

# Angel Investment in Latin America and the Caribbean

Analysis of the Perspective of the  
Performance of Ventures from 2014-2020

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IDB Lab

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# Index:

<u>Introduction</u>	<u>3</u>
<u>Definitions</u>	<u>5</u>
<u>Objective of the analysis</u>	<u>7</u>
<u>Methodology for collecting information</u>	<u>9</u>
<u>Descriptive analysis of the results of the survey of ventures that received investment from angel networks between 2014-2020</u>	<u>12</u>
<u>Qualitative Comparative Analysis (QCA): relationships that can explain the performance of the ventures invested in by angels.</u>	<u>23</u>
<u>Limitations of the study</u>	<u>27</u>
<u>Summary of Results and Conclusions</u>	<u>29</u>
<u>References</u>	<u>32</u>

# I. Introduction



In 2013, the Business School of the University of Montevideo (IEEM) together with IDB Lab launched an initiative with the aim of contributing to the development of dynamic and innovative activity in the region, while also favouring a cultural change that supports the risks taken by entrepreneurs and investors to create a critical mass of dynamic companies in Latin America and the Caribbean through the acceleration of the activity of angel investor networks. This regional initiative was called, and is known as, Xcala.

## **Angel investors have a key role in supporting the development of the entrepreneurial economy,**

as they are the largest external source of financing for starting up a new venture after family and friends; their investments fill the size, stage and sector gaps left by venture capital funds, and in many regions they are virtually the only source of capital available. Business angels are typically responsible for providing seed funding to young, rapidly growing companies, and angel investment networks facilitate multiple rounds of fund-

ing, taking startups to the next level of development. As experienced professional's angels also bring valuable non-financial help to the companies in which they invest.

## **However, the lack of visibility of angel investors and their investment activity is a significant barrier to obtaining information on this activity.**

For this reason, within the Xcala action framework, information and knowledge has been generated that has been disseminated through the Angel Activity Monitor. This has made it possible to systematically monitor the amount and type of investments made since 2014, which has become a significant contribution to the longitudinal monitoring of the activity of angel investment networks.

## **This study aims to provide information about the performance of the ventures that received**

## **angel investment in Latin America and the Caribbean.**

There are relatively few studies of the impact of angel investment on business ventures, and none which focused on Latin America and the Caribbean. Given the volume of contacts and links generated after 7 years of working together with the angel investment networks of the region and the associated entrepreneurial ecosystem, Xcala and IDB Lab have taken advantage of this unique opportunity to analyze the information on the results of angel investments and measure the real impact of the activity of the networks in the region.

## II. Definitions



# Business Angel:

An individual who makes his own investment decisions and who contributes with his own money, sometimes dedicating time, to unlisted companies promoted by outsiders. Although they invest at any stage of development, the business angel plays a fundamental role in the creation of innovative companies by supporting entrepreneurs in the initial phases of the life cycle of their companies (seed and start-up).

# Business Angels networks:

Organizations that bring together private investors (usually business owners, business executives or successful entrepreneurs) who are interested in contributing financial resources to new business projects. These investors typically have many goals: a) Obtaining a profit; b) Enjoying the spirit link to the development of new companies; c) Promoting entrepreneurs through mentoring and coaching; d) Giving back to society much of what they've received in the past as business owners, executives or entrepreneurs.

### **III. Objective of the analysis**



The objective of this analysis is to fill this significant gap in our knowledge regarding the performance of ventures that received angel investment in Latin America and the Caribbean.

To this end, we have analyzed information on the impact that angel investment had on the ventures that received capital from angel investors in Latin America and the Caribbean between 2014 and 2020. Using specific information on the characteristics of the ventures and investments, and the performance results of the ventures, we aimed to analyze the results and impact of investments having a longitudinal perspective, instead of looking at the returns on the fund portfolio used in previous venture capital studies.

For these purposes, respondents were asked about financial and non-financial support obtained prior to angel investment, data referring to closed investment rounds, information on exits, indicators at the time of investment and currently, as well as information regarding the impact of COVID-19 on their activities.

As a result of these questions, two types of analysis were carried out:

- **A descriptive analysis** of the aggregate results of the survey of ventures that received investment from angel networks between 2014-2020: the results of the survey were analyzed, and conclusions were drawn.
- **A qualitative comparative analysis (QCA)** seeking to find relationships between the component factors of the investment and the performance of the outcomes a posteriori.

## **IV. Methodology for collecting information.**



**The survey form was designed based on the literature review, where information was collected to categorize the ventures, in addition to performance indicators of the ventures after receiving angel investment. Information that IDB Lab considered to be relevant for the purposes of designing future programs was also added.**

The procedure for contacting the ventures was carried out from June 1-30, 2021. The ventures that received investments from angel investor networks in Latin America and the Caribbean were invited to participate.

Contact was made through network managers linked to Xcala who, in turn, contacted the entrepreneurs who received investment through their networks during the aforementioned period. The contact was reinforced

through social networks. To encourage participation, a course at Babson College worth USD 250 was offered to survey participants.

**The final screening resulted in 84 responses from invested ventures between 2014-2020 which were used for the descriptive analysis and 74 for the proposed QCA analysis.**

For the purposes of the first analysis, we wanted to include the greatest number of responses that would contribute to the analysis, but when faced with an incomplete question in the survey, 10 of the responses were discarded for the purposes of the second analysis. The sample is made up of responses from ventures located in Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Spain, the United States, Guatemala, Jamaica, Mexico, Panama, Peru, the Dominican Republic and Uruguay. The largest number of ventures are located in Mexico (17), Colombia (16), and Brazil (8).

### **Collected Information:**

The only information available for the analysis are investments made through the angel networks. This source of data has the benefit of accessibility through the Xcala program and may be used as a trusted source. However, there are also several important limitations. In particular, market coverage is incomplete: only a fraction of business angels are network members. Although this data source cannot measure the total volume of investment activity it is valuable for highlighting trends.

**Despite the problem of being the tip of the iceberg, network data provides unique and valuable insight.**

The areas analyzed in the report were the following:

Investment stages and amounts: the Xcala angel activity monitor provides us with information on investment average ticket, which historically is around USD 120,000 per investment. This report will allow us to analyze additional rounds of investment that may have been left out of those carried out exclusively through the Xcala networks.

**Industry:** There are previous reports that studied the performance of angel investments in technology-based companies and whether or not these are associated with superior performance (but these are in Europe and the United States). This is due to the ability of these companies to create new markets with significant growth potential. This report will make it possible to assess what is happening in Latin America and the Caribbean.

**Investment Rounds:** Traditionally, while informal investors invest across the full range of business development stages, they are the main source of funds when the size of the deal is less than USD 1 million and provide more rounds of seed capital than venture capital funds. This study will analyze the number and profile of investment rounds of the ventures, seeking to understand the behaviour of investors over time.

**Investor's role in the venture:** The capital provided by angel investors is known as “smart capital.” Business angels are usually “hands-on” investors who contribute with their experience, knowledge and contacts for the benefit of the companies they invest in. Given that the majority of angels have an entrepreneurial background, we can expect that their participation will also benefit the companies in

which angels invest although research to date has failed to identify a positive relationship between participation and business success. To understand this behaviour in the region, questions will be included to help identify not only the quantitative contribution of investors, but also their qualitative contribution, such as know-how and contacts.

