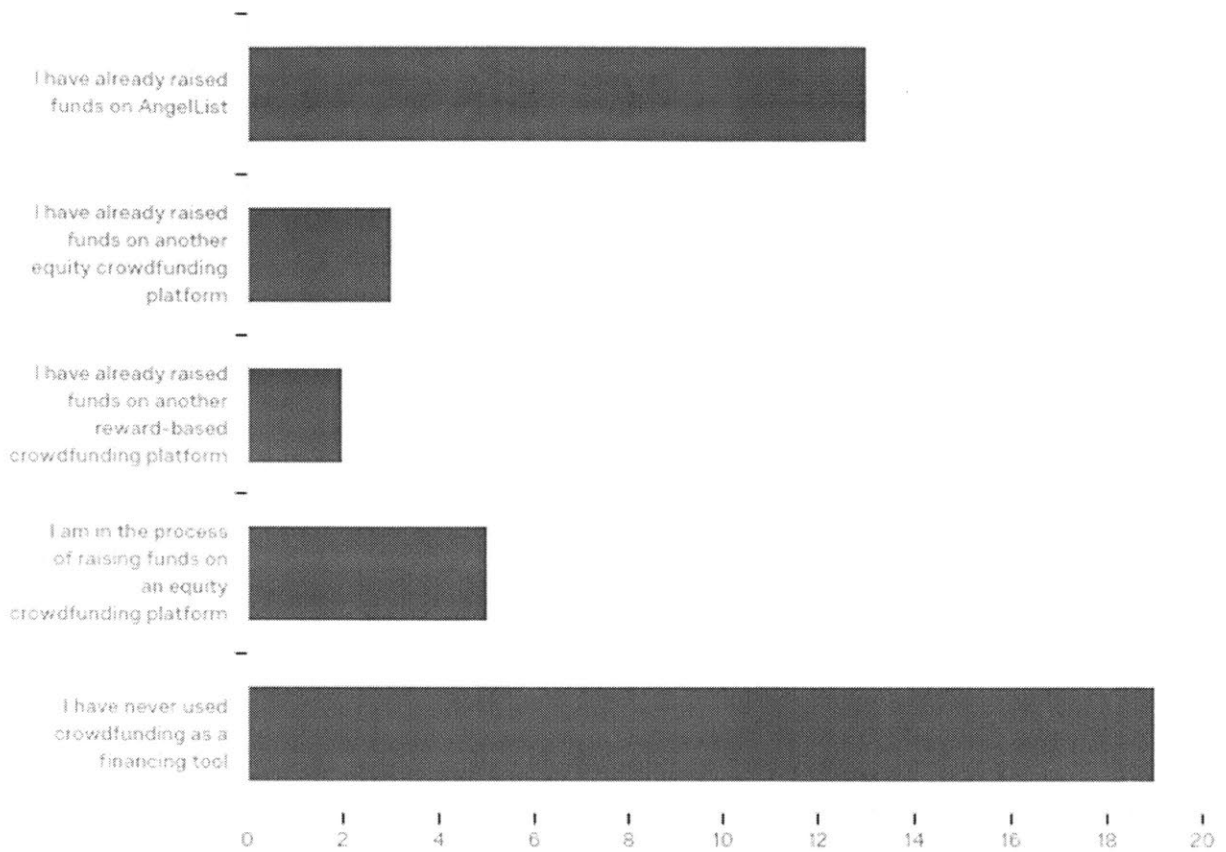


Figure 22: Survey Results, Question 2

Table 7: Survey Results Details, Question 2

#	Answer	%	Count
1	I have already raised funds on AngelList	35.14%	13
2	I have already raised funds on another equity crowdfunding platform	8.11%	3
3	I have already raised funds on another reward-based crowdfunding platform	5.41%	2
4	I am in the process of raising funds on an equity crowdfunding platform	13.51%	5
5	I have never used crowdfunding as a financing tool	51.35%	19

