

RUI MANUEL FALCÃO GUERREIRO ESCORREGA

### OS OBJETIVOS E O VALOR DE INVESTIMENTO PERCEBIDO DA ATIVIDADE DOS INVESTIDORES ANJO

THE GOALS AND THE VALUE BUSINESS ANGELS PERCEIVE FROM THEIR INVESTMENT ACTIVITY



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Tese apresentada à Universidade de Aveiro para cumprimento dos requisitos necessários à obtenção do grau de Doutor em Marketing e Estratégia, realizada sob a orientação científica dos Doutores Maria João Aibéo Carneiro, Professora Auxiliar do Departamento de Economia, Gestão, Engenharia Industrial e Turismo da Universidade de Aveiro, António Carrizo Moreira, Professor Associado do Departamento de Economia, Gestão, Engenharia Industrial e Turismo da Universidade de Aveiro, e Harry Sapienza, Professor Emeritus da Carlson School of Management da Universidade do Minnesota.

I dedicate my thesis to my parents Armindo and Clarisse, my lovely wife, Ana, and children Sofia, Marta and Francisco - you are my inspiration and confidence in a better world.

#### o júri

Presidente	Doutor Luís António Ferreira Martins Dias Carlos Professor Catedrático, Universidade de Aveiro
Vogais:	Doutora <b>Aurora Amélia Castro Teixeira</b> Professora Catedrática, Universidade do Porto
	Doutor <b>Mário Lino Barata Raposo</b> Professor Catedrático, Universidade da Beira Interior
	Doutor <b>Miguel Torres Preto</b> Professor Associado, Universidade de Lisboa
	Doutor <b>Conceição Maria Oliveira da Cunha</b> Professora Auxiliar, Universidade de Aveiro
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palavras-chave Investidores anjo, empreendedores, empreendedorismo, inovação, objetivos do investidor, valor de investimento percebido, redes de anjos, grupos de anjos, carreira, desenvolvimento pessoal e profissional, desenvolvimento de carreira percebido, vocação, vocação de investidor anjo, satisfação no trabalho, envolvimento, boca a boca, intenção de reinvestimento.

resumo

Os business angels (BA), também designados como investidores anjo, desempenham um papel vital no processo de criação e financiamento de startups e continuam a crescer em número e relevância. No entanto, enfrentam atualmente enormes desafios de posicionamento, decorrentes da crescente organização da sua atividade através de grupos de BA profissionalizados e pela entrada de novos atores (ex. crowdfunding, capital de risco) no mercado. Este é um momento crítico, em que a comunidade científica e os BA poderem refletir e criar conhecimento sobre a nova forma de atuar e investir destes investidores. O objetivo principal desta tese é desenvolver uma análise mais profunda dos objetivos e do valor que os BA percebem da sua atividade. Primeiramente, os objetivos dos BA foram analisados sob uma abordagem que propõe o comportamento do consumidor e o valor percebido como uma nova lente de análise integrada com as visões económicofinanceiras convencionais, de modo a obter uma visão mais holística, rica e precisa do BA. Em segundo lugar, o valor do investimento percebido, já aplicado aos investidores em bolsa, foi estendido à área dos BAs para medir o valor que os anjos percebem como resultado da sua atividade e o impacto deste na satisfação com o trabalho e na intenção de reinvestimento. Em terceiro, a atividade dos BAs foi analisada à luz das teorias de desenvolvimento de carreira para descobrir os motivos internos que levam os indivíduos a investir o seu dinheiro e esforço numa carreira de BA. Em quarto lugar, uma vez que a *calling* (vocação) se tornou, nos últimos anos, um tópico fundamental na análise do desenvolvimento da carreira, parte deste estudo foi conduzido para medir o impacto da vocação no envolvimento dos BA na sua atividade e na perceção do valor que dela resulta. Foram adotadas metodologias tanto qualitativas como quantitativas: as primeiras são baseadas em entrevistas com BA e na técnica de laddering, e as últimas na modelagem de equações estruturais com a qual se analisaram respostas a questionários de BA de todo o mundo . Esta tese realça que ser BA aumenta a oportunidade de atingir uma grande diversidade de objetivos pessoais interrelacionados tais como autodesenvolvimento, contribuir para a sociedade, cocriar valor com os empreendedores, ganhar dinheiro, divertir-se e experimentar a excitação emocional de investir em startups. A importância de abordar a atividade de BA como um processo de desenvolvimento de carreira sai reforçada. A perceção de valor com a atividade de investimento, incluindo o desenvolvimento de carreira, torna os BA mais satisfeitos e mais propensos a reinvestir. Além disso, os BA que veem o seu trabalho como uma vocação têm mais probabilidade de perceber o valor do investimento e de se envolverem na sua atividade de anjos. Para muitos indivíduos, ser BA não é apenas um jogo financeiro; pelo contrário, o caminho de ser investidor aparenta ser mais importante que o resultado financeiro. A própria "viagem" é o destino. Finalmente, foram identificadas implicações cruciais para grupos de BA, empreendedores e todo o ecossistema dos BA. A experiência de BA é pessoal e não delegável. Portanto, os BA não devem ser impedidos pelos grupos organizados de alcançar os seus objetivos pessoais mais profundos alinhados com as suas vidas. Grupos profissionalizados e empreendedores devem criar condições para permitir que os BA vivam a experiência que pretendem viver, sendo encorajados a atingir os seus objetivos mais importantes. Se assim for, os BA sentir-se-ão mais satisfeitos e aumentarão as suas oportunidades de reinvestir e permanecer a longo prazo na carreira de BA.

Business angels, entrepreneurs, entrepreneurship, innovation, angel goals, investor goals, angel investors, angel perceived investment value, angel networks, angel groups, investor goals, angel career, personal development, perceived career development, angel calling, angel satisfaction, job satisfaction, angel involvement, word of mouth, reinvestment intention.

keywords

abstract Business angels (BAs), also designated as angels, play a vital role in the process of emergence and nurturing entrepreneurial startups at their early stages and keep growing in number and relevance. However, today, they face dramatic challenges from the increasing organisation of their activity through professionalised angel groups. New players (e.g. crowdfunding, venture capital) are also entering their natural arena of early-stage investments. Therefore, this is a critical moment, in which the scientific community and the BAs may reflect and create knowledge about the new way of acting and investing of these investors. The overall purpose of this doctoral thesis is to develop a deeper understanding of the goals and the value angels currently perceive from their investing activity. First, angel goals were analysed under an approach proposing consumer behaviour and perceived value as a new lens of an integrative analysis with the conventional economic and financial views, to obtain a more holistic, richer, and precise view of the angel behaviour. Second, the perceived investment value, already applied to stock market investors, was extended to the angel scope to measure the type of values angels perceive from their activity and their impact on job satisfaction and reinvestment. Third, the angel activity was analysed through the career development theory perspective to uncover the internal motives that drive individuals to invest their money and effort following an angel career. Fourth, since calling became, in recent years, a fundamental topic in work and career development, part of the research was conducted to measure the impact of calling on the angels' involvement in their activity, and on the value they perceive from it. Both qualitative and quantitative methodologies are adopted: the former is based on interviews with BAs and on the laddering technique; and the latter on structural equation modelling techniques, with which responses of angels worldwide to questionnaires were analysed. This thesis highlights that becoming a BA enhances the opportunity for achieving a high diversity of interrelated goals such as self-development, co-creating value with the entrepreneurs, earning money, having fun and experiencing emotional excitement from investing in startups. The importance of addressing angel activity as a career development process is reinforced. The perception of getting value with the investing activity, including career development, also makes BAs more satisfied and more likely to reinvest. Moreover, those BAs who see their work as a calling are more likely to perceive value from angel investing and more likely to be involved in angel activity. For many individuals, being a BA is not exclusively a financial game; the journey of being an angel is more important than the financial outcome. The "journey" is itself the destination. Finally, crucial implications were identified for angel groups, entrepreneurs and the entire BAs' ecosystem. The angel experience is personal and non-delegable. Therefore, angels should not be prevented from reaching their deepest personal goals aligned with their lives. Professionalised groups and entrepreneurs should create conditions to let the angels live the angel experience they intend to live, being encouraged to achieve their most important goals. If this happens, BAs will feel more satisfied, increasing their reinvestment opportunities and remaining for a long term in the BAs' career.

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#### Acronyms and abbreviations

ACA – Angel Capital Association APIV – Angel Perceived Investment Value AJobSat – Angel Job Satisfaction AJS - Angel Job Satisfaction APD - Angel Perceived Development AVE – Average Variance Extracted BAs – Business Angels BAw(g) – Weighted Degree Algorithm applied to business angels BA PR(g) – Page Rank Algorithm applied to business angels CFA – Confirmatory Factor Analysis CFI – Comparative Fit Index CR – Construct Reliability Ew(g) – Weighted Degree Algorithm applied to entrepreneurs EIB – European Investment Bank E PR(g) – Page Rank Algorithm applied to entrepreneurs EBAN – European Business Angels Network FNABA – Federação Nacional de Business Angels FiBAN – Finnish Business Angels Network IAPMEI - Public Institution that Certifies Business Angels in Portugal InnoSupp – Innovation Support IP – Intellectual Property NFI - Bentler and Bonnet's Normed Fit Index PCV – Perceived Career Development PIV – Perceived Investment Value RMSEA – The root mean square error of approximation ROI – Return on Investment SEM – Structural Equation Modelling SRMR - Standardised Root Mean Square Residual TLI – Tucker–Lewis index

UAE – United Arab Emirates

UK – United Kingdom

VC – Venture Capital

WOM – Word of mouth

WBAF – World Business Angels Investment Forum

 $R^2$  – Coefficient of determination

 $\chi 2$  – Chi-Square test

### **Chapter 1 - Introduction**

#### 1.1 The relevance and research purposes of the thesis

Entrepreneurial startups have contributed to impact the world positively and change the lives of millions. The world we live in today would be unrecognisable without the existence of some of those early-stage startups that evolved to great companies such as Spotify, Uber, Instagram, WhatsApp or Airbnb. Business Angels (BAs) or angels are the major contributors to finance these early-stage companies (EBAN, 2019). Besides the money, angels support the entrepreneurs in several ways such as strategic guidance, mentoring, sharing industrial knowledge, and networking opportunities (Mason et al., 2019). Entrepreneurs, venture capitalists (VCs), industrial players, academics and policymakers widely recognise the relevance of the angels' role in strengthening innovative startups (EIB, 2020; Harrison & Mason, 2019; Landstrom & Mason, 2016). Nevertheless, there is an acknowledged gap between academic research and angel practice (Landstrom & Sorheim, 2019; Mason et al., 2019). Due to the importance of the BAs' phenomena in entrepreneurship, the study of the BAs goals and the value they perceive from their investments is critical to understand, create thought, and improve an activity with tremendous impact in local and national economies (Dealroom.co & Sifted.eu, 2020). Besides, there is evidence that BAs are resilient to crises and changing market cycles (Kraemer-Eis et al., 2019). The pandemic situation the world is living, with loss of millions of jobs, historic contraction of world per capita income and long-term damage to productivity growth (World Bank, 2020), makes the role of the BAs even more relevant to help the economic recovery.