**Return on investment:** Although some reports have identified the expectations of business angels, in terms of their exit horizon, exit method, rate of return and proportion of ‘winners’ and ‘losers’ there is little information on the real returns obtained by informal investors. This study will seek to provide more information in this regard, especially in the Latin American and Caribbean region.

**Exits:** In most cases, a commercial sale to another company will be the only exit strategy available for angel investors. The questions included in the questionnaire will allow us to understand the main characteristics of the exits of the region.

**V. Descriptive analysis of the results of the survey of ventures that received investment from angel networks between 2014-2020.**



# Descriptive analysis of the results of the survey of ventures that received investment from angel networks between 2014-2020.

## a. Sample data.

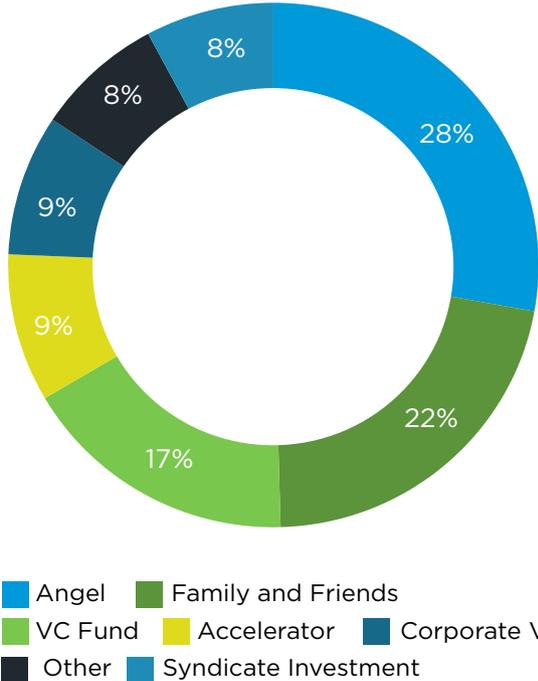
Regarding the characteristics of the sample, it represents USD 47,756,906 dollars invested in different investment rounds by 40 networks that support the entrepreneurial ecosystem.

28% of investors in investment rounds comprise individual angels, followed by 22% from families and friends, 17% from VC Funds, 9% from accelerators, 9% from Corporate VC, 8% from syndicate investors and the remaining 8% corresponds to other profiles.

The highest disbursement of the investors of the ventures in the sample was found between the years 2020 and 2021.

92% of the ventures currently have plans to grow. In addition, 73% of those surveyed consider their venture to have a social impact.

Investor profile



*“The ecosystem is growing. There are many unicorns and a lot of people who want to invest. Today I tell businesses to beautify themselves and go looking for capital, which is there to be found.”*

Emprepreneur, Mexico.

# Descriptive analysis of the results of the survey of ventures that received investment from angel networks between 2014-2020.

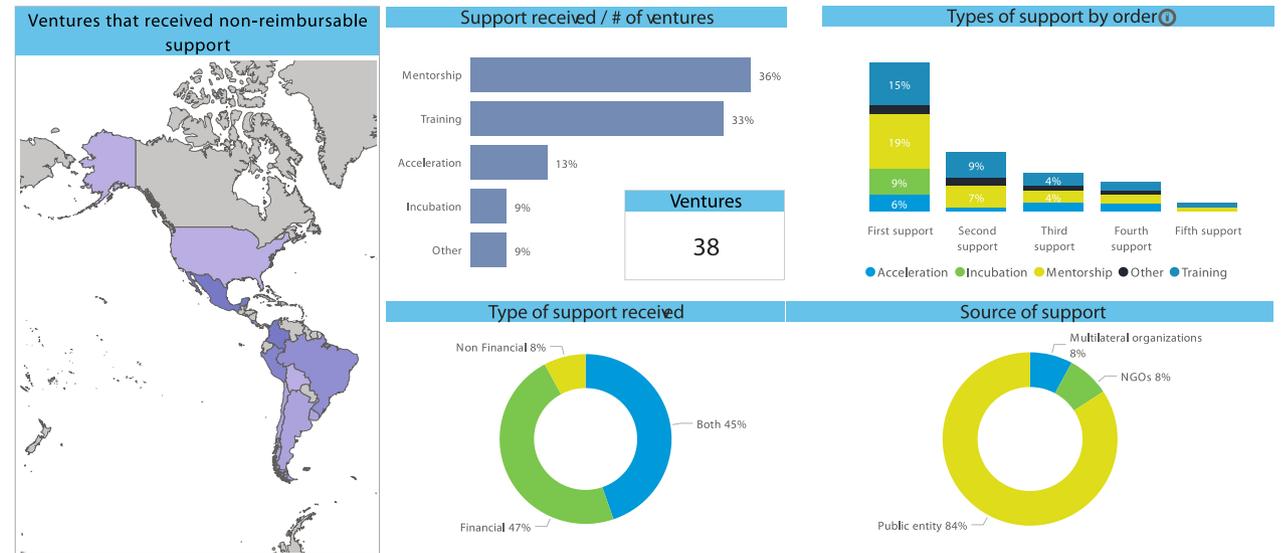
## b. Type of support.

Regarding the type of non-reimbursable support received by the surveyed ventures, 47% received exclusively financial support, 45% received both financial and non-financial support, and the remaining 8% received only non-financial support.

**Regarding non-monetary support received, 38 ventures received a total of 67 instances of support.**

36% of the ventures received mentoring as support, and 33% training. Third, 13% of the ventures received accelerations, 9% received incubations and 8% other types of support.

The origin of the support can be divided as follows: 84% of the respondents received non-reimbursable support (both financial and non-financial) from a public entity, 8% from a non-governmental entity and only 8% received direct support from an international body. However, this type of support varies from country to country.



If we observe the evolution of the support received, we can see that 19% of the ventures received mentoring as the first support and that number falls to 7% when it is the second support received. When we look at the training received, while 15% of the enterprises receive training as a first support, 9% receive training as a second support.

## c. Investments.

The main destinations of the total investments in the first investment round were: start-up (32%), capital for early growth (16%) and validation (13%). In the second investment round, the destination for early growth represents 11% of the total investment.

# Descriptive analysis of the results of the survey of ventures that received investment from angel networks between 2014-2020.