**Question 3: To investors only, 91 respondents**  
**Do you? (Multiple Answers)**

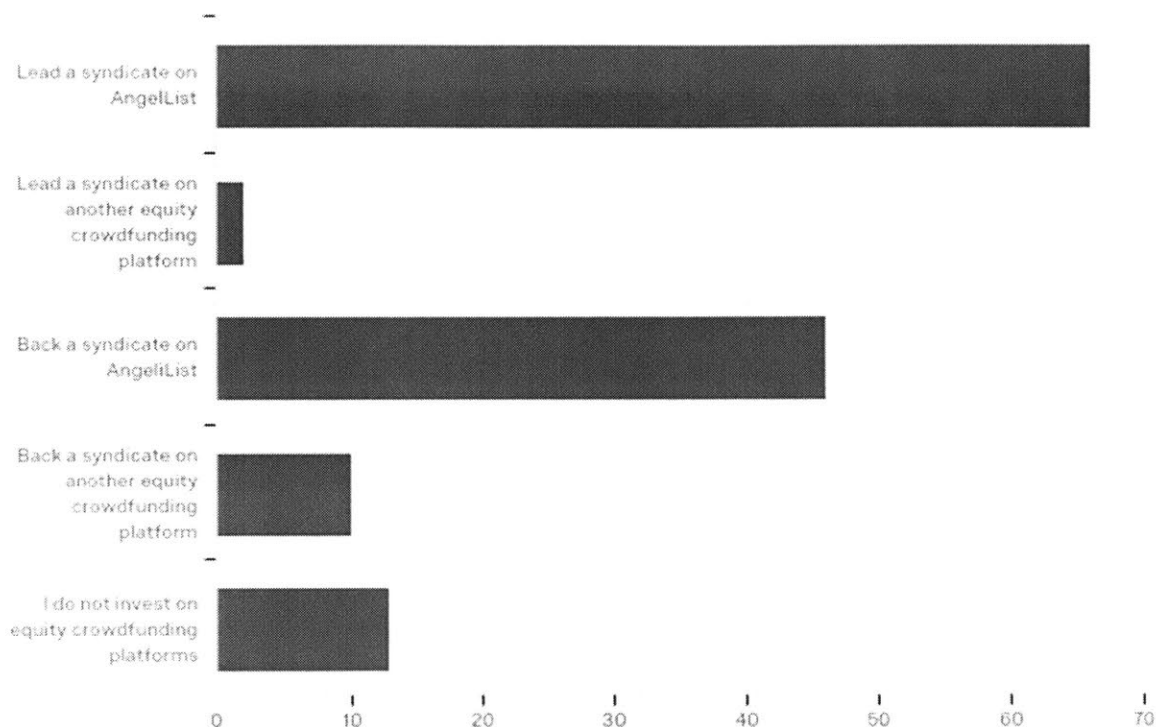


Figure 23: Survey Results, Question 3

Table 8: Survey Results Details, Question 3

#	Answer	%	Count
1	Lead a syndicate on AngelList	72.53%	66
2	Lead a syndicate on another equity crowdfunding platform	2.20%	2
3	Back a syndicate on AngelList	50.55%	46
4	Back a syndicate on another equity crowdfunding platform	10.99%	10
5	I do not invest on equity crowdfunding platforms	14.29%	13