Scholars highlight the methodological difficulties of conducting BAs research (Tenca et al., 2018), considering it time-consuming and less attractive for a high-level publication rate (Landstrom & Sorheim, 2019). The angels' invisibility was pointed as highly problematic to understand this market and measure it (Mason & Harrison, 2008). Also, the angel market is heterogeneous, "almost individualistic in character" (Landstrom, 2007, p. 53), being composed by individuals with different characteristics, stage of investment, culture, experience, involvement, motivations and behaviours (e.g. Avdeitchikova, 2008; Erikson et al., 2003; Söderblom et al., 2016). Avdeitchikova et al. (2008) argue that large samples of BAs, which may represent a good picture of the broader population of angel investors because of their diversity, are badly understood by statistical programs, providing additional challenges for statistical analyses. Furthermore, the angel market's dynamic nature provoked substantial changes in the angels' *modus operandi* of the last decade (Harrison & Mason, 2019). BAs are progressing from individuals investing alone to groups of angels investing together (Mason et al., 2016). This new development has important practical and theoretical implications. New professional or semi-professional structures

have been created, being led by a contracted manager or gatekeeper who organises the deal-flow and all the investment process (Mason et al., 2016). Some authors pointed out the potential consequences of the market change on the involvement of some angels in their activity, with some BAs eventually becoming more passive and similar to pure financial investors, which may result in a substantial change or even loss of the angel identity (Mason et al., 2016; Norberg, 2007; Paul & Whittam, 2010). The aggregated amount of investment by the angel groups has increased to values similar to small VCs, allowing angels to invest collectively more money in later phases of the startup process (Cavallo et al., 2019; Norberg, 2007). In this context, the global quality of angel involvement can be even higher and distributed by different angels or delegated in one specific angel or in the group manager. This period of big transformations occurring in the BAs' market (Block et al., 2018; Mason et al., 2016) also brings tremendous challenges to undertaking research on BAs in changing conditions but also remarks the relevance to carry out research on BAs nowadays and extend the limited research on BAs goals undertaken previously.

Scholars recognise the dynamism and speed of the angel market evolution and the methodological difficulties in maintaining the rhythm of research, with theoretical knowledge becoming delayed and divorced from angel practice. Mason et al. (2019, p.177, p.187) advocate "The research community has been slow to react to this change", highlighting that "the current stock of knowledge becomes increasingly divorced from how the practice is evolving. This is what is happening in business angel research." Landström and Sørheim (2019, p.97) go in the same direction, arguing that there is a scarce dialogue between academic researchers and practitioners. They stimulate the community of scholars to fulfil this gap, particularly "scholars who possess the knowledge to write relevant and insightful implications should be encouraged to increase their contributions."

That is precisely the first high-level aim of this research, to develop an updated understanding of the BA's nature, contributing to close the gap between academic and practitioners. Besides the methodological research difficulties claimed by scholars (Avdeitchikova et al., 2008a; Paul, Whittam, & Johnston, 2003), there has been a slow-down on BAs research in the last decades (Landström & Sørheim, 2019), with a small number of studies being published in high-ranked journals, discouraging researchers from producing more and deeper studies. Landström and Sørheim (2019) highlight that efforts are still needed on concept definition and understanding of angels' thought, which are essential to the development of the BAs research field.

Angel research has mostly been focused on studying the "Who", "What" and "Where" of angel investing. Relevant discussions can be found on who angels are, their characteristics and types, what angels do for their financed startups, the entrepreneurial community and

society, and where are angels spread. See, for example, some recent reviews (Edelman et al., 2017; Harrison & Mason, 2019; Landström & Sørheim, 2019; White & Dumay, 2017). There is also substantial knowledge on the "How they do it", with scholars focused on the process of selecting and investing (e.g. Carpentier & Suret, 2015; Ding et al., 2014; Maxwell et al., 2011; Sudek, 2006), creating and adding value (e.g. Fili & Grünberg, 2016; Politis, 2008) and, more recently, on exiting (e.g. Botelho et al., 2019; Mahapatra, 2014; Mason & Botelho, 2016; McKaskill, 2009; Pisoni & Onetti, 2018). Some research has also analysed performance – the "How much" and "How many" – how much they invest in seed rounds, second rounds, in groups and their performances (e.g. Capizzi, 2015; Gregson, Bock, & Harrison, 2017; Wiltbank, 2009; Wiltbank & Boeker, 2007). Scholars have also answered the "Whom" of angel investing, the angels' partnerships, the co-investors, the relation with entrepreneurs, the venture capitalists, and other players (e.g. Block et al., 2018; Christensen, 2011; Collewaert & Fassin, 2011; Hsu et al., 2014; Van Osnabrugge, 2000).

However, very little is known about the "Why" and "How", including the true reasons that make individuals become angels, and invest in unknown people, supporting ideas and solutions that have not yet been proven. Who is the real person behind the angel investor? What are their goals? Why angel investing is more important for certain individuals than for others? Does angel investing configure the presence of a calling? What kind of values and benefits BAs' perceive from their activity and how some factors, namely a sense of calling influence this perception? How the value perceived affect angel's satisfaction, positive word of mouth and likelihood to reinvest, favouring the continuation of the BAs' activity? Indeed, it is not sufficiently clear: (i) why people become angels; (ii) what are their deep motivational goals; (iii) what kind of value and benefits BAs perceive from their activity and how this perception is influenced by some factors, namely by calling; and (iv) how the value perceived affect angel's satisfaction, positive word of mouth and likelihood to reinvest as a set of satisfaction, positive from their activity and how this perception is influenced by some factors, namely by calling; and (iv) how the value perceived affect angel's satisfaction, positive word of mouth and likelihood to reinvest, favouring the continuation of the BAs' activity?

The research on BAs is thus excessively focused on some topics and views disregarding important fields of knowledge and relevant perspectives. Angel research needs the contribution of external blocks of knowledge and theory that look to the angel investor practice outside the exclusivity of economic and finance lenses, with a more holistic view, contributing to close the gap between angel theory and practice. Marketing, consumer behaviour, and career theory can provide relevant insights on investing research that has been dominated by economic and financial perspectives (Puustinen, 2012). Table 1.1 summarises the research gaps addressed, providing insights on the thesis's specific objectives (which will be summarised in section 1.2) and on the methodology used to reach those objectives (this methodology will be explained in more detail in section 1.4).

 Table 1.1 - BAs' knowledge map with research gaps on goals, perceived investment value, career development, and calling

	why being an angel	angels' perceived value	angels' career development	angels' calling
Already known	Heterogeneity of the angel market. Generic angel motivations.	The value perceived by investors in the stock market.	Angels follow an entrepreneurial career.	No reflection on calling has been done in the business angels' world.
Already done	Quantitative research. Scarce qualitative research.	Qualitative and quantitative research on perceived investment value on the stock market	Initial reflection on angels and career development. No empirical studies.	Nothing was done as far as we know.
Approach	Economic behavior, Finance, Marketing.	Consumer behavior, Economy and Finance.	Work and Career theories.	Not yet applied in the field of BAs.
Research gap	Not enough detail on the Why of angel investing. Needed detailed identification, categorisation, hierarchisation and relevance of angel goals.	No reflection neither empirical studies on angels' perceived investment value.	As far as we know, no empirical studies on angel career have been developed.	No reflection neither empirical studies on angels' calling.
Opportunity	Go deeper on why people become BA, with the consumer behaviour & goal theory.	Extend perceived investment value to the angels' field.	To add on angel knowledge with career literature and practice.	Extend Calling research to the angels' world.
Objectives of the thesis (want to know)	Why angels invest (in more detail). Hierarchy and relation among angels' goals. Consequences and implications to angels' theory and practice.	Angel Perceived Investment Value Scale. Consequences of this value to angel satisfaction and reinvestment intention.	Angel Perceived Career Value. Consequences to job satisfaction and implications to the way angels look to their career.	Effect of calling on angel behaviour and perceived investment value.
Method used in the thesis	Rich qualitative research. Laddering technique. Network analysis of goals.	Quantitative study. Structural Equation Modeling.	Quantitative study. Structural Equation Modeling.	Quantitative study. Structural Equation Modeling.

Despite the claimed invisibility, diversity, and even personalisation of the angel market (Farrell, Howorth, & Wright, 2008; Landström, 2007), despite the research difficulties and the new challenges coming out of groups re-organisation (Mason et al., 2019), and the entrance of new players invading the early-stage investing space (Block et al., 2018), BAs continue their road growing in number and relevance. However, today, they face the biggest identity crisis since their inception due to all the changes introduced in the BAs' market.

Therefore, it is a perfect moment for the angel community to clarify their new positioning justifying this thesis's overall purpose: to develop knowledge on the goals and the value angels perceive from their investing activity.

Firstly, the angel profile and angel motivations were deeply researched in the firstgeneration of angel studies occurring in the early eighties and nineties and revisited in the two thousand decades (e.g. Benjamin & Margulis, 2005; Freear et al., 1994; Sullivan & Miller, 1996; Van Osnabrugge & Robinson, 2000). At that time, angels were investing essentially alone. The motivations, the circumstances, and all the angel market has changed dramatically after that (Mason et al., 2016). Many aspects of the angel behaviour and practice changed because of the new group investment approach and the democratisation hype of the investing process (Mollick & Robb, 2016; Townsend & Hunt, 2019). Those facts, occurring in parallel with the appearance of new players in the early stage investing arena (Block et al., 2018), justify the time and the opportunity to revisit angel goals, to obtain a more holistic view in this field, proposing consumer behaviour and marketing as a new lens of analyses.