Each of the stages refers to the following definition:

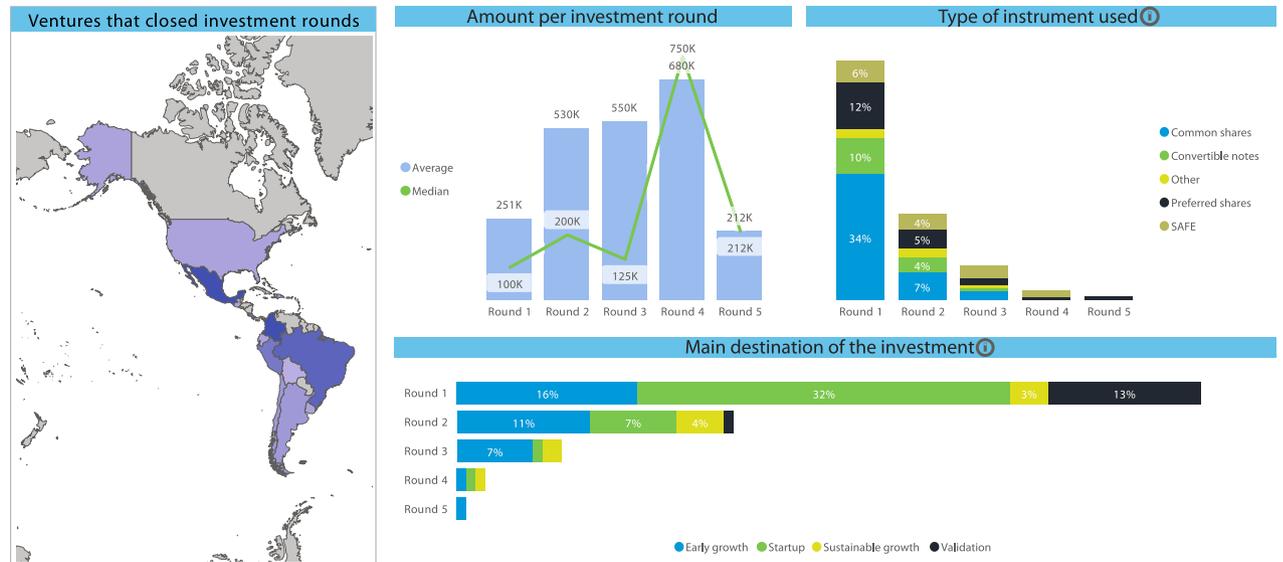
**Start-up:** Stage of the venture in which starts the design of the architecture of the business with the goal of creating a sustainable business model that generates income in the future.

**Validation:** Validation stage, if the real demand for the product or service proves to be sufficient to sustain a company and the business model is adequate to make a business out of it.

**Early growth:** Growth of the initial business model through market expansion

**Sustainable growth:** Generation of operational efficiencies (standardization of processes, economies of scale, etc.) and / or growth through new business units or capture of new international markets.

The capital raising rounds show progressive increases in the tickets raised between rounds when we analyze the individual ventures. The average increase in the ticket, expressed as a multiplier of the previous round has been: a) From the first to second round: x4; b) From the second to the third round: x1.5 ; and c) From the third to fourth round: x2.4



*“Raising capital was necessary in order to be able to continue with our operations. We had a project that was 5 times bigger than the amount of credit that a bank was able to provide.”*

Founder, Peru

Regarding the main instruments used for closing the rounds of the sample: common shares predominate (43%), followed by preferred stock (21%), convertible notes (15%), SAFE

(14%) and finally others at 7% (including alternatives to SAFE such as KISS and ABACO).

*“It’s important to understand very well what a good investor means to you. Because it is not only a question of money. And that implies segmenting and understanding that the investment from the investor or fund goes along with your company.”*

CEO and Founder, Ecuador

# Descriptive analysis of the results of the survey of ventures that received investment from angel networks between 2014-2020.

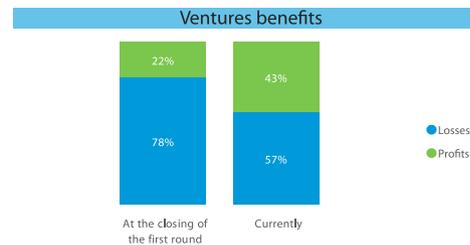
## d. Evolution.

**78% of entrepreneurs made a loss at the close of the first investment round. However, when analyzing ventures with current losses, that number falls to 57%.**

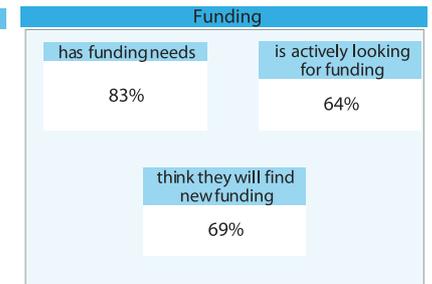
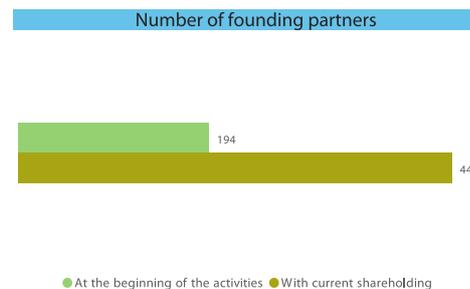
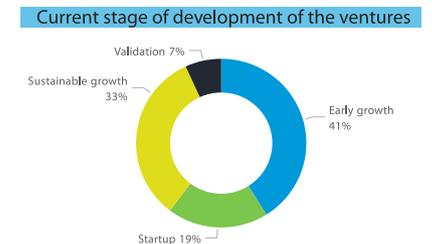
*“The path to success is resilience. I’ve had a lot of people against me, but I’m not going to give it up. We must move forward.”*

CEO and Founder, Ecuador

The number of partners with share participation more than doubled (x2.2) between the beginning of the activities of the venture and its current situation. Likewise, we can see a significant increase in job creation, with an average of x4.3 since the beginning of the activities of the ventures.



It is highlighted that more than 40% of the enterprises currently obtain profits.



*“I love the project, I really like it, I have seen it grow and made it my own. I make sure the team that accompanies me sees it the same way. If no one gets onboard, the boat disappears.”*

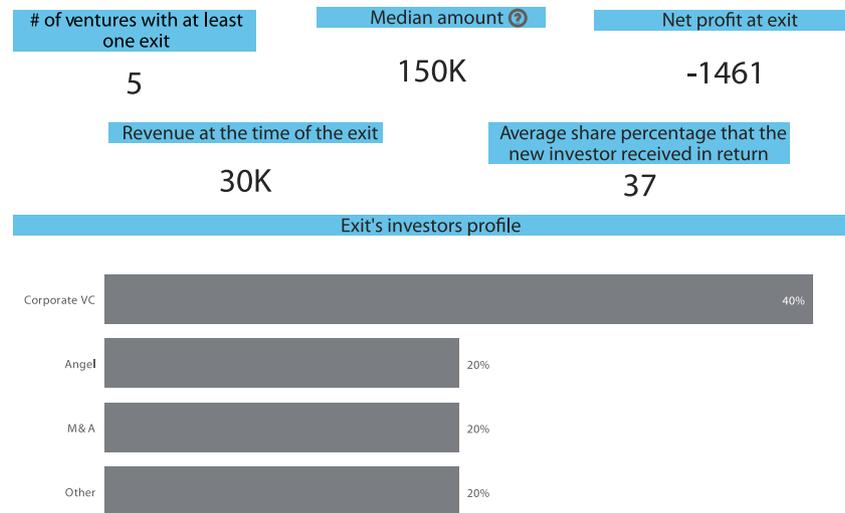
CEO and Entrepreneur, México

Finally, 83% of the ventures declare that they need financing, with 64% actively seeking financing and 69% believing that they are going to find it.

# Descriptive analysis of the results of the survey of ventures that received investment from angel networks between 2014-2020.