**Question 4: To lead investors only, 64 respondents**  
**Why did you choose to join AngelList? (Multiple Answers)**

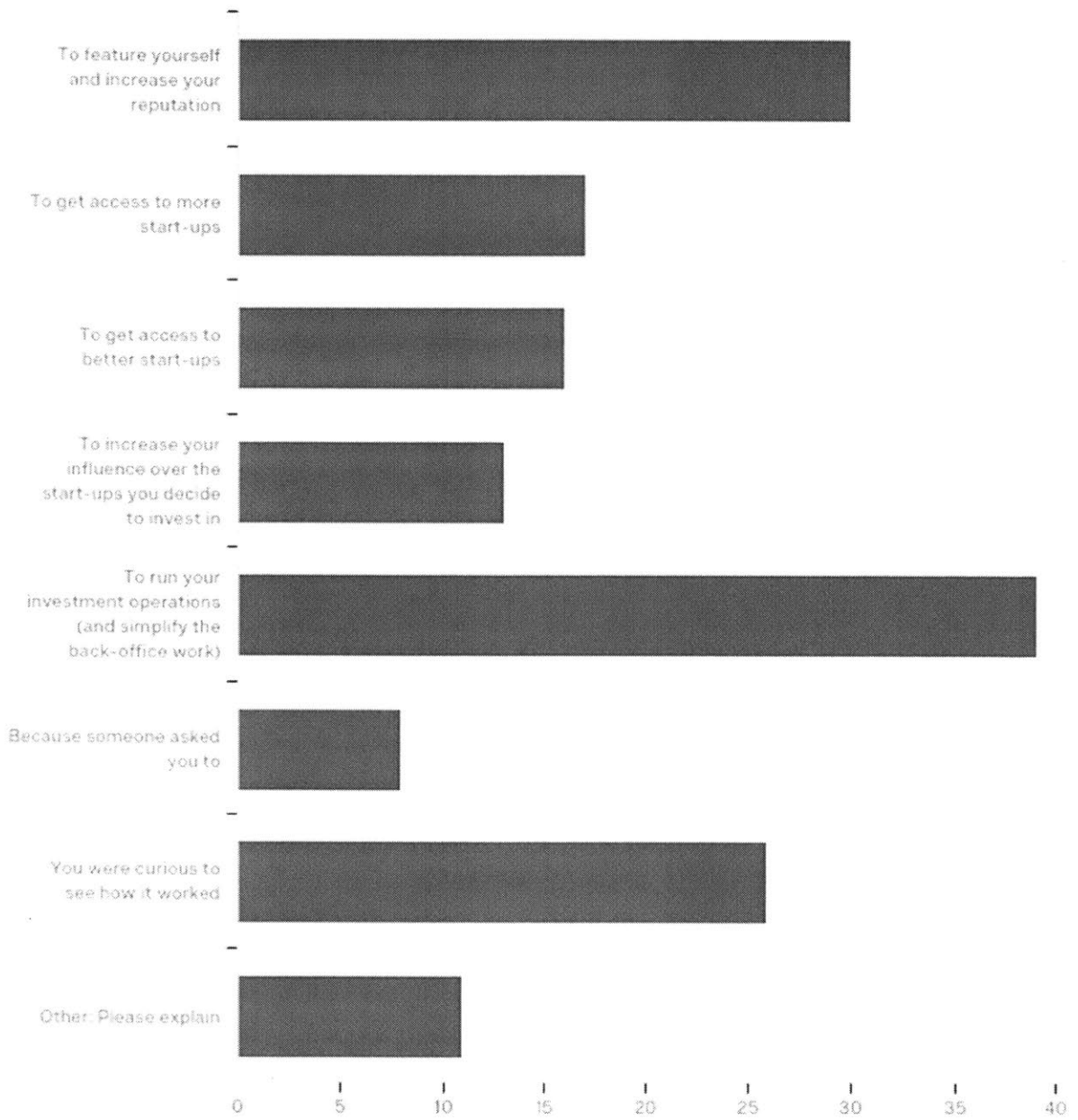


Figure 24: Survey Results, Question 4

Table 9: Survey Results Details, Question 4

#	Answer	%	Count
1	To feature yourself and increase your reputation	46.88%	30
2	To get access to more start-ups	26.56%	17
3	To get access to better start-ups	25.00%	16
4	To increase your influence over the start-ups you decide to invest in	20.31%	13
5	To run your investment operations (and simplify the back-office work)	60.94%	39
6	Because someone asked you to	12.50%	8
7	You were curious to see how it worked	40.63%	26
8	Other: Please explain	17.19%	11

**Question 5: To lead investors only, 63 respondents**  
**For how long have you been leading deals on AngelList? (One Answer)**