Secondly, in the case of the stock exchange investor goals, it was found crucial to examine the value these investors perceive from investing in stock (Puustinen et al., 2013). However, nothing has been done on perceived value in the angel investing context, which corresponds to another research gap. It would be likely that the active direct hands-onapproach involvement of the angel investors with the startups delivers some type of value that differs from that obtained through the passive investment process of the stock market investors. Therefore, we propose extending Puustinen et al. (2013) instrument to the angel scope to measure the value angels perceive from their activity, understanding how it impacts their job satisfaction and reinvestment intention.

Thirdly, the scarce professionalisation of the BAs has been highlighted by scholars and pointed as a relevant reason for angel economic failure (Romaní & Atienza, 2016; Söderblom et al., 2016). Increasing professionalisation is acknowledged as an ongoing trend, but scholars have been slow to react to it and to adjust their research focus (Landstrom & Sorheim, 2019; Mason et al., 2019). The angel professionalisation and the new possibilities of career development are growing in importance inside the angel community and constitute a promising research field demanding further attention. The present thesis will look into angel activity through the career development theory perspective (Callanan et al., 2017; Meijers & Lengelle, 2015; Savickas, 2012; Schein, 2010), particularly trying to understand the internal motives that underpin individuals to invest their money and effort following an angel career. Some impacts of the development of an angel career will also be examined.

Finally, in recent years, calling became a fundamental topic in research on work and career development (Lysova et al., 2019). Research on this topic was carried out in several professional areas; however, no empirical studies of calling are explicitly undertaken in the BAs domain. The angel activity can be framed in the type of occupations that Thompson and Bunderson (2019, p. 437) suggest are suited to the emergence of callings since "they require unique skills and economic sacrifices for a perceived public benefit." Part of the research undertaken through this thesis will be designed to understand the impact of a BAs' calling on the involvement on their activity, and the value they perceive from it.

#### 1.2 Research questions and objectives

The present thesis aims to overcome the research gaps identified in section 1.1., extending the research in the field of BAs. Therefore, the research questions underlying this thesis are:

- RQ 1: Why do people become angel investors?
- RQ 2: What is the perceived investment value from the angel activity and how relevant this value is?
- RQ 3: How BAs perceive their career development and how relevant is the perception of this development?
- RQ 4: To what extent a sense of calling affects angels' behaviour and perceived investment value?

The following specific objectives were identified to address the research questions presented in this section:

- To identify the goals of BAs, their hierarchy and relationship to provide further theoretical explanations on why BAs invest;
- To understand the types of value BAs perceive from their activity and some impacts of this value perception;
- To explore how BAs perceive their career development and analyse some impacts of this development;
- To examine how the sense of calling influences BAs' involvement in their activity and the value BAs perceive from that activity.

The research questions and objectives of the thesis, as well as the specific essays, are illustrated in Figure 1.1.

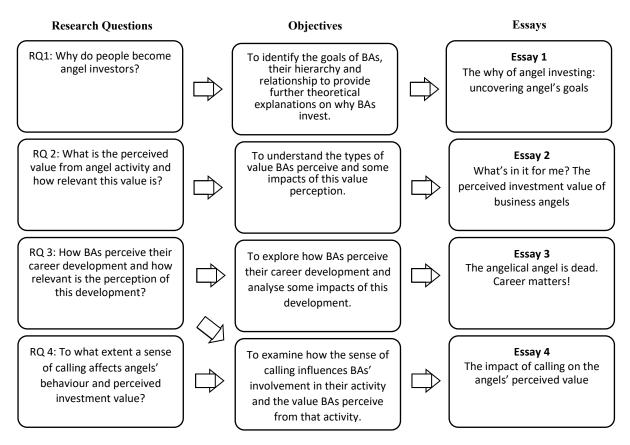


Figure 1.1 - Research questions, objectives, and essays

#### 1.3 Framing literature review

The purpose of this section is not to elaborate a full literature review, but to contextualise and promote the essential arguments that sustain the objectives and research questions, avoiding duplication. Each essay has its own specific and complete literature review section.

#### 1.3.1 The angels in Heaven

The word angel is applied in Scripture to an order of supernatural or heavenly beings whose business is to act as God's messengers to men, and as agents who carry out His will.

Entry for "Angel" In International Standard Bible Encyclopedia (Orr, 1939)

Almost in all the world's religious traditions, angels have the important role of being messengers of someone or something great that will happen, and preparers of the way (Mal 3:1). They act as agents of God, with those who need to be enlightened (Job 33:23), seeking to help them (Psalms 91:11), freeing and protecting humans from danger (Acts 12:7), clarifying doubts and uncertainties (Matthew 1:20). They also distribute tasks and

callings for special missions, guiding and indicating humans the right way to reach their dreams' promised land (Exodus 23:20).

Heavenly angels often assume a role of proximity and comfort, giving encouragement and confidence in the face of the greatness of the tasks and the scarcity and fragility of resources (Luke 1:18-19). The difficulty of these tasks may be compared to the one experienced developing an entrepreneurial project from scratch, with no money and a lot of uncertainty. Furthermore, angels tend to devalue the person's inexperience and unpreparedness in carrying out the task, accentuating the strength of character, the will, the passion, and the faithfulness as the essential qualities to accomplish the mission (Luke 1:26-38). Heavenly angels propose simple solutions to complex problems, with an impossible solution in the light of obvious rationality, counting on the strength of God in addition to their own (Luke 1:7-18). Angels are also diverse from each other, with different hierarchies and roles, contributing in different ways to the mission of adding value in God's kingdom (Elwell, 1996). They also reveal different levels of talent and power. Most are constructive, with some having more responsibilities and adding more value than others. Some good examples of the action of the angels described in the Bible are the case of the Angel Gabriel challenging Mary to be the Mother of Jesus, giving her encouragement and confidence to face the difficulties of the task (Luke 1:26-38). However, some bad angels (fallen angels) take away value instead of adding, and propose wrong paths that should not be followed because they lead to destruction (2 Sam 24:16). This may be somewhat compared to some BAs' negative impact on startups – negative added-value - abundantly mentioned in BAs literature (Boué, 2002; De Noble, 2001; Severinsen et al., 2012).

Angels also have different levels of involvement with humans, with some important angels like Gabriel only appearing on extraordinary occasions, others rarely or never appear, while others, known as guardian angels, exist to be present in people's daily lives (Acts 27:23-24). This different type of angel presence can find similitude with several levels of involvement of BAs with the startups (Lahti, 2011).

There is also evidence that terrestrial humans do not always believe in angels and are not even available to listen to their voice (Luke 1:20). Sometimes humans follow their own way, different from the one proposed by the angel or previously agreed-upon path. The result in the Bible is always disastrous, with very negative consequences. However, in some cases, it is possible to correct the trajectory and recover the right path for everyone's rejoicing (Luke 1:57-64). In the context of BAs, one could call this the "coachability" of the entrepreneur, accepting and recognising the value proposed by the BA. The metaphor is also interesting for "pivoting", which means changing the startup's trajectory when a path proves unfeasible. Heavenly angels, like terrestrial BAs, are numerous thousands of thousands (Psalm 68:17) and for those who believe in them, they continue to walk around. In Gethsemane, Christ identified more than 12 legions of heavenly angels, equivalent to 72,000 angels willing to serve Him in case their assistance was requested (Matt 26:53). This is a substantial number compared with the terrestrial BAs, estimated to be around one million in all the world (EBAN, 2019; NVCA, 2020). There is, however, a remarkable difference among these two kinds of angels, since, in addition to encouragement and inspiration, that means a lot, sometimes terraqueous BAs are also inspired or called to invest terraqueous money for the entrepreneurs' joy.

#### 1.3.2 The origin of terraqueous angels: From Heaven to the Broadway

"When Lafayette College was celebrating its 65th birthday back in 1891, The American Dictionary of Slang defined the word "angel" for the first time as a person who backs or invests in a theater production. Over a century later, the Theater Department at Lafayette College still believes in angels, and we know what a difference theater angels can make." (Lafayette, 2020)

The American theatre story gives us important clues and adequate context to understand how, when, and why theatre angels' phenomenon has occurred (Schanke, 2007). According to the Lafayette College Theater Angels (Lafayette, 2020) the word "angel", defined for the first time as a synonym of a person who backs or invests in theatre productions, entered in The American Dictionary of Slang (Maitland, 1891), year in which the Lafayette College commemorated the 65th birthday. The dictionary aimed to select words and phrases that found no place in standard dictionaries but became part of the people's everyday speech both from America and the United Kingdom (UK). The precise reference was: "Angel (Am.), one who possesses the means and inclinations to "stand treat"". At that time, there were no references on "angel" as a patron or an investor of theatre productions or anything related in the reference dictionary project of the time, the Oxford English Dictionary edited by James Murray, which edition by fascicles began in 1888. An early reference of the usage of the word "angel" as a patron of arts was made in 1903 by Roy McCardell (1870-1961) an American journalist, scenarist, humourist and writer living in New York at the time. In his book, Conversations of a Chorus Girl (McCardell, 1903, p.64), a fan tell the chorus girl that he wants to make her a big star in Broadway. She responds, "it's nice to know that you have a friend in front who has money to arbitrate, and who's anxious to be an angel. You know that he appreciates your art. You know that he will be at the hitching post when the show's over."