## e. Exits.

Only 5 of the surveyed ventures had an exit. Although the situation of the enterprises was highly variable at the time of exit, 80% of them had losses when the exit occurred.

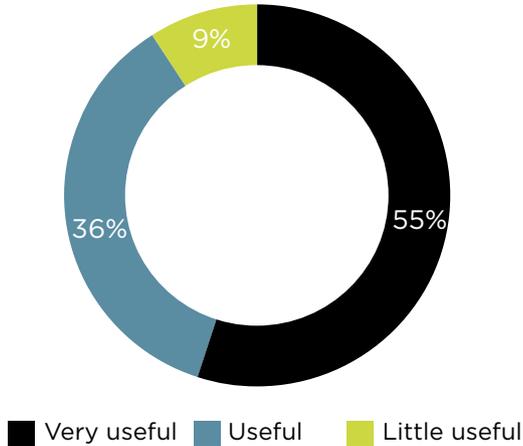


Only 5 surveyed enterprises had an exit. The situation of these ventures is very diverse. However, 80% of them obtained losses at the time of the exit.

# Descriptive analysis of the results of the survey of ventures that received investment from angel networks between 2014-2020.

## f. Role of the Investor.

Out of the ventures surveyed, in the first round 55.13% of the ventures considered the contribution of the investor or leader of the investment to be very useful; 36% somewhat useful and 9% not very useful.



*“The entrepreneurs have a strong passion, but they lack the expertise. I think investment networks have to think not only in receiving new ideas but also be involved in helping entrepreneurs to take their business to the next level”*

Director of Operations, Mexico.

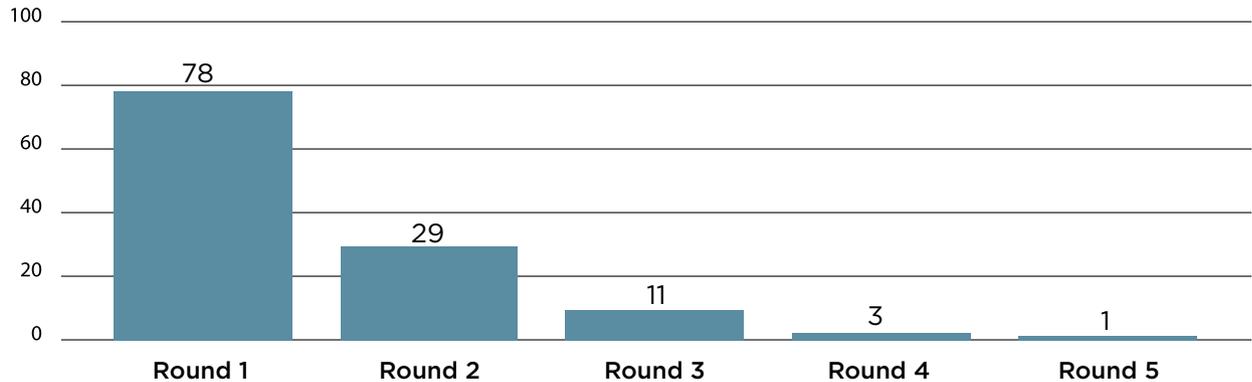
## g. The following investment rounds.

On average, the ventures raised USD 309,000 in the first round of investment. The average in the second investment round increased to USD 530,000. In the third round, the average amount raised was USD 550,000. Then in the fourth round the average amount was USD 680,000 and in the fifth round it was USD 212,000. However, it should be taken into account that only three ventures completed a fourth investment round, and only one

completed a fifth. Therefore, for the purpose of this analysis, it must be considered that the averages may be distorted given the low number of the sample of the last two investment rounds.

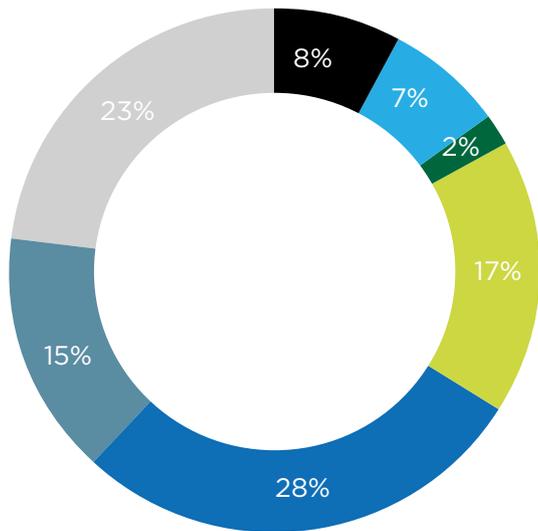
The ventures reported that they had received 122 rounds of investment in total: 78 completed one round, 29 had two rounds, and only 15 had 3 or more rounds.

Number of ventures per investment round



# Descriptive analysis of the results of the survey of ventures that received investment from angel networks between 2014-2020.

The ventures that have managed to raise at least a second round of investment mainly correspond to ICTs and high-tech ventures sectors.



- Agroindustrial
- Consuming goods
- Circular economy
- High Tech
- Others
- Services
- TIC

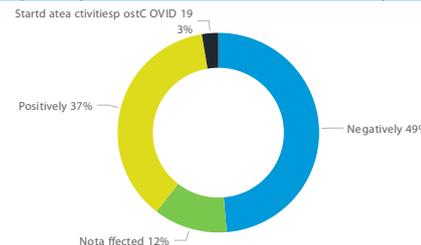
## h. The impact of COVID-19.

The COVID-19 pandemic had an impact on these ventures. Comparing the state of activity with its pre-pandemic state, more than half of those surveyed (61%) say that the company is operating above its pre-covid levels and 26% consider it to be operating below its pre-covid levels and 11% consider that it is operating in the same way as just before the pandemic. Only 3% of the enterprises ceased their activities due to the pandemic.

The company currently operates below or above pre-covid levels

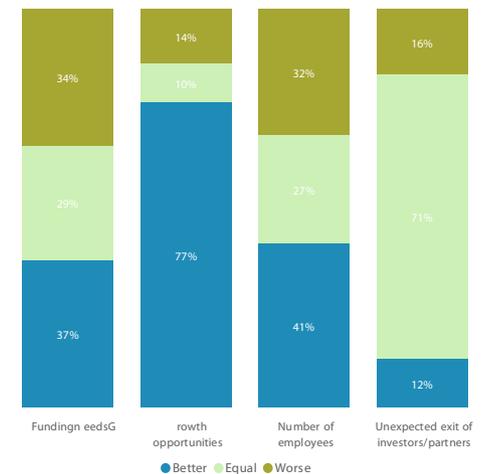


The development plans of the ventures were affected by the pandemic



49% of the ventures perceive that their development plans were negatively affected by the pandemic (Regardless of the positive results shown in the previous paragraph. This means that their level of activity is higher than before the pandemic, but their original plans had greater growth expectations that they actually achieved).

The venture is in a better, worse or similar condition, regarding some key aspects compared to pre-pandemic?



## Descriptive analysis of the results of the survey of ventures that received investment from angel networks between 2014-2020.

**On the contrary, 37% of the enterprises consider that they were positively affected by the pandemic.**

12% consider that they were not affected by the pandemic and 3% of those surveyed began their activities after the pandemic began.