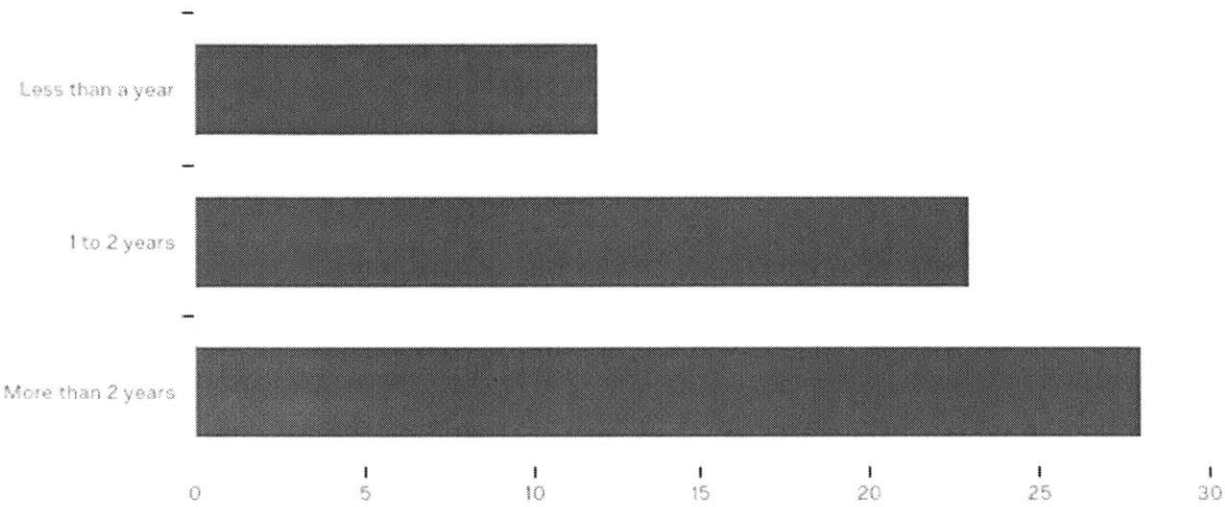


Figure 25: Survey Results, Question 5

Table 10: Survey Results Details, Question 5

#	Answer	%	Count
1	Less than a year	19.05%	12
2	1 to 2 years	36.51%	23
3	More than 2 years	44.44%	28

**Question 6: To lead investors only, 63 respondents**

**About what percentage of the people backing your first deal did you personally know? (One Answer)**

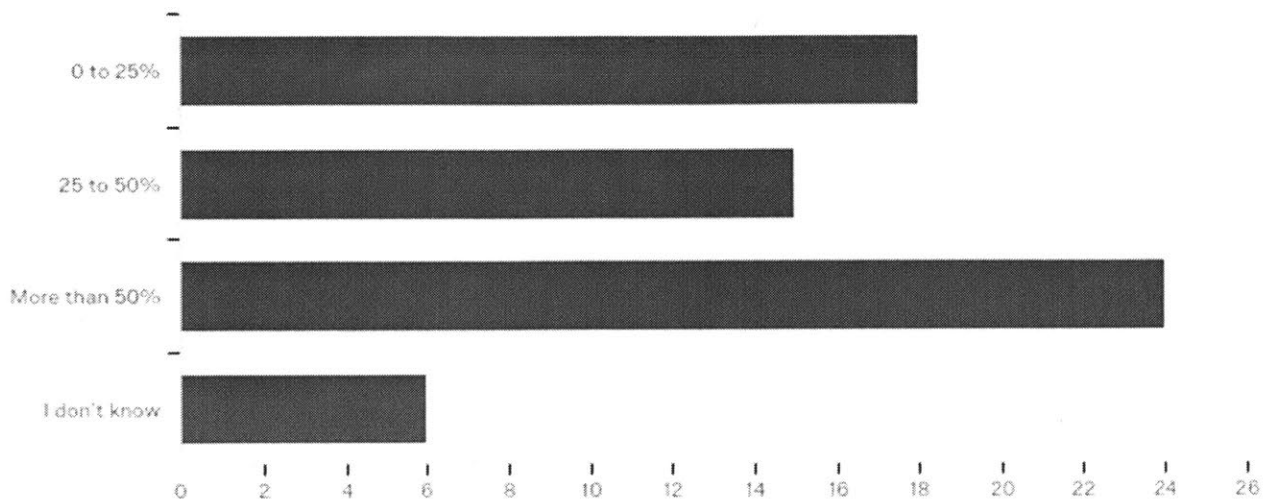


Figure 26: Survey Results, Question 6

Table 11: Survey Results Details, Question 6

#	Answer	%	Count
1	0 to 25%	28.57%	18
2	25 to 50%	23.81%	15
3	More than 50%	38.10%	24
4	I don't know	9.52%	6

**Question 7: To lead investors only, 62 respondents**  
**About what percentage of your backers do you personally know today? (One Answer)**