Business angel literature confirms the idea, expressed by McCardell's chorus girl, that the term business angel has its roots in Broadway, to describe patrons, contributors, or investors of theatre productions. However, it also emphasises that one of those angels' motivations was the privilege of socialising "rubbing shoulders" with theatre personalities they admired or flirted (Benjamin & Margulis, 1999, p.5). Commenting the matter of

sexual expectations of theatre's angels, Otto Khan, a famous theatre angel, ironised: "the impulses which actuate the 'angel' are generally looked upon as being not precisely angelic." (Collins, 2007, p.32). Nowadays, that type of attitude configures a crime of sexual harassment, that recent arraignments of the me-too movement (Me Too, 2020) reveal that was not uncommon in the cinema and theatre contexts of Hollywood and Broadway. However, and fortunately, the reasons and social outcomes of angel investing in the theatre's production were highly positive. It is largely recognised that theatre angels had a monumental impact shaping and developing American theatre (Schanke, 2007). They were instrumental for professional and amateur expansion around the country supporting local and university theatres. Contrarily to what happened in European long cultural history, with monarchy and aristocracy leading the sponsoring of the arts through the centuries, in America, there was no nobility or aristocracy before the establishment of the capitalist era (Mills, 2000). Since office tickets in Broadway usually paid only half of the production costs, looking for external funds was a vital activity for theatre survival (Schanke, 2007). The economic and cultural development of the 1900s, and the federal tax reduction for philanthropic contributions, created the need and the momentum for the emerging of the angel patronage in the growing elites of local communities of theatregoers (Schanke, 2007). The new wealthy and upper-middle-class individuals saw in theatre sponsoring the opportunity of status improvement, with larger chances of being closer and accepted by society's upper class. Being a theatre angel gave them the opportunity of networking and socialising with important people such as the Whitney's and the Rockefeller's, and some other frequent angels of Broadway shows (Collins, 2007; Gupta, 2000). However, some of the angels assumed to be discreet and asked for anonymity. Two reasons were appointed: One is clarity of purpose. Some people believe philanthropy should be anonymous (Frumkin, 2006). Another explanation is the competition for the big checks of the angel's money. The theatre owners refuse to reveal the givers' names to avoid being harassed by other theatre groups (Schanke, 2007).

However, it is interesting to note, that besides the presence of some millionaires, the angel theatre movement was diverse and heterogeneous on angel's profile, invested amount, motivations and level of involvement. Different types of angels, patrons and givers co-existed, going from a hands-off approach to a deeply engaged one, from complete anonymity to strong recognition and acclamation (Frumkin, 2006). Indeed, there were communities of angels and civic leaders, united by the credo of community support to the local theatre, whose endeavours were not for self-glorification or visibility, but the common benefit of the local community (Ullom, 2007). Other times the angels put on a mixed hat of entrepreneur's with philanthropist, having an active role in the development of the theatre business. The level of philanthropy could be judged by the way how the deal was structured, impacting the terms of reimbursement, which was not always fair for the theatre side (Abernethy & Heidtman, 1999).

One of the most remarkable theatre angels was Otto Khan, a German Jewish immigrant, and one of America's leading financiers at Wall Street. Otto Khan was considered the modern Medici, the Renaissance family known for its patronage of the arts in Italy (Schanke, 2007). He made himself impressively available to artists, listening to their pitches everywhere, in the office, at home, in the yachts, at hotel suites because he had a passion for doing it. He is remembered to be personally committed with much more than money, giving his time and effort to ensure the future of the artists, sending them abroad to work, organising concerts, giving advice, referrals, and recognition (Collins, 2007). Artists and entrepreneurs largely understand and appreciate the emotional significance of the support behind the money (Jenkins, 2007) and considered him the king of New York (Schanke, 2007). As the Pulitzer Prize-winning playwright Paula Vogel brilliantly highlights about theatre angels (Jenkins, 2007, p.252): "This may sound strange, but the truth about great philanthropists is that it's not about the money. It's about the connection. It's about the generosity of spirit and letting younger artists know that what they do matters—and that takes a personal giving. In fact, the whole board gives personally of themselves to the theater. That, to me, is why they're angels."

#### 1.3.3 BAs: Definitional aspects

The first scientific paper that explicitly refers to the term "business angels" to nominate individuals investing in young entrepreneurial ventures as an analogy to those investing in theatre productions was written by Wetzel (1983). "Angels and Informal Risk Capital" describes some pioneering research initiated in 1978 about the role of informal investors in America. At that time, Wetzel described informal investors as "essentially individuals of means" to finance "technovation" (Wetzel, 1981, p.15-16). Two years later Wetzel (1983, p.23) highlighted "business angels play a key role in the risk capital market by providing risk capital for inventors, and startup and growth capital to small technology firms." BAS' relevance was noted because venture capitalists were not interested in inventors, "since few ideas turn out to be worth pursuing" (Wetzel, 1983, p.24). Consequently, business angels filled the gap, got their role, and positioned themselves as the most helpful capital to investors.

In the 1980s and 1990s, typically the angels invested alone, the entrepreneurial ecosystem was not organised, the market was characterised by the angel informality, with literature suggesting "angels make themselves scarce and difficult to find" and are not organised like venture capitalists (Benjamin & Margulis, 2005 p.40; Freear, Sohl, & Wetzel, 2002). A detailed description of the venture capital industry's history with interviews with the pioneers, including Wetzel, is brilliantly related by Landström (2007) in the article "Pioneers in Venture Capital Research."

Naturally, due to the emergence of new financial players and the professionalisation of the business angels, the idea of who they are and their role in the investing scene is increasingly pertinent (Block et al., 2018). Today, the most consensual and stable academic definition of angels is "high net worth individuals who make their own investment decision, invest their own money, along with their time and expertise, directly in businesses in which they have no family connection, and, after making the investment, generally takes an active involvement in the business, for example, as an advisor or member of the board of directors" (Mason et al., 2019 p.181; Mason, 2006). Building on the academic definition, the angel industry expressed by the European Business Angels Network (EBAN, 2020), added some more details proposing: "Business angel investors ('angels') are high net worth individuals who usually provide smaller amounts of finance (€25,000 to €500,000) in the form of equity investments done at an early stage. The typical profile of an angel is that of a serial entrepreneur who has exited from their own ventures and now invests in the next generation of founders. Angels usually contribute much more than pure cash – they have the industry knowledge and contacts that they pass on to the entrepreneurs, besides experience in starting and growing a company. Angels will often take non-executive board positions in the companies in which they invest and act as advisors to the startup team." It may sound too much detailed, but a couple of fundamental differences can be extracted from the two proposed definitions.

Firstly, the investment phase. The academic definition does not refer to the investment phase, while the definition from the industry clarifies BAs as early-stage investors. The stage of startup investment is naturally important to define the typology of investors since it is widely recognised the financial gap at very early-stage and the preference of angels for this stage of investments (e.g. Benjamin & Margulis, 2005; Freear & Sohl, 2001; Mckaskill, 2009). Another difference is related to the "nature" of the investor profile. While the "academic" definition is agnostic to the profile, the "industry" definition underlines the entrepreneurial nature of the angel profile. A third substantial difference is on the "object of investment". Do angels invest in the jockey (the entrepreneur) or on the horse (the project)? Each definition proposes a different approach. While the academic definition suggests that angels invest "directly in business" (the horse), the industry definition says angels invest in "the next generation of entrepreneurs" (the hockey). Consequently, the academic definition emphasises the financial nature of the high net worth individuals that invest in the business. In contrast, the industrial definition makes explicit the connection of the angels with the entrepreneurial world that strengthens the entrepreneurial ethos as a fundamental angel goal. The essence of the two definitions points for two different types of investors – a business angel pointed out by the industrial definition and a financial investor pointed by the academic one. These differences evidence and reinforce the idea expressed by Landström and Sørheim (2019) that further dialogue between theory and practice, academics and practitioners, is needed to have a

deeper and integrative view of who angels are, their goals and how they look into their activity.

#### 1.3.4 The relevance of the business angels

#### 1.3.4.1 The relevance of the angel investing market

Recent numbers in Europe confirm the same facts of twenty years ago in the United States (US) "Business angels collectively invest more money, in more entrepreneurial firms than any other investor type. BAs fund thirty to forty times more ventures than venture capitalists, their better known counterparts" (Van Osnabrugge & Robinson, 2000, p.5). According to EBAN (2019) angel investing in Europe in recent years, overpassed 7 billion Euros, reaching, in 2018, the estimated amount of 7.45 billion Euros, with an annual growth of 2.44%, contrasting with the triple amount of 23.1 billion USD invested in the US. The angel community in Europe reached 345 000 investors, which closed 37 200 deals, contrasting with 300 000 angels and 70 000 deals annually in the United States (A.C.A., 2020; Sohl, 2018). These results clearly show the preponderance of the angel investors as the main contributors to finance early-stage investment. In Europe, the earlystage market is annually estimated to be worth 12.3 billion Euros. Compared with other sources of financing early-stage startups, the angel contribution is approximately 60% of the market, followed by the venture capital industry with 33.6% and 4.13 billion Euros, and equity crowdfunding corresponding to near 5% representing 0.78 billion Euros (EBAN, 2019). The cited numbers highlight the growing relevance of angel investing in early stage, to foster innovation in Europe, in line with the political and economic strategic goals to close the competitive gap with United States and maintaining a relevant position in the global economy.

#### 1.3.4.2 Angels foster disruptive innovation

In the last three decades, the economic world has registered a strong transitional context in Europe and US, going from the manufacturing traditional economy to the entrepreneurial innovation economies fuelled by technological and innovative startups backed by BAs and early-stage investors (Edelman et al., 2017). Can we imagine the world today without Google to search on the internet, Zoom or WhatsApp to communicate, listen to music without YouTube or Spotify, or even going on holidays without Airbnb and Uber? It is hard to believe that those giant multinational companies that changed the lives of millions and modified their incumbent industry players' paradigm did not exist some years ago. They have the common denominator of being co-founded or supported by BAs and venture capitalists investing in early-stage (Dealroom.co & Sifted.eu, 2020; Kenney & Zysman, 2019; OECD, 2011). Angels are relevant, not only because they are the biggest investors on the early stage, but also because their investments foster a qualitative difference. Angels support the innovation and the entrepreneurs that have the power to change the world, and create disruptive markets, challenging existing players, proposing new business models, and new forms of organisation, because angels, as entrepreneurs, are not afraid of risk (Block, Fisch, & van Praag, 2017). They understand risk and failure as structural phases of validation and learning processes of startup development. Like entrepreneurs, angels love to live challenged to create and support disruptive innovation and new things that work differently, making new value propositions and learning with the failures. According to the lean startup methodology, iterative failure and learning are understood as fundamental parts of the validation process to develop innovation (Ries, 2011). The impact of innovation in today's economy is inestimable. Focusing in Europe, 190 startups are considered unicorns, that surpassed the \$1 billion valuation, with angels and venture capital providing financial support and added value to 82% of them, compared with only 20% a decade ago (Dealroom.co & Sifted.eu, 2020). Among them are companies that significantly impacted our lives like Spotify, Trivago, Farfetch, Hello Fresh, and Team Viewer and increased the European ability to global competitiveness.