*“In March 2020, before the pandemic, we had almost closed a deal of around 150,000, almost 200,000 dollars, with an off-line fund that we learned about through networking possibilities. With the pandemic, all negotiations were closed. In June of last year we had to make the decision to suspend everything until after the pandemic.”*

Founder, Colombia

**77% of those surveyed believe there were better growth opportunities compared to pre-pandemic levels.**

In general terms, there is a positive view with respect to pre-pandemic levels in relation to financing needs (37%), the number of employees (41%) and growth opportunities (77%). On the other hand, 71% of the ventures maintain that there were the same number of unexpected departures from partners or investors. This percentage far exceeds those who consider that unexpected departures were better than before the pandemic (12%) and those who believe that unexpected departures were worse than the pre-COVID 19 stage (16%).

*“I honestly believe that this issue of the pandemic shook the world, and also the typical business model. Everything we had learned before the pandemic was affected. It is necessary to restart with updated and modern bases, and from there to undertake a venture. I believe that today there has to be a lot of financial education and a lot of education towards entrepreneurs to know how to solve unexpected problems or challenges that arise.”*

Director of Operations, Mexico

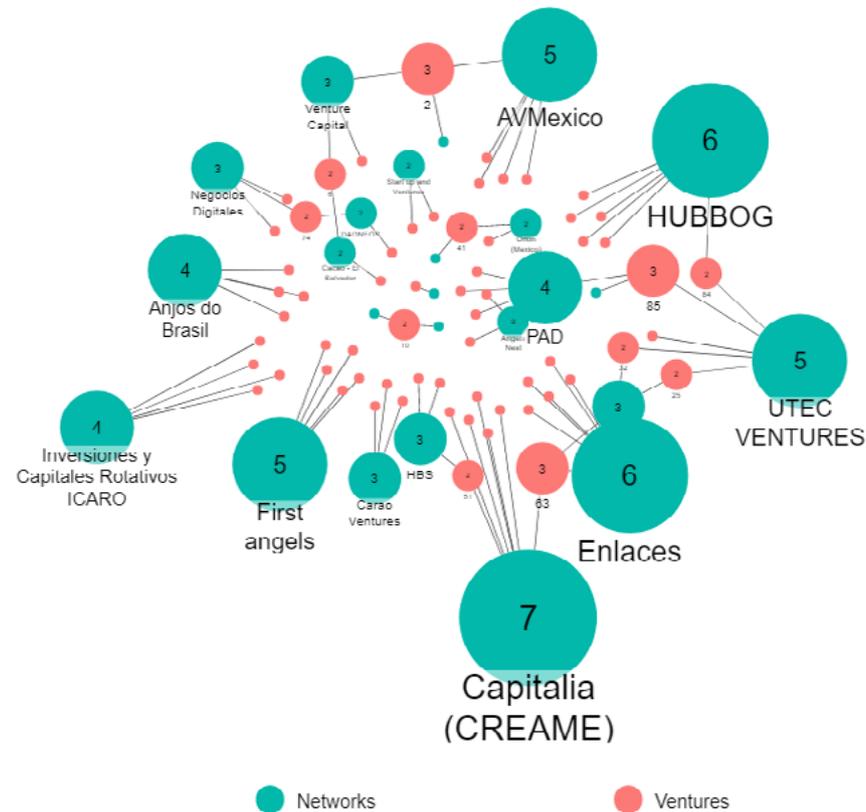
# Descriptive analysis of the results of the survey of ventures that received investment from angel networks between 2014-2020.

## i. Networks.

Based on the connections between ventures and networks, we can see that entrepreneurs tend to connect with more than one network in order to receive investments.

*“I think that creating these synergies, these groups, just as XCALA does, where different investment funds from various countries are integrated, has helped a lot. This allows everything to look like a region. I think that the only way that Latin America has to compete with the United States and with other geographies is by thinking of the region not as Colombia and Mexico, but Latin America as an ecosystem that is promoting entrepreneurship.”*

CEO and Co-Founder, Colombia



## Descriptive analysis of the results of the survey of ventures that received investment from angel networks between 2014-2020.

### j. The recommendations of entrepreneurs.

*“When making a decision it is important not to hesitate, because sometimes take too long to makes a decision and the capital disappears.”*

CEO and Entrepreneur, Mexico

*“I think the first thing is to relate to people, that is, before opening an investment round you have to generate an important network of contacts so that you already have the possibility of being known, that they have seen you, that you make the introductions and that it is not simply like you go out there to look for investment. The second thing is to prepare all the information. The third thing is to define times and objectives, right? What is it I hope to achieve and in what timescale? It is a matter of great resilience, of knowing that you are going to impact investors like this and 98% are going to say no. Prepare yourself psychologically, mentally, and emotionally for that. Don't take anything personally.”*

CEO and Co-founder, Colombia

*“The first thing is to make sure that what you are doing is working well. Don't attempt to grow ahead of time. And, second, don't get into things that you won't be able to do. And third, choose your partners very well. Finally, make sure everything is in writing and signed.”*

Founder, Chile

*“Don't just focus on the amounts, but on the investors themselves. We shouldn't attempt to raise money as if the investor is doing us a favor. I think we should go and raise money as we are giving the investor the opportunity to be part of our business. You have to sell well in that sense, and you also have to establish the conditions clearly. And finally, it is necessary to communicate well with the investor so that unnecessary friction is not generated.”*

CEO and Founder, Ecuador

*“My recommendations for a venture that wants to raise capital are: (i) before creating a brand make sure you register it, invest in a good lawyer, (ii) don't be so creative about the route you have to take to achieve suc-*

*cess, or (iii) show solidarity with your team. Your team is THE support. So, don't believe yourself to be Superman and think that you will be able to do everything alone. This is formed with a team, if you want to get there fast, do it alone, but if you want to go far, go with a team, and choose the people who are going to help you get there well.”*

Founder, Peru

*“So, first, choose something that fulfills you as a person and that is more than just a financial benefit for everyone who sits at the table. Then have a team of people capable of reaching that goal. I believe that teamwork is essential. After that, knowing the direction of the operation. I think it would also be a very important piece of advice and the last one, to be very focused on learning. Entrepreneurs here must know a little about everything, the basics of everything and everything to do with it.”*

Director of Operations, Mexico

**VI. Qualitative Comparative Analysis (QCA): relationships that can explain the performance of the ventures invested in by angels.**



# Qualitative Comparative Analysis (QCA): relationships that can explain the performance of the ventures invested in by angels.

In order to seek for possible explanations (both positive and negative) of the performance of the ventures, questions were asked to guide the study:

**R1. What impact did angel investment have on the performance of the ventures that raised capital in the Xcala networks in Latin America and the Caribbean, between 2014-2020?**

**R2. What factors or combinations of factors are associated with high levels of performance in each of the results?**

that Ragin (2008ab) has developed. This methodology reflects the fact that different sets of conditions can exist to achieve the same result. Furthermore, the configuration theory underlying QCA considers the fact that the same set of causal factors can lead to different outcomes, depending on how these factors are arranged. The QCA therefore assumes that (a) performance results are rarely caused by a single factor, (b) factors rarely operate in isolation from each other, and (c) multiple solutions generally lead to the same result.