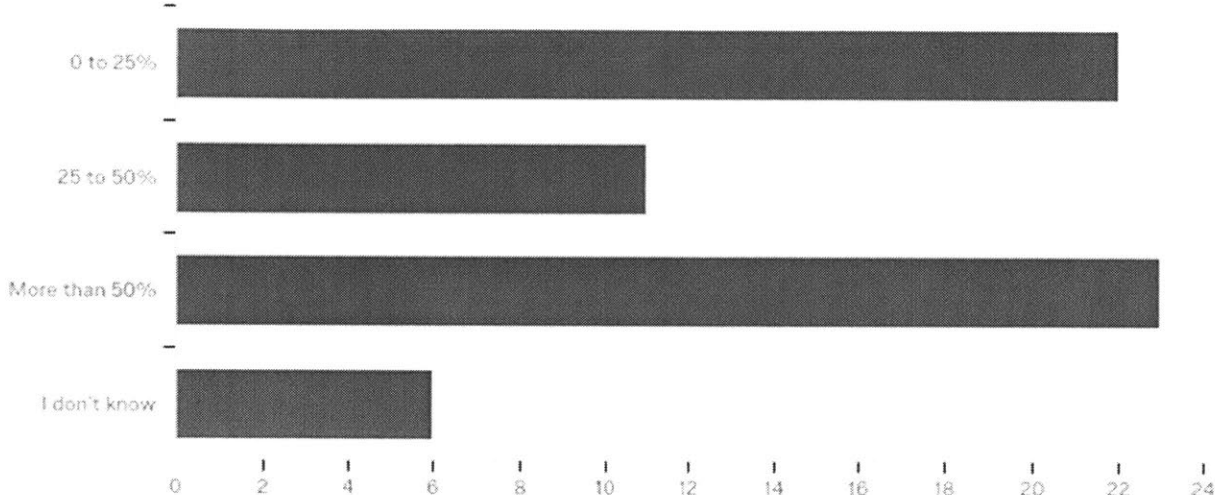


Figure 27: Survey Results, Question 7

Table 12: Survey Results Details, Question 7

#	Answer	%	Count
1	0 to 25%	35.48%	22
2	25 to 50%	17.74%	11
3	More than 50%	37.10%	23
4	I don't know	9.68%	6



**Question 8: To backers only, 48 respondents**

**What is your main reason for investing on AngelList / Another equity crowdfunding platform? (One Answer)**

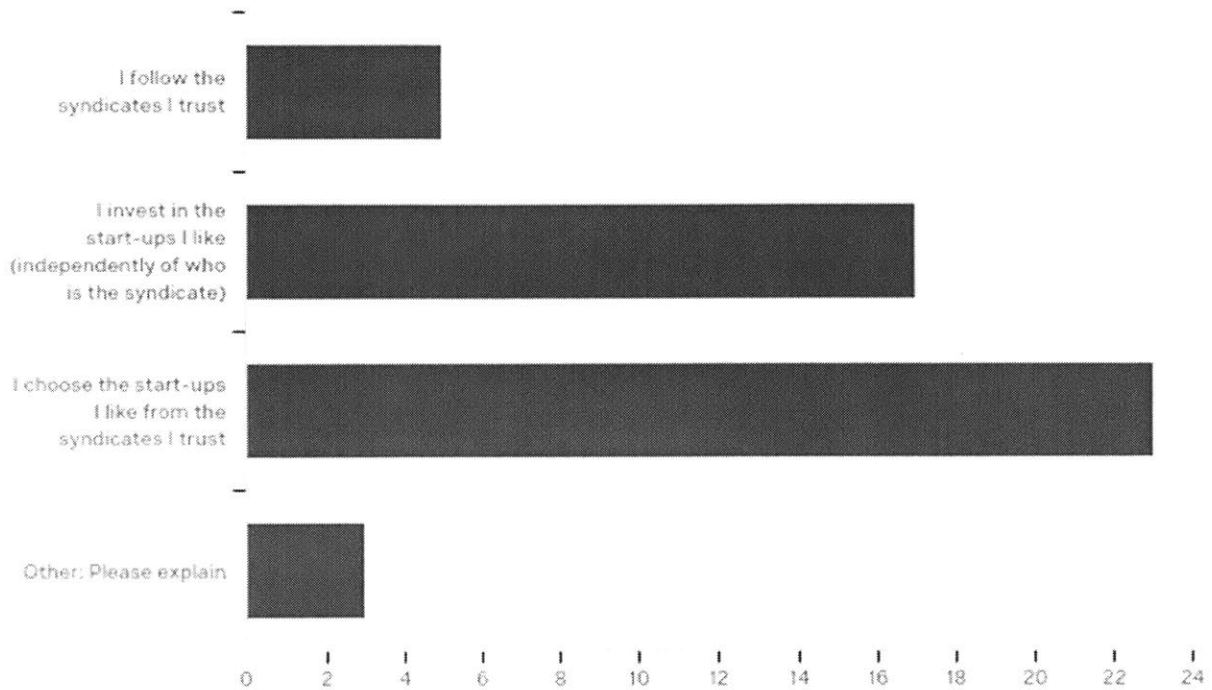


Figure 28: Survey Results, Question 8

Table 13: Survey Results Details, Question 8

#	Answer	%	Count
1	I follow the syndicates I trust	10.42%	5
2	I invest in the start-ups I like (independently of who is the syndicate)	35.42%	17
3	I choose the start-ups I like from the syndicates I trust	47.92%	23
4	Other: Please explain	6.25%	3

**Question 9: To backers only, 28 respondents**  
**What drives your decision to back up a syndicate? (Multiple Answers)**