#### 1.3.4.3 Angels contribute to new jobs and local development

Angel investments are significant contributors to job growth. The majority of the jobs created by startups are knowledge-based (Truman, 2018). Statistics in the United States show the creation of 209 300 new jobs in 2017, corresponding to 3.4 jobs per angel investment (Sohl, 2018). Business startups considered the economy's job engine account for 20% of job creation (Decker et al., 2014). In Europe, startups jobs' creation was estimated at 154 947 in 2011, reaching 184 170 in 2013 (EBAN, 2014). In 2019, startups across Europe provided approximately 2 million jobs with an annual growth rate of 10%, contributing to adding more new jobs each year than any individual sector (Dealroom.co & Sifted.eu, 2020).

It has been noted that the risk capital that fuels high growth startups can bring benefits to local economies through the increment of competitiveness and job creation (NVCA, 2020). There is a growing political awareness of startups' importance as essential vehicles to fix and attract talent to regions and generate new tax returns for local governments (OECD, 2011). An evaluation report of market policies for BAs in Europe (CSES, 2012) highlights that the savings resulting from the benefits of new jobs created by startups backed by angels are greater than the eventual level of government support to the angels. These results open space for the creation of policies that encourage regional angel investing activity.

What is relevant from the political side is to fix or maintain at least a part of the startup operations in their original territory. At the same time, they are stimulated to grow and

enlarge their frontiers. Local job attraction and fixation are particularly relevant to combat regional development asymmetries since a substantial part of angel investments is made close to the BA's territory. Local startups have symbolic value for the BAs and are more protected from the competition of early-stage venture capitalists that prefer to invest in major entrepreneurial spots (Avdeitchikova & Landstrom, 2016; Cumming & Zhang, 2019). As a small country with a vibrant entrepreneurial ecosystem, Portugal is an excellent example to demonstrate that talent and the next big company can arise anywhere. The country has contributed with three unicorns in 2018, namely Farfetch, Outsystems and Talkdesk that maintain a substantial part of their operations in the local territory where they were born. Moreover, with their global success, jobs and wealth creation, unicorns contribute to reinforce the local and national self-esteem (Costa, 2016), inspiring the new generation of entrepreneurs and policymakers to strengthen the culture of entrepreneurship (Dealroom.co & Sifted.eu, 2020).

#### 1.3.4.4 Angels empower entrepreneurship

The possibility of adding value in the startup corresponds to the initial primary expectation of the BAs and the entrepreneurs. Being recognised as making a difference in startups and contributing positively to their development is a significant angel motivation (Mitteness, Sudek, & Baucus, 2010). The entrepreneurs also expect that angels' contribution goes well beyond just money, as provided by purely financial investors. Money should be aggregated with coaching, mentoring and networking capabilities, commonly quoted as "smart money" and "added value" (Mason et al., 2019). However, research has highlighted, in some cases, problems of trust, fit and agency in the angelentrepreneur relationship. It has been noticed that angel involvement is not always a positive adding value equation (De Noble, 2001), differentiating positive, negative, potential and realised added value (Politis, 2008; Severinsen et al., 2012). Also, scholars distinguish high value-added angels, who develop rigorous screening processes and hold regular meetings with founder teams (Hoyos-Iruarrizaga et al., 2017), from inexpert angels with apparently nothing to add, but who give positive contributions to peoplecentred activities (Macht, 2011). The added value provided by the angels is contingent, only to a certain point. Some directly added value activities such as legitimation and endorsement to attract further finance have a value per se and are based exclusively on the business angel's previous track record (Sørheim, 2005). That type of value does not depend upon the receptivity or the entrepreneurs' ability to exploit and realise it (Tatomir, 2020). Involvement in adding value activities, particularly as a board member, led to better startup financial results and more favourable outcomes, whereas less involvement led to more negative outcomes (Wiltbank, 2009). Research also highlights that startups financed by angels improve 20%-25% their survival rate having more 9%-11% to undergo a successful exit (Kerr et al., 2014). They are also 16%-18% more likely to grant a patent and have 70% higher likelihood to obtain additional finance (Kerr et al., 2014). Additionally, research has confirmed the superior performance of startups backed by BAs and VCs. However, the higher performance may be caused not specifically by the adding value activities but by a mixed combination of added value with the startup inner potential resulting from highly selective criteria on the screening process (Puri & Zarutskie, 2012). Recent studies consistently reveal that the performance of startups invested by angels is more positive when compared with equity crowdfunding since angels select better and add more value (Boch & Tatomir, 2018; Tatomir, 2020). BAs also provide much of the quality deal flow of venture capitalists and fund 20 to 50 times the number of startups that venture capitalists do (Mason, 2020). Like metaphorically expressed by Van Osnabrugge and Robinson (2000, p.5): "It is the business angels who are the gardeners caring for the seedings", concerned with the germination and nurturing process of the entrepreneurial ventures.

#### 1.3.4.5 Angel investments create hope in society

Maybe the most remarkable and unique characteristic of angel behaviour regarding investing is their autonomy and freedom of choice. Angels are the "guardians of the temple" of the free initiative. Outside the love money circle of family and friends, BAs are the firsts to believe in young entrepreneurs. Contrarily to other professional investors, angels invest their own money, the amount they want, when they want, if they want, in which startups they want, without any type of fiduciary obligations or responsibilities through third parties (Farrell, 2005; Sapienza & Villanueva, 2007; Shane, 2005). Additionally, BAs are not just casuistic gamblers. In addition to the money they invest, they have the knowledge and passion for setting up companies and developing businesses. Their freedom to think and act, associated with their expertise and passion to entrepreneurship, compose a "magic potion" that empowers them with a surprising ability to take risks, above any other type of investors, to fuel entrepreneurship. That is why BAs invest in the investible (not yet proven in very early phases, disruptive innovation) and trust in the un-trustable (trust in people with no track record). BAs have no fear of investing before the evidence becomes real because of their entrepreneurial orientation (Lindsay, 2004) and insatiable curiosity about making and seeing things happening. Therefore, it is not surprising that angels reveal a strong capacity for resilience in times of crisis. BAs groups in the UK made more investments and invested more in 2009/10 than in the previous years before the aftermath of the 2008 financial crisis, in clear contrast to bank lending and venture capital (Mason & Harrison, 2015). This evidence underlines the BAs' critical and unique role to contribute significantly in periods of economic recovery, filling financing gaps left by banks and venture capital firms (OECD, 2011), providing a message of hope to our society.

#### 1.3.5 The goals of the business angels

The dialectic of the definitions mentioned in section 1.3.3 is well expressed in the two currents of thought that have been dominating angel literature. On the one hand, the rational economic perspective that is grounded on microeconomic and standard finance theories (Fama, 1970; Markowitz, 1952; Persky, 1995). The rational view argues the primary goal of angel investing is to earn money (e. g., van Osnabrugge, 1998; Riding, 2008; Morrissette, 2007; Murnieks & Mosakowski, 2007). In this line of thought, Mason et al. (2015, p.1) confirm: "The ultimate purpose of investing in an entrepreneurial business is to achieve a financial return". On the other hand, the experientialist perspective considers that the contributions of other social sciences, such as anthropology, sociology, psychology, ethics and moral, also provide useful insights to explain investor behaviour. Experientialists highlight that behind money, there are other motives to be an angel investor. Those motives encompass fulfilment, fun, excitement, pride, desire to contribute, and personal recognition (e.g. Baty, 1963; Benjamin & Margulis, 2005; Brettel, 2003; Rose, 2014; Linde & Prasad, 2000; Shane, 2009). In this view, the principal perception of value and the real purpose of angel investing is to live the experience of the journey of supporting and developing a startup (Fili & Grünberg, 2016; Ramadani, 2012; Rose, 2014).

By incorporating both rationalist and experiential perspectives on the second decade of angel research, Sullivan and Miller (1996) building on the perceived benefits that angels derive from their investments, proposed classifying the BAs in three main categories of investors, namely economic, hedonistic and altruistic.

It is reasonable to accept that none of the perspectives about the purpose of angel investing is right or wrong per se. The angel market is diverse, and angels are highly heterogeneous in their characteristics and motivational goals (Landstrom & Sorheim, 2019; Tenca, Croce, & Ughetto, 2018). However, there is scarce contemporary research on the consequences that the new market changes of angels investing through groups of investors are provoking in the angel activity in general (Mason et al., 2019) and particularly on their motivational goals. It is also imperative to understand, in more detail, the relevance and hierarchisation of BAs' goals and how the different goals are related to each other. In addition, there is no research comparing the perception of BAs and entrepreneurs concerning the BAs' goals. Some research was carried out in this thesis to fill these gaps. Further developments on angel investing goals will be discussed with more detail on the essay presented in Chapter 2.

#### 1.3.6 The perceived value of the angel activity

The perceived consumer value, a central concept in marketing and strategy (Khalifa, 2004; Smith & Colgate, 2007) was developed initially to uncover the real reasons, not only the utilitarian ones, why consumers buy their products. The concept gained a strong interest in the academy and industry and was extended to several areas, including the informal investors of the stock exchange market (Puustinen et al., 2013; Wang, 2015).

Puustinen (2012, 2013) understood that informal investors desire to obtain certain incentives and benefits from their investments that have not been anticipated in economic and finance mainstream literature. Those incentives and benefits may include hedonistic, altruistic, self-expressive, and emotional types of value.

Despite the great interest of the topic to provide a holistic view of the BAs and to improve angel practice, the different type of values that BAs perceive from their activity has not yet been studied. However, as already mentioned, there are substantial differences between BAs and stock exchange investors, which underlines the need to develop a proper instrument to measure the perceived investment value of the angel activity (APIV). This instrument can be beneficial for angel groups and networks to design the angel investing experience according to the goals and the value perception of their members. Angel groups can differentiate themselves, based on certain value propositions, and specific activities customised to the angels they want to attract, keeping them committed and satisfied.