In the present report, each invested venture was analyzed as a set composed of different dimensions or conditions according to the factors identified in the previously identified literature. Therefore, the cases were considered as configurations or combinations of characteristics that result in a certain result.

For the purposes of this study, the proposed theoretical configuration model for certain results is as follows:

## 6.1 Metodology

To answer the questions, the study relied on a Qualitative Comparative Analysis (QCA) which is a robust methodology used in comparative research of small / medium N, and employs a set of analytical techniques tools



## Qualitative Comparative Analysis (QCA): relationships that can explain the performance of the ventures invested in by angels.

As mentioned above, the expectation was not to show causality, but rather to seek to demonstrate areas of uniform association between the characteristics of the venture and the investment agreement, and the performance of the venture in the following years. The fsQCA software program (Ragin & Davey, 2014) provided the tool for data analysis in this study.

To interpret the results of the QCA it is necessary to clarify the difference between the analysis of necessary and sufficient conditions. A condition is necessary for a specific result if that condition is always met when the result occurs. On the contrary, if a condition is sufficient, the result always occurs when that condition is met, although the results can occur under different conditions.

In order to consider a condition as necessary, the threshold considered was  $> 0.9$  and its coverage  $> 0.5$ . Identifying a necessary condition is quite rare empirically, and indeed these relationships are rarely found empirically (see authors A. George and Bennett, 2005; Schneider and Wagemann, 2007).

For the analysis of sufficient conditions, a consistency cut-off point of  $\geq 0.8$  was used, which is higher than the minimum suggestion of  $\geq 0.75$ .

## 6.2 Results of the analysis

After the study, the following results were found:

I. The presence of an investor's active role in a venture is a necessary condition for the occurrence of the following performance indicators:

- Presence of an increase in benefits (consistency: 0.924264, coverage: 0.502057) between the first round of investment and the moment of the survey.
- Presence of utility of the role of the investor (consistency: 0.936190, coverage: 0.748895)
- Presence of fulfilling the investment objective (consistency: 0.912894, coverage: 0.851135)

II. That is to say that all the cases whose benefits increased between the first investment round and the moment of the survey, share

the presence of an active role of the investor in the venture.

III. Similarly, all the cases in which the entrepreneurs considered the role of the investor to be useful share the presence of an active role of the investor in the venture.

IV. Likewise, all the cases in which the entrepreneurs consider that the investment helped to meet the objective sought share the presence of an active role of the investor in the venture.

# Qualitative Comparative Analysis (QCA): relationships that can explain the performance of the ventures invested in by angels.

When we analyze the components of an active role of the investor in the venture separately as independent variables (participation in the board of directors; management advice; contact networking; supervisor in the financial performance of the company; assistance in crisis management and short-term problems) and its relationship with the dependent variables, the results were as follows:

All the cases in which the entrepreneurs considered the role of the investor to be useful share the presence of active investors in all the mentioned roles (that is, they are all necessary conditions for the fulfilment of the condition):

- Participation in board of directors (consistency 0.961905; coverage 0.731884)
- Management advice; (consistency 0.961905; coverage 0.731884)
- Contact networking; (consistency 0.971429; coverage 0.728571)
- Supervisor in the financial performance of the company; (consistency 0.895238; coverage 0.734375)
- Assistance in crisis management and short-

term problems (consistency 0.961905; coverage 0.731884)

The same occurs in cases where the entrepreneurs consider that the investment was useful to meet the objective sought: all cases share the presence of active investors in all the roles mentioned with the following results (that is, they are all necessary conditions for fulfilment of the condition):

- Participation in board of directions (consistency 0.940350; coverage 0.83391)
- Management advice; (consistency 0.934957; coverage 0.829130)
- Contact networking; (consistency 0.956529; coverage 0.836143)
- Supervisor in the financial performance of the company; (consistency 0.880699; coverage 0.842031)
- Assistance in crisis management and short-term problems (consistency 0.934793; coverage 0.828986)

That is, the participation of the active role of the investor as a necessary condition for the fulfilment of the objectives does not lie in just

one of the roles of the investor but in several of the roles (participation in the board, advice, providing contacts, supervising financial performance, crisis assistance and helping resolved problems).

As we mentioned before, it is quite rare empirically to find a condition necessary, so finding a variable that meets this condition for three results is an interesting finding.

Finally, no other results were found with significant coverage that would validate the results to determine conditions as sufficient.

## **VII. Limitations of the study**



This methodology is open to three possible sources of bias.

- Firstly, even though many thousands of active and potential angel investors and ventures are registered with the Xcala angel investment networks currently operating in Latin America and the Caribbean, these may not be typical of the general population. To counteract the bias inherent in sampling through a single type of network (Mason and Harrison, 1997), the sample has been drawn from several different types of networks (large and small, local, regional, private and public) in various parts of the region.
- Secondly, there may be a problem with response bias. However, this cannot be proven because no information is available on the characteristics of the non-respondents. An alternative method of testing for non-response bias is to compare early and late respondents (Freear et al., 1994). For the purposes of this study, we can see that the responses were relatively uniform over time. Likewise, by having a scholarship to a course at Babson College as a reward for a response to the study, the bias of not wanting to respond due to the possibility of showing negative results is mitigated.
- Thirdly, there are unavoidable questions about the reliability of self-reported data. The main concern is the ability of respondents to accurately recall the financial details of their investments. Another possibility is that respondents exaggerate their successes and downplay their failures, although there is no a priori reason to believe that this will happen.

# VIII. Summary of Results and Conclusions



From the study carried out we can reach the following conclusions:

## Non-reimbursable support:

- Most of the ventures invested in by angels in the sample received non-reimbursable support, particularly financial (47%) as well as support that combines financial and non-financial support (45%)
- The majority of non-reimbursable support (84%) was provided by public entities.
- Mentoring and training was more commonly present as a first support and their participation in subsequent support stages decreased.

## Investment uses:

- The main uses of first-round investments were for the very early stages of the ventures: Start-up (32%) followed by early growth (16%) and validation (13%).

## Financial state of the ventures upon receiving the 1st round:

- 78% of the ventures had losses at the close of the first investment round.

## Amounts and instruments for raising capital:

- On average, USD 309,000 was raised in the first investment round.
- The average in the second investment round increased to USD 530,000.
- In the third round, the average amount raised was USD 550,000.
- In the fourth round the average amount raised was USD 680,000 and
- In the fifth round it was USD 212,000.

It should be taken into account that only 3 ventures completed a fourth investment round, and only one completed a fifth (which distorts the regional average for the fourth and fifth round due to the small number of the sample).

- During the first round 34% of the investment raised was through common shares and 12% through preferred shares.

## Investment rounds:

Of the surveyed ventures there were 122 investment rounds in total.

- 78 ventures closed one investment round,
- 29 managed to close two investment rounds,
- 11 ventures closed three investment rounds,
- 3 of them closed four investment rounds, and
- 1 closed a fifth.
- ICT (29%) and High Tech (21%) were the sectors among the ventures which had the highest number of second and subsequent investment rounds.