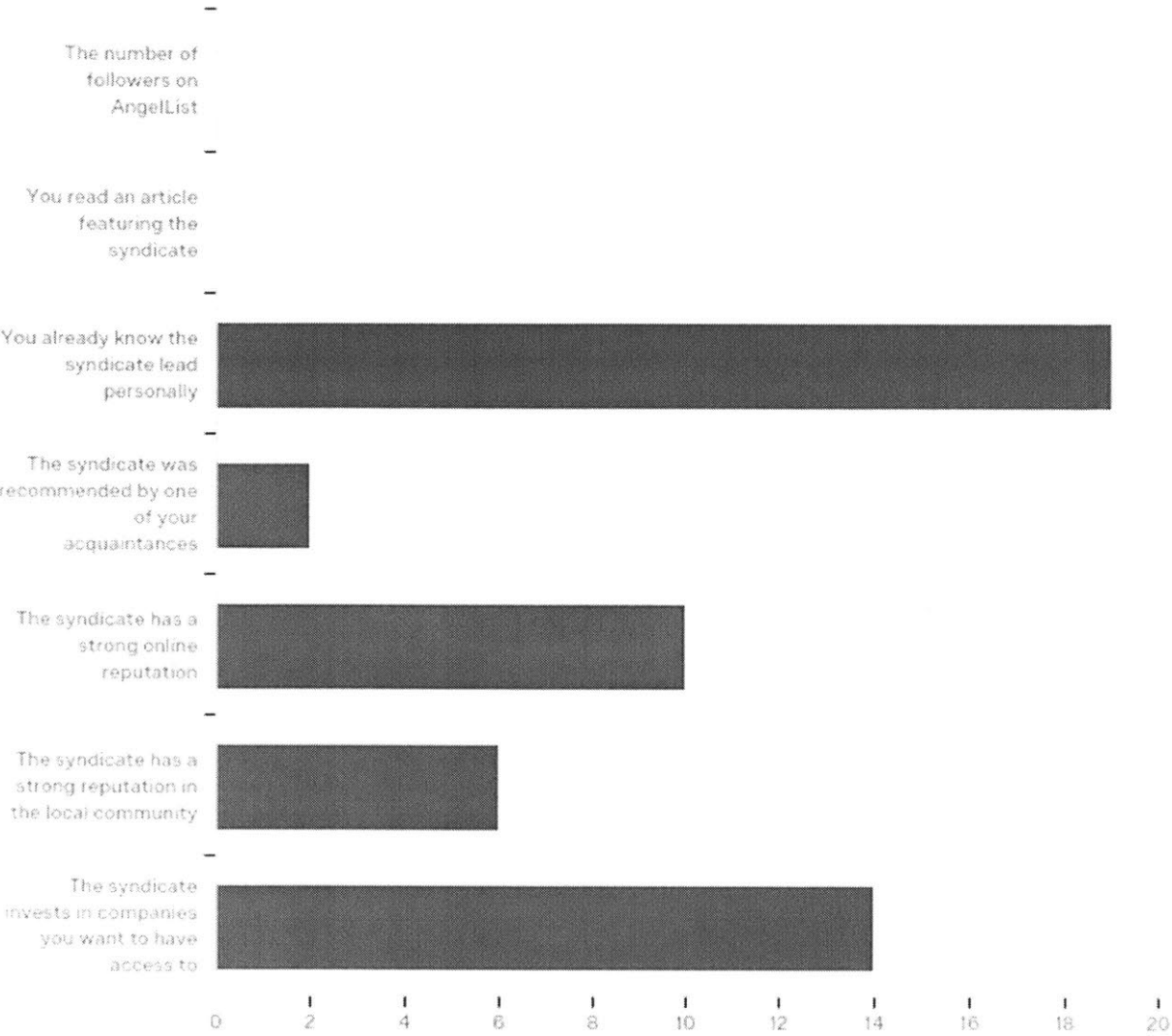


Figure 29: Survey Results, Question 9

Table 14: Survey Results Details, Question 9

#	Answer	%	Count
1	The number of followers on AngelList	0.00%	0
2	You read an article featuring the syndicate	0.00%	0
3	You already know the syndicate lead personally	67.86%	19
4	The syndicate was recommended by one of your acquaintances	7.14%	2
5	The syndicate has a strong online reputation	35.71%	10
6	The syndicate has a strong reputation in the local community	21.43%	6
7	The syndicate invests in companies you want to have access to	50.00%	14