The essay presented in chapter 3 explains all the development of the APIV instrument done in this thesis, providing insights on the impacts of this value on angel job satisfaction and intentions of future behaviour, and guidance to those who belong or are related to the context in which BAs carry out their activity.

#### 1.3.7 The angel work as a career

Recently, Landström and Sørheim (2019) highlighted that knowledge about BAs needs theoretical and practical efforts on definition and clarification. In this line of thought, it is relevant to look into angel work through the eyes of career development theory (Dobrow & Tosti-Kharas, 2011; Hall & Chandler, 2005a; Novak, 1996; Thompson & Bunderson, 2019), and elaborate on the value BAs perceive from their career. The literature on career construction suggests that there are three different ways of how people look into their work, namely as a job, a career or a calling (Bellah et al., 1985). Depending on the work perspective, the outcomes are also expected to be different. Those who look into their work as a job see it as merely instrumental and expect essentially financial outcomes (Rosso, Dekas, & Wrzesniewski, 2010). This option, however, does not seem attractive for the angels. Cash compensation is usually not appropriate in angel groups (Preston, 2004),

and startups are known to pay low salaries until venture outcomes are clear (Farrell, 2005). Those who see their work as a career are focused on career advancement and expect status improvement, additional power and prestige (Pitacho, Palma, & Correia, 2019). Research on angel career is very scarce, and we found only one study on angel literature that explicitly approaches the theme (Politis & Landstrom, 2002). However, the recent change in the angel market that is growing in organisation and professionalisation puts the issue in the angel research agenda. It is particularly interesting to explore why angels feel attracted by an angel career perspective, and what type of goals motivate individuals to develop an angel career. The essay presented in chapter 4, elaborates on a new professional angel paradigm in contrast with the hobbyist view, identifying dimensions of the perceived career development and analysing the impact of career development on satisfaction with the angel job and subsequent impacts of satisfaction on the reinvestment intention.

#### 1.3.8 The angel work as a calling

The concept of work as a calling was coined in the reformation period (Thompson & Bunderson, 2019), creating the opportunity to change what traditionally meant to be called to God's plan through religious work, by seeking self-definition and fulfilment of personal goals on non-religious work. According to Weber (1930, xii), the notion of calling suggests that "the highest form of moral obligation of the individual is to fulfil his duty in worldly affairs."

The word "calling" derives from the Greek klesis and the Latin vocatio, and points to the function, career or mission, toward which one believes himself to be called (Cammock, 2012). The classical religious definition of calling highlights the individual role of productive work that fulfils God-given talents and circumstances presented to the individual in the course of life (Bunderson & Thompson, 2009). For those who believe in God, to answer a calling is a personal response to a God's will seeing a man as co-creator, performing a job that corresponds to innate characteristics gifts and talents, in favour of creation (Novak, 1996). For those who do not, callings respond to society's needs, are connected with others' wellbeing, or serendipitous fate (Dik & Duffy, 2009). It is referred that atheists and agnostics may have the same strong sense of a calling as religious persons, with the difference that they do not use the word "God", or see "His" invisible hand as the ultimate reference of their calling (Bunderson & Thompson, 2009; Novak, 1996).

Two dominant streams dominate calling literature. The neoclassical view conceptualises calling at work as a personally meaningful career project in which the individual works toward a pro-social, altruistic and greater common good, originated from an external source to the self (Duffy & Dik, 2013). The modern view of calling is based on internal

motives of intrinsic interest, self-fulfilment, passion, personal meaning and enjoyment (Praskovaet al., 2014; Thompson & Bunderson, 2019).

The individuals who perceive their work as a calling see it as an end in itself (Lysova & Khapova, 2019), inseparable of their own life (Dobrow & Tosti-Kharas, 2011). The work is understood as deeply meaningful and associated with self-fulfilment (Thompson & Bunderson, 2019). It is believed it contributes to the community's common good (Steger, Dik, & Duffy, 2012; Wrzesniewski et al., 1997).

As acknowledged by Thompson and Bunderson (2019, p. 437) "It may be that some occupations lend themselves to the emergence of callings, because they require unique skills and economic sacrifices for a perceived public benefit." That may be the case of the business angel activity that requires managerial skills and the investment of economic resources in risky startups, to help entrepreneurs develop their projects, as well as for the perceived public benefit of creating jobs and supporting the local economy (Rose, 2014; Shane, 2009). Nevertheless, angels have been generally understood in angel literature and society, essentially, as investors and moneymakers, whose main expectation is financial gain (Mason, 2011; 2015; Politis, 2016). Perhaps this preconceived idea of the angel activity explains why has not yet resonated that angel investing is a potential occupation suited to have a calling. The research undertaken in this thesis will fill this gap. The essay presented in chapter 5 will describe the concept of calling in the angel scope and analyse, through an empirical study, the impact of calling on angel behaviour, both on the involvement and the value angels perceive from their activity.

#### 1.4 Research methodology

A researchers' core issue is the choice of adequate research philosophy and paradigm when conducting a research project (Sobh & Perry, 2006). A research philosophy is generally understood as the system of beliefs and assumptions about the development of knowledge (Saunders, Lewis, & Thornhill, 2019). Despite the long debate regarding the advantages and appropriateness of using distinct philosophies and their methodological consequences, researchers are encouraged to be aware of the differences of research philosophies and paradigms when choosing a research method (Guba, 1990; Sobh & Perry, 2006). Table 1.2 presents the research philosophies most usually adopted in Business and Management.

BAs, framed through entrepreneurship, business, finance, and management, emerged as a research field in the late twentieth century (Wetzel, 1981, 1983). Theoretically, BAs and entrepreneurship were studied under the scope of a mixture of areas that, themselves, absorbed various associated philosophies and methodologies included on social sciences, natural sciences, applied sciences and humanities (Saunders et al., 2019). BAs are widely understood as a complex phenomenon with several research difficulties mainly related to the angel's nature and the dynamism of the entrepreneurial market (Mason et al., 2019). The angel market has been characterised as highly diverse and heterogeneous, almost personalised (Avdeitchikova et al., 2008; Landström & Sørheim, 2019; Mason et al., 2019; Sohl, 2007).

Angels have also been considered independent by nature, with some individual angels investing alone their own money in individual entrepreneurs (Sohl, 2007). Some of those startups promote radical innovations, create new business models, and become high-growth companies with enough power to change the status-quo of entire industrial sectors (e.g. Google, Skype, Uber, Airbnb). Those unicorns re-shape and impact society's structures, the policies, and the collective way of living, configuring a radical structuralist approach. Some other startups are invested with the purpose to create social impact, promoting social changes, influencing behaviours in aspects related to ecology, environmental causes, food or health (Social Impact Investment Taskforce, 2014) applying for a radical humanist paradigm.

Simultaneously, in recent years there has been a trend of angels investing through group organisations with the potential consequence and practical implication of a certain homogenisation of angel behaviour (Mason et al., 2016; Norberg, 2007). Both Individual and collective action are driven by objective and subjective factors that mutually influence the market and the individual. This mutual influence configures the usage of interpretivism and positivism paradigms.

Some scholars debated whether mixed methods research is possible, asking if different ontologies and ways of seeing realities could be mixed in a single study (Creswell, 2011; Hunt, 2003). Other scholars advocate that different approaches provide distinct types of knowledge about a phenomenon (Weber, 2004), and claimed the end of paradigm rhetoric wars between positivism and interpretivism (Silverman, 1998; Weber, 2004). Despite the long controversy among scholars, the mixed methods approach became increasingly popular among researchers (Creswell, 2011), particularly after Guba and Lincoln (2005) declared that elements of paradigms might be blended together in a study. A first general assumption underpinning business and entrepreneurship highlights a dynamic and complex phenomenon, hardly captured by a unique single method (Neergaad & Ulhøi, 2007).

Table 1.2 - Research philosophies on Business and Management

Research philos	sophies commonly use				
Assumptions	Positivism	Critical Realism	Interpretivism	Postmodernism	Pragmatism
Ontology (nature of reality)	Reality is real and apprehensible. External, independent, universal. One true ordered reality.	Reality is <i>"perception"</i> . What we experience is sensations about real, rather than the real actual thing (virtual reality).	Multiple realities, local and specific. Complex, rich, socially constructed through culture and language. Multiple meanings, interpretations, Experiences and practices.	It emphasises the chaotic primacy of reality, movement, and change. It is socially constructed through power relations. Language is partial and inadequate to describe reality.	Complex, rich, external. Reality is the practical consequence of ideas, processes, and practices—the pragmatic conception of truth.
Epistemology (nature of knowledge)	Scientific method. Observable and measurable social reality to produce law-like generalisations. Causal explanation and prediction.	Relativism. Knowledge is transient. Facts are social constructions. Based on historical causal explanations.	Focus on individual narratives, stories, perceptions, and interpretations. New understandings and worldviews are contributions.	What counts as truth and knowledge are decided by dominant ideologies.	The practical meaning of knowledge. It strives to reconcile both subjectivism and objectivism, facts and values, rigorous knowledge, and individual experiences.
Axiology (role of values)	Value-free research. The researcher is detached, objective, neutral and independent of what is researched.	Value-laden research. World views and culture bias the researcher. The researcher is as objective as possible.	Value-bound research. Researchers are part of what is researched. Subjective and reflexive. Interpretations are key to contribution.	Value-constituted research. Researcher and research embedded in power relations. Some research narratives are repressed at the expense of others. The researcher is radically reflexive.	Value-driven research. Research initiated and sustained by the researcher's doubts and beliefs. The researcher is reflexive.
Typical Methods	Mostly concerns with theory testing. Typically, deductive, large samples, quantitative methods. Surveys and verification of hypotheses.	Retroductive, in- depth, historically situated. Range of methods and data types to fit the subject matter. Action research and participant observation.	Typically, inductive. Small samples, in-depth investigations, qualitative methods of analysis. In-depth unstructured interviews, participant observation.	Typically, deconstructive – reading texts and realities against themselves. In- depth investigations of anomalies, silences and absences. Range of data types, typically qualitative methods of analysis.	The researcher follows the research problems. Range of methods: mixed multiple, qualitative, quantitative. Emphasis on practical solutions and outcomes.