## Impact of COVID

COVID seemed to be less of a problem, and more of an opportunity for entrepreneurs:

- More than half of those surveyed (61%) stated that the company operates above its pre-covid levels, and 11% consider that it operates in the same way as in the moments before the pandemic. Only 3% of the ventures ceased their activities due to the pandemic.
- 49% of the ventures perceive that their development plans were negatively affected by the pandemic. On the contrary, 37% of the ventures consider that they were positively affected by the pandemic. 12% consider that they were not affected by the pandemic and 3% of those surveyed began their activities after the pandemic began.
- 77% of those surveyed believe there were better growth opportunities compared to pre-pandemic levels. In general terms, the view was positive with respect to pre-pandemic levels in relation to financing needs (37%), the number of employees (41%) and growth opportunities (77%). On the other hand, 71% of the ventures maintain that there were the same number of unexpected departures

of partners or investors. This percentage far exceeds those who consider that unexpected departures were better than before the pandemic (12%) and those who believe that unplanned departures were worse than the pre-COVID 19 stage (16%).

## Link to the angel investment networks:

- Entrepreneurs often connect to more than one network in order to receive investments.

## Role of the investors:

- The role of investors was important for the entrepreneurs: in the first round, 55.13% of the ventures considered that the contribution of the investor or leader of the investment round to the venture was very useful; 36% somewhat useful and only 9% not very useful.
- Similarly, in all the cases where profits increased between the first investment round and the moment of the survey, the investor has an active role in the venture.
- Likewise, all the cases in which the entrepreneurs considered the role of the investor to be

useful share the presence of active investors in the venture.

- Also, all the cases in which the entrepreneurs considered that the investment was useful to meet the objective sought, share the presence of active investors in the venture.
- The participation of the active role of the investor as a necessary condition for the fulfillment of the objectives does not lie in just one of the roles of the investor, but in several of its roles: participation in the board of directors, management advice; contact networking; supervisor in the financial performance of the company; assistance in crises and short-term problems

## Current financing needs

- Financial continues to be a necessity for entrepreneurs that received investment: 83% of the ventures declared that they need some sort of financing, 64% are actively seeking financing and 69% believe that they will find it.

**References**



- Amatucci, F. M. and Sohl, J. E. (2004) 'Women entrepreneurs securing business angel financing: tales from the field', *Venture Capital*, 6(2-3), pp. 181-196. doi: 10.1080/1369106042000223579.
- Asociación Española Business Angels (AEBAN) (2012). *Business Angels*. Madrid: Asociación Española Business Angels (AEBAN). Recuperado de <http://www.aeban.es>
- Becker-Blease, J., and J. Sohl. 2007. Do women-owned businesses have equal access to angel capital? *Journal of Business Venturing* 22, no. 4: 503-21.
- Berg-Schlosser, D., De Meur, G., Rihoux, B., & Ragin, C. C. (2009). Qualitative Comparative Analysis (QCA) as an approach. In B. Rihoux & C. C. Ragin C. C. (Eds.), *Configurational comparative methods: Qualitative Comparative Analysis (QCA) and related techniques* (pp. 1-18). Los Angeles, CA: Sage.
- Bruno, A.V., McQuarrie, E.F., Torgrimson, C.G., 1992. The evolution of new technology ventures over 20 years: patterns of failure, merger and survival. *J Bus Venturing* 7, 291-302.
- Bygrave, W.D., Timmons, J., 1992. *Venture capital at the crossroads*. Harvard Business School Press, Boston
- Fiss, P. C. (2011). Building better casual theories: A fuzzy set approach to typologies in organizational research. *Academy of Management Journal*, 54(2), 393-420.
- Freear, J., Grinde, R. and Sohl, J.E., 1998, The influence of sector on the early stage financing of high- tech entrepreneurs. Paper presented at the 1998 Babson College/Kauffman Foundation Entrepreneurship Research Conference, Gent, Belgium, May. Copies available from Professor Jeffrey Sohl, Whittemore School of Business and Economics, University of New Hampshire, McConnell Hall, Durham, NH 03824.
- Freear, J., Sohl, J. and Wetzel, W., 1997, The informal venture capital market: milestones passed and the road ahead. In D. Sexton and R. Smilor (eds) *Entrepreneurship 2000* (Chicago: Upstart) 47 - 69
- Freear, J., Sohl, J. E. and Wetzel, W. E., Jr, 1993, Angel Profiles: A Longitudinal Study. In N. C. Churchill, S. Birley, W. D. Bygrave, J. Doutriaux, E. J. Gatewood, F. S. Hoy and W. E. Wetzel Jr (eds) *Frontiers of Entrepreneurship Research* (Wellesley, MA: Babson College), 557- 558.
- Freear, J., Sohl, J. E. and Wetzel, W. E., Jr. (1994). Angels and non-angels: Are there differences? *Journal of Business Venturing*, 9(2), 109-123.
- Freear, J., Wetzel, W.E., 1990. Who bankrolls high-tech entrepreneurs? *J Bus Venturing* 5, 77-89
- Greckhamer, T., Misangyi, V., Elms, H., & Lacey, R. (2008). Using qualitative comparative analysis in strategic management research. *Organizational Research Methods*, 11(4), 695-726. Retrieval at <http://doi.org/10.1177/1094428107302907>
- Harrison, R., and C. Mason. 1992. "The Roles of Investors in Entrepreneurial Companies: A Comparison of Informal Investors and Venture Capitalist." In *Frontiers of Entrepreneurship Research 1992*, edited by N. C. Churchill, S. Birley, W. D. Bygrave, D. F. Muzyka, C. Wahlbin, and W. E. Wetzel, 388-404. Wellesley, MA: Babson College.
- Harrison, R.T., C.M. Mason, and P.J.A. Robson. 2003. Determinants of long distance investing by business angels. In *Frontiers of entrepreneurship research*, ed. W.D. Bygrave, C.G. Brush, P. Davidsson, J. Feit, P.G. Greene, R.T. Harrison, M. Lerner, G.D. Meyer, J. Sohl, and A. Zacharakis, 116-30. Wellesley, MA: Babson College.
- Kelly, P. (2007). Business angel research: The road traveled and the journey ahead. In H. Landström (Ed.), *Handbook of research on venture capital* (pp. 315-331). Northampton, UK: Edward Elgar.
- Kelly, P., Hay, M., 1996. Serial investors and early stage finance. *J Entrepreneurial Small Bus Finance* 5, 159-174.
- Legewie, N. (2013). An introduction to applied data analysis with qualitative comparative analysis (QCA). *Forum: Qualitative Social Research [Sozialforschung]*, 14(3), Art. 15, 1-33. doi: 10.17169/FQS-14.3.1961
- Legewie, N. (2013). An introduction to applied data analysis with qualitative comparative analysis (QCA). *Forum: Qualitative Social Research [Sozialforschung]*, 14(3), Art. 15, 1-33. doi: 10.17169/FQS-14.3.1961