**Question 10: To everyone, 75 respondents**  
**In which locations do you invest/work? (Multiple Answers)**

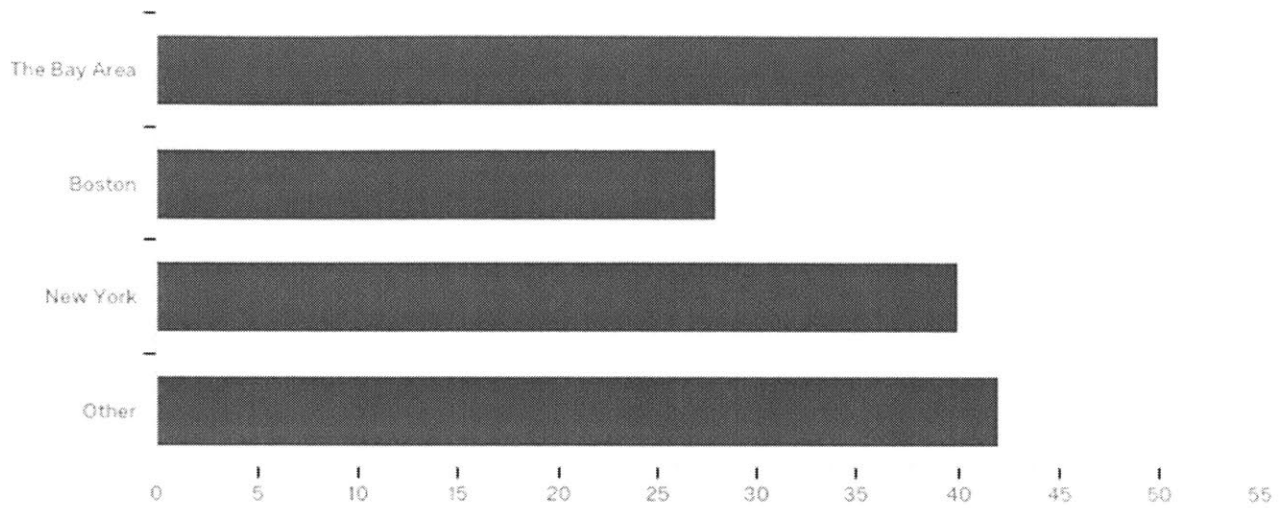


Figure 30: Survey Results, Question 10

Table 15: Survey Results Details, Question 10

#	Answer	%	Count
1	The Bay Area	66.67%	50
2	Boston	37.33%	28
3	New York	53.33%	40
4	Other	56.00%	42

**Question 10: To everyone, 75 respondents**  
**What is your age? (One Answer)**

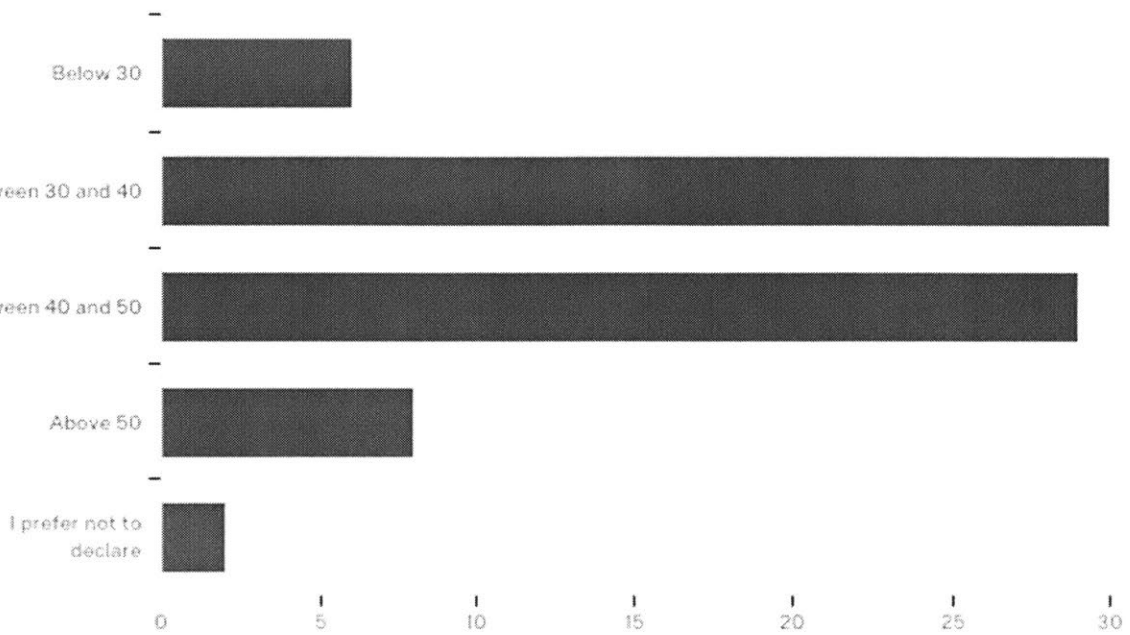


Figure 31: Survey Results, Question 11

Table 16: Survey Results Details, Question 11

#	Answer	%	Count
1	Below 30	8.00%	6
2	Between 30 and 40	40.00%	30
3	Between 40 and 50	38.67%	29
4	Above 50	10.67%	8
5	I prefer not to declare	2.67%	2