Sources: Based on Saunders et al. (2019) and Sobh and Perry (2006)

Consequently, the philosophy chosen for BAs research should be one involving the usage of multiple methods. That is the main reason to propose pragmatism as the main research philosophy in this thesis. Pragmatism, with high family resemblance with logical empiricism (Pihlström, Stadler, & Weidtmann, 2017), was presented by William James (1842-1910) based in the pragmatism of Pierce (1839-1914). It is often considered the only philosophical system that was originated in the United States (Hunt, 2003). The BAs also born in the United States, in the context of Broadway (Benjamin & Margulis, 1999) and, like pragmatism, angels were essentially an authentic expression of American culture of the "land of dollars" (Ferrari, 2017, p.24). James, the "father" of pragmatism, highlighted that the truth must be evaluated based on its practical consequences. James (1907, p.122) presents a good illustrative example of the pragmatic view applied to religion: "On pragmatic principles, if the hypothesis of God works satisfactorily in the widest sense of the word, it is 'true'." According to the pragmatic view, the most determinant aspect for research design and strategy is the research problem and questions being addressed. No single point of view can give the entire picture of the problem; therefore, it is perfectly possible to work with different types of knowledge and methods (Saunders et al., 2019).

In the present research, the purposes and research questions configure different type of paradigmatic approaches. The research question number one: "*Why do people become angel investors?*" suggests an interpretive paradigm approach, acknowledging the subjective nature of the investment behaviour, and attempting to identify the multiplicity of reasons for undertaking the investing activity. The interpretative paradigm is used to create new, richer understandings and interpretations of the social world (Saunders et al., 2019). It is concerned with the essence of the everyday world, how and why that world is subjectively created (Burrell & Morgam, 1979). Naturally, the interpretative approach suggests the usage of qualitative methods. In the present case, it was decided to rely on a laddering procedure and network analyses to understand the several reasons why people become angels and the links among those reasons.

Regarding the other research questions – number two, three and four – the intention is to obtain a broader view of angels' perceived value – either related to the investing activity or career development – and relationships between the perceived value and other constructs. Considering the relationship between the perceived value and other constructs it is intended, among other issues, to analyse how the perceived value affects angels' job satisfaction and worth of mouth concerning BAs' activity. In addition, it is aimed to understand how a sense of calling may influence BAs' behaviour and perceived investment value. In these cases, the goal of the research is to search for regularities and patterns on angels' perspectives and behaviour. Moreover, it is also intended to test the impact of the perception of career development on job satisfaction and subsequent

impacts on reinvestment intention. Furthermore, the aim is also to examine causal relationships and test them to predict and control, with theoretical concerns on causality and generalisation. For all these reasons, the adequate paradigm is positivism (Gioia & Pitre, 1990). The data collection method will be quantitative surveys. The final version of the questionnaire may be found in Appendix 1.1. Structural equation models are used to test the relationships between constructs (see Table 1.1). More details on the methodology adopted in each essay are provided in the chapters where the essays are presented (chapters 2 to 5).

#### 1.5 Structure of the thesis

The thesis is elaborated as a composite document consisting of an introductory chapter, four essays that constitute the nuclear part of the thesis, and a final chapter of conclusions. It starts with an introduction that begins with a discussion on the relevance and the purposes of the thesis and the formulation of the research questions and objectives. This formulation is followed by a brief literature review on the origin of the BAs and their present context, with particular attention being given to the constructs under analysis in the thesis – goals, perceived value (perceived investment value and value related to career development) - and calling. The Introduction – Chapter 1 - ends with the explanation of the research methodology and the structure of the thesis. Chapters 2 to 5 correspond to the four essays carried out to answer the four research questions and achieve the thesis's four specific objectives. More details of the four chapters and the way they are structured can be found in Figure 1.2. The final chapter – Chapter 6 – summarises the essays' contributions, both the theoretical conclusions and practical implications. Limitations and suggestions for future research are also presented in this chapter.

Chapter1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter6
The relevance of BAs	1st Essay	2 <sup>nd</sup> Essay	3 <sup>rd</sup> Essay	4 <sup>th</sup> Essay	Discussion
			*		
Research purpose	Literature review on angel motivations and goals	Literature review on perceived investment value	Literature review on career development	Literature review on work orientation and calling	Theorethical contributions Practical implications
1			#	8	
Research methodology	Qualitative survey (interviews)	Quantitative survey (questionnaires)	Quantitative survey (questionnaires)	Quantitative survey (questionnaires)	Limitations and future research
Structure of the thesis	Laddering Procedure	Construction of APIV scale	Structural Equation Model	Structural Equation Model	
			+	*	
	Social Network Analysis	Structural Equation Model	Analysis and discussion of results	Analysis and discussion of results	
	*	Analusia and			
	Analysis and discussion of results	Analysis and discussion of results			

Figure 1.2 - Structure of the thesis

# Chapter 2 - The why of angel investing: uncovering angels' goals

## Abstract

Despite the growing prominence of business angels (BAs) as crucial players in the development of high-potential, early-stage startups, who they are and what drives them is not fully understood. In what sense are they really "angels"? Where do our portraits and assumptions regarding BAs come from, and how accurate are these portraits? Many of the images of BAs depart significantly from more conventional views. Yet the conventional views stubbornly persist. To gain a comprehensive view of the goals of BAs, we went beyond the traditional economic and financial models to perspectives from marketing and consumer behaviour as additional lenses. We employed qualitative techniques (including laddering and means-ends chains) to allow currently active BAs to describe their aims and dreams in ways that forced-choice, quantitative methods do not accomplish. Finally, to find out if entrepreneurs see BAs as angels see themselves, we also collected the same descriptions from entrepreneurs. We find that traditional financial views do not adequately capture the richness and thrust of BAs' goals. Further, we find that entrepreneurs appear to be overly influenced by conventional assumptions regarding the activities of BAs. We conclude with reflections on the practical implications of our research for BAs, entrepreneurs and policymakers.

**Keywords**: angel goals; business angel identity; perceived investment value; angel network; investor goals; entrepreneur; self-development; social networks

## 2.1 Introduction

Business angels (BAs) are widely recognised as the main contributors in financing earlystage entrepreneurial startups, fueling innovation and providing entrepreneurs with "smart money" (EBAN, 2018; Mason & Botelho, 2014). Entrepreneurial startups are the primary job-creating engine of the economy (Sudek, 2006), having a strong local impact, promoting new talent, improving people's lives, and adding substantial value to society (Brush et al. 2012; Edelman et al., 2017; Hill & Power, 2002). BAs have assumed a unique role in entrepreneurship (De Clercq et al. 2006; Linde & Prasad, 2000) and consequently have their own goals and motivations. Differently from other types of investors, angels invest their own money, not the money of others, being involved with the investee startups to exchange value and share their expertise (Linde & Prasad, 2000; Mason & Botelho, 2014; Politis, 2008; Ramadani, 2012).

Two different currents of thought have dominated perspectives about the motivations for angel investing: the financial and behavioural perspectives. On the one hand, grounded on microeconomic and standard finance theories (Fama, 1970; Markowitz, 1952; Persky,

1995), the rational economic perspective advocates that investor decisions are based on the rational trade-off between risk and profit (Keynes, 1955; Persky, 1995). Consequently, the primary goal of angel investors is to earn money (e. g., van Osnabrugge, 1998; Riding, 2008; Baty, 1963; Morrissette, 2007; Murnieks & Mosakowski, 2007), as expressed by Mason et al. (2015, p1): "The ultimate purpose of investing in an entrepreneurial business is to achieve a financial return".

The behavioural perspective considers other social sciences' contributions, such as anthropology, sociology and psychology, also providing insights into investor choice theory. Investor decision-making can be motivated by feelings of greed and fear (Redhead, 2008) and embedded with common biases such as optimism, overconfidence and false consensus (Barberis & Thaler, 2003; Kahneman & Riepe, 1998; Thaler, 2000). Kahneman and Tversky (1979, 1984) justify investment valuations are based on a subjective perception of value. This type of investor sentiment, difficult to reconcile with pure rationality, has been incorporated in some investment models (Barberis et al., 1998; Shleifer, 2000). Similarly, Thaler (2000) advocates that the instrumental man, coming from normative rational choice, will become more emotional, recommending more attention to the role of emotions in economic behaviour. Based on the high rate of failure of BAs' investments (Mason & Harrison, 2002b; Wiltbank & Boeker, 2007), it seems questionable to claim that financial returns are BAs' primary motivation. Certain literature suggests that the most important outcome for BAs is to live the experience of supporting and developing a startup (Fili & Grünberg, 2016; Ramadani, 2012; Rose, 2014). However, researchers are increasingly arguing that BAs have other motives to invest, encompassing fulfilment, fun, excitement, pride, the desire to contribute and personal recognition (e.g. Baty, 1963; Benjamin & Margulis, 2005; Brettel, 2003; Rose, 2014; Linde & Prasad, 2000; Shane, 2009). This stream of thought suggests that standard assumptions and narratives about BAs, confined to economic goals, are incomplete or mistaken, which might prevent the effectiveness of BAs' investing activity and living a full angel experience.

The assumptions behind financial perspectives rest on how angels as rational investors ought to behave, while the behavioural perspective assumes there are limitations to rationality, and experience, emotions and uncertainty may play an important role framing angel goals. Although both rational and behavioural perspectives have positive contributions, they lack a deep integrative and holistic view of the purpose and goals that drive BA investors.

Moreover, the empirical research on BAs' goals in this context is very scarce, and most studies on BAs' motivations adopt quantitative approaches such as survey questionnaires, which are greatly influenced by researchers' perspectives and BAs' forced-choices based on a set of predetermined goals, which prevents us from having a broad view of their non-economic motivations (Croce et al., 2019; Farrell, 2005; Morrissette, 2006). The only

two studies found to adopt qualitative approaches (Farrell, 2005; Shane, 2005) were based on interviews and focus groups. Although these techniques permit a greater exploration of BAs' goals than quantitative studies, they do not have the greatest potential to encourage BAs to reveal the variety of their goals and cannot establish a hierarchy among these goals. In addition, previous empirical studies in this field are only limited to BAs' own perspective regarding their motivations and goals, with a clear gap concerning how other players, such as entrepreneurs, understand them.

A substantial stream of literature interfacing marketing and finance, suggests the experience of consumer behaviour research used to reveal consumer goals in consumption (Khalifa, 2004) is equally appropriate to uncover the multiple investor goals in the investment context (Allen & McGoun, 2001; Amoah et al., 2017; Canova, Rattazzi, & Webley, 2005; Hsee & Tsai, 2008; Pasewark & Riley, 2010). The perception of investment value, as in consumption, goes beyond the utility of a product or service, encompassing a meaningful interactive and emotional experience that responds to higher personal goals and values (Aspara & Tikkanen, 2011; Pasewark & Riley, 2010; Puustinen et al., 2013; Sheth, Newman, & Gross, 1991).

Taking into account (a) the long tradition of marketing and consumer behaviour research tools to measure and uncover the hierarchy and relevance of the different consumer goals in goods, services and even investment areas, (b) the need to integrate financial and behavioural perspectives to find a broader perspective on angel investing and (c) the usefulness of the marketing research lens to understand angel investing, this paper seeks to uncover the invisible iceberg of BA goals and complementarily how their main partners - the entrepreneurs - perceive them. This objective will be achieved in two ways. First, a deep analysis of BAs' goals will be conducted examining the variety and relevance of their economic and non-economic goals. Specific qualitative approaches - the laddering technique and means-ends chain will be used. These techniques incorporate value on the analyses since they encourage BAs to provide a broad and deep view of their goals and offer new insights into BAs' short-term (instrumental) and long-term (terminal) goals. Third, an analysis of how entrepreneurs who work directly with BAs understand BAs' goals will also be carried out, contributing to managing the relationship between the parties. Finally, This paper is particularly relevant to improve and connect angel research and empirical worlds, providing valuable input for the entire entrepreneurial ecosystem.

### 2.2 Literature review

Goals and motivations are dominant concepts in people's lives (Deci & Ryan, 2000). Motivation is the intensity of desire and effort put into the process of goal pursuit (Touré-Tillery & Fishbach, 2011), which might be intrinsic – reflecting the inherent benefits of pursuing a goal – or extrinsic – when associated with the process of achieving a goal (Ryan

& Deci, 2000a). A goal is the cognitive representation of a desired end state that includes the variety of objects, plans, mental images, emotions and behaviours toward which actions may be directed (Pervin, 1989; Touré-Tillery & Fishbach, 2011).

Research on entrepreneurship suggests goal-directed behaviour with different hierarchic levels of goals serving as essential motivators and links between entrepreneurial intention and action (Carsrud & Brannback, 2011; Kirkley, 2016). Equally, angel literature offers some perspectives on the goals and motivations of BAs. Part of the angel literature, grounded on the traditional finance paradigm, points out economic motivations as the most important reasons for being an angel investor (Morrissette, 2007; Van Osnabrugge & Robinson, 2000). However, previous research refers mainly to the motivations for being an angel, and rarely point the hierarchy or the level of abstractness of the angel goals. Moreover, nothing is said about how important each goal is, or its relation and contribution to other goals. Some economic goals and motivations are: (i) the opportunity for high capital appreciation (Baty, 1963; Capizzi, 2011; Haar et al. 1988; Hill & Power, 2002; Linde & Prasad, 2000; Morrissette, 2007; Murnieks & Mosakowski, 2007); (ii) the acquisition of new clients for their other companies (Baty, 1963; Linde & Prasad, 2000); (iii) to participate in a growing business that will have a great impact (the next big thing) (Benjamin & Margulis, 2005); or (iv) to exploit technologies that promise capital growth (Baty, 1963). Angel literature has many references to BAs' motivations, with economic goals being considered the most common reasons for angel investing (e.g., van Osnabrugge, 1998; Riding, 2008; Baty, 1963; Morrissette, 2007; Murnieks & Mosakowski, 2007).

Some other research supported on behavioural and experiential arguments suggests that economic goals may not be most important (Hill & Power, 2002). According to Freear et al. (1995), 50% of BAs accept lower financial returns because part of their income is considered to be a psychic return. Research highlights that non-economic factors affect the motivations for investments of more than one-third of BAs (Sullivan, 1991; Wetzel, 1983), aligning their reasons for investing with emotional and symbolic outcomes. Coinvesting, socialising and learning from more experienced BAs seems to be, sometimes, one of the strongest motivations to invest (Preston, 2004; Sorheim & Landstrom, 2001; Van Osnabrugge, 1998). Some individuals feel motivated to be angels to guarantee the status inherent to the BA condition (Mulcahy, 2005) and to socialise with prominent entrepreneurs and investors (Linde & Prasad, 2000). Others aim to improve self-image and public recognition (Benjamin & Margulis, 2005) and help the local community to praise political forces (Shane, 2009). Other motivations mentioned include the joy of giving back to society (Rose, 2014), the motivation to support a socially beneficial product (Morrissette, 2007; Sullivan, 1991), and to help young entrepreneurs just because they need help (Hill & Power, 2002; Morrissette, 2007). The last decade has seen a new,

growing community of BAs (impact investors) who are predominantly motivated to finance projects that answer social and environmental challenges, generate significant changes with high impact on the world (OECD, 2011). These types of goals seem to be aligned with personal values and long term objectives, but there is a lack of research regarding how angels distribute long-term and short-term goals.

Some BAs also invest to obtain emotional outcomes. On this particular point, there is an anecdote mentioning that the first BAs invested in Broadway productions (theatre angels) mainly not for money but for the "pleasure of rubbing shoulders" with their favourite actors (Landstrom, 2007, p.8). Other emotional outcomes refer to the fun obtained from participating in attractive investments (Brettel, 2003; Landstrom, 1993), the excitement of being connected to new venture startups (Linde & Prasad, 2000) and the adrenaline and stimulation resulting from risk-taking (Freear et al., 2002). Some authors reveal the testimonial of BAs suggesting the intrinsic pleasure obtained from BA investing is "cheaper and more fun than buying a yacht" (Osnabrugge & Robinson, 2000, p.117) or "it's really fun!" (Rose, 2014, p.37). Other potential goals capture the entrepreneurial value of BA activity, namely: the enjoyment of being involved with young entrepreneurs, nurturing their development (Rose, 2014); the gratification from having an active role in a startup (Mason, 2005; van Osnabrugge, 1998); and the pleasure of repeating an exit or success story already achieved by the BA as a previous entrepreneur (Benjamin & Margulis, 2005). However, some questions regarding emotional outcomes remain, e.g., How are emotional outcomes perceived by BAs and entrepreneurs? How important are emotional outcomes compared to other kinds of outcomes?

In recent years, investing literature suggests a polymorphic view of investor behaviour, supported by new approaches to behavioural finance (Baker & Ricciardi, 2014; Pompian, 2006, 2012), perceived investment value (Puustinen, 2013) and the expected investment value (Lounio, 2014). These new approaches go beyond the traditional financial theories based on efficient markets with perfect information that support investor decisions grounded on the rational trade-off between risk and profit (Fama, 1970; Markowitz, 1952). Recent contributions are grounded on psychology, sociology, marketing and consumer behaviour literature suggesting that investors evaluate investment opportunities based not only on utilitarian and rational criteria, but on holistic perspectives that include the investing experience, personal values and affect (Aspara & Tikkanen, 2011; Beal, Goyen, & Philips, 2005; Fama & French, 2007; Pasewark & Riley, 2010); Puustinen et al., 2012, 2013). The BA literature advocates that BAs are a special class of investors with a strong entrepreneurial orientation expecting to obtain entrepreneurial value in the exercise of their BA activity (e.g. Politis & Landstrom, 2002). According to Mason (2008a), BAs have unique characteristics that differentiate them from other investors. They invest their own money and do not manage others' money like venture capitalists (VCs), reveal high-risk capacity by investing in early-stage startups, and get involved with the startups in which they invest. It is also stated that a substantial number of BAs have startup experience (Brettel, 2003; Gaston, 1989; Landstrom, 1993), viewing themselves as entrepreneurs, "co-creators" and "co-founders" of new ventures, rather than purely financial investors (Fili & Grünberg, 2016).

Although the literature reviewed suggests that BAs have multiple goals, no empirical research is found specifically on the hierarchy of angel goals, which goals leads to short-term action and which are closer to long-term values. Empirical research on BAs' motivations is scant, highly quantitative/deductive, and does not provide a holistic view of BAs' goals' variety and relevance. Additionally, this paper sheds new light on the different perceptions of both entrepreneurs and BAs regarding BAs' goals.

## 2.3 Materials and methods

As mentioned above, the purpose of this research is to answer the why of angel investing uncovering the invisible iceberg of BAs' goals. The research procedure uses the laddering technique that refers to an in-depth one-on-one interviewing technique (asking why is that important to you?) (Reynolds & Gutman, 1988) and the means-end chain defined as a hierarchy of goals (Gutman, 1982, 1997). Initially, these techniques were proposed to uncover relevant personal information about the consumer, particularly to understand the cognitive linkages between attributes of products or services, consequences of the acquisition/experience and personal values (e.g., Grunert & Valli, 2001; Pike, 2011), but were applied with success in several other domains, namely: to uncover the reasons for individual savings (Canova et al., 2005); to analyse the hierarchical cognitive structure of entrepreneur motivation toward private equity financing (Morandin, Bergami, & Bagozzi, 2006); to develop the perceived value concept for stock exchange investments (Puustinen et al., 2013); and to identify the company attributes that are important for investors' preferences (Schiefelbein, 2016). The most appealing advantage of the combined approach of the laddering technique and the mean-ends method is they reveal the holistic and hierarchical perspective of individual goals and, at the same time, provide guidance for future action. Creating meaningful mental maps they perform a more contemporary approach to classical motivation research, stimulating participants to reflect upon their behaviour in a broader way, disconnected from their usual context (Malhotra, Nunan, & Birks, 2017).

The sampling method was convenience sampling, a type of non-probability sampling that involves a readily available population selected by one of the authors' convenience, member of the same angel group of the respondents. A questionnaire was administered to 53 BAs and 35 entrepreneurs who attended a full-day interaction event of REDangels, the largest structured BA group in Portugal. The event aimed to promote involvement

between the BAs and their invested startups. The BAs and entrepreneurs