- Lumme, A., Mason, C., Suomi, M., 1996. The returns from informal venture capital investments: an exploratory study. *J Entrepreneurial Small Bus Finance* 5, 139-158.
- Lumme, A., Mason, C., Suomi, M., 1998. *Informal venture capital: Investors, investments and policy issues in Finland*. Kluwer Academic Publishers, Dordrecht. Martin,
- Martin, R., and R. Minns. 1995. Undermining the financial basis of regions: The spatial structure and implications of the UK pension fund system. *Regional Studies* 29, no. 2: 125-44.
- Mason, C. (2013) 'The transformation of the business angel market: evidence from Scotland', *The University of ...*, 44(August), pp. 0-42. Available at: [http://glasgowsciencefestival.org.uk/media/media\\_302219\\_en.pdf](http://glasgowsciencefestival.org.uk/media/media_302219_en.pdf).
- Mason, C. M. and Harrison, R. T. (1994) The informal venture capital market in the UK. In A. Hughes and D.J. Storey (eds.) *Financing Small Firms* Routledge, London, pp 64-111.
- Mason, C. M. and Harrison, R. T. (2002) 'Is it worth it? The rates of return from informal venture capital investments', *Journal of Business Venturing*, 17(3), pp. 211-236. doi: 10.1016/S0883-9026(00)00060-4.
- Mason, C. M. and Harrison, R. T. (2008) 'Measuring business angel investment activity in the United Kingdom: A review of potential data sources', (March 2015), pp. 37-41. doi: 10.1080/13691060802380098.
- Mason, C. M. and R. T. Harrison, 1996, 'LINC: A Decentralised Approach to the Promotion of Venture Capital', in R. T. Harrison and C. M. Mason (eds.), *Informal Venture Capital: Evaluating the Impact of Business Introduction Services*, Hemel Hempstead: Woodhead-Faulkner, pp. 119-141.
- Mason, C. M., & Harrison, R. T. (1997). Business angel networks and the development of the informal venture capital market in the U.K.: Is there still a role for the public sector? *Small Business Economics*, 9(2), 111-123
- Mason, C.M. (2006). The informal venture capital market in the United Kingdom: Adding the time dimension. In *Research on entrepreneurship and management. Volume 5: Venture capital and entrepreneurship*, ed. J. Butler, 137-71. Greenwich, CT: Information Age Publishing.
- Mason, C.M. 2006a. Informal sources of venture finance. In *The life cycle of entrepreneurial ventures*, ed. S.C. Parker, 259-99. New York: Springer.
- Mason, C.M. 2007. Regional aspects of venture capital. In *Handbook of research on venture capital*, ed. H. Landstrom, 86-112. Cheltenham: Edward Elgar.
- Mason, C.M., and R.T. Harrison. 1989. The north-south divide and small firms policy in the UK: The case of the Business Expansion Scheme. *Transactions of the Institute of British Geographers* 14: 37-58.
- Mason, C.M., and R.T. Harrison. 2002. The geography of venture capital investments in the UK. *Transactions of the Institute of British Geographers* 27: 427-51
- Mason, C.M., Harrison, R.T., 1999. Does investing in technology-based firms involve higher risk? An exploratory study of the performance of technology and non-technology investments by business angels. Paper to the 7th Annual International Conference on 'High Technology Small Firms', Manchester Business School, 27-28 May.
- Ordanini, A., Parasuraman, A., & Rubera, G. (2014). When the recipe is more important than the ingredients: A qualitative comparative analysis (QCA) of service innovation configurations. *Journal of Service Research*, 17(2),134-149. doi:10.1177/1094670513513337
- Ragin, C. C. (1987). *The comparative method: Moving beyond qualitative and quantitative strategies*. Berkeley, CA: University of California Press.
- Ragin, C. C. (2000). *Fuzzy-set social science*. Chicago, IL: University of Chicago Press.
- Ragin, C. C. (2008a). *Redesigning social inquiry: Fuzzy sets and beyond*. Chicago, IL: University of Chicago Press.
- Ragin, C. C. (2008b). *User's guide to fuzzy set/Qualitative Comparative Analysis*. Tucson, AZ: University of Arizona.
- Ragin, C. C., & Davey, S. (2014). *Fs/QCA [Computer software]*, Version 2.5. Irvine, CA: University of California, Irvine.
- Sánchez Solé, S. & Casanueva, F. (2009). *Propuesta de medidas fiscales de fomento de la figura de los*

Business Angels en España. Madrid: Dirección General de Política de la Pequeña y Mediana Empresa, Ministerio de Industria, Gobierno de España.

Sohl J, 2007, "The organization of the informal venture capital market", in Handbook of Research on Venture Capital Ed. H Landström (Edward Elgar, Cheltenham, Glos) pp 347-368

Sohl J, 2012a, "The changing nature of the angel market", in Handbook of Research on Venture Capital. Volume 2: A Globalising Industry Eds H Landström, C Mason (Edward Elgar, Cheltenham, Glos) pp 17-41

Sohl, J.E. 2006. Angel investing: Changing strategies during volatile times. *Journal of Entrepreneurial Finance and Business Ventures* 11, no. 2: 27-47.

Sohl, J.E. 2007. The organisation of the informal venture capital market. In *Handbook of research on venture capital*, ed. H. Landström, 347-68. Cheltenham: Edward Elgar.

Thiem, A. (2010). Set-relational fit and the formulation of transformational rules in fsQCA (COMPASS Working Paper Series No. 61). Retrievable at <http://www.compass.org/wpseries/Thiem2010.pdf>

Timberlake, M. (1989). Review: The comparative method: Moving beyond qualitative and quantitative strategies by Charles C. Ragin. *Social Forces*, 67(3), 827-829.

Tymes, E.R., Krasner, O.J., 1983. Informal risk capital in California. In: Hornaday, J.A.,

Timmons, J.A., Vesper, K.H. (Eds.), *Frontiers of entrepreneurship research 1983*. Babson College, Babson Park, MA, pp. 347-368.

Van Osnabrugge, M., & Robinson, R. J. (2000). *Angel investing: Matching startup funds with startup companies—The guide for entrepreneurs and individual investors*. Hoboken, NJ: John Wiley & Sons.

Van Osnabrugge, M., & Robinson, R. J. (2000). *Angel investing: Matching startup funds with startup companies—The guide for entrepreneurs and individual investors*. Hoboken, NJ: John Wiley & Sons.

Wagemann, C., & Schneider, C. Q. (2010). Qualitative comparative analysis (QCA) and fuzzy-sets: Agenda for a research approach and a data analysis technique. *Comparative Sociology*, 9(3), 376-396.

Werani, T., Freiseisen, B., Martinek-Kuchinka, P., & Schauburger, A. (2016). How should successful business models be configured? Results from an empirical study in business-to-business markets and implications for the change of business models. *Journal of Business Economics*, 86(6), 579-609. doi: 10.1007/s11573-015-0795-z.

Wetzel, W. E., Jr. (1983). Angels and informal risk capital. *Sloan Management Review*, 24(4), 23-34.

Wetzel, W.E. 1981. Informal risk capital in New England. In *Frontiers of entrepreneurship research*, ed. K.H. Vesper, 217-45. Wellesley, MA: Babson College.

Wetzel, W.E. Jr., 1986. Entrepreneurs, angels and economic renaissance. In: Hisrich, R.D. (Ed.), *Entrepreneurship, intrapreneurship and venture capital*. Lexington Books, Lexington, MA, pp. 119-139.

Wetzel, W.E., 1994. Venture capital. In: Bygrave, W.D. (Ed.), *The portable MBA in entrepreneurship*. Wiley, New York, pp. 172-194.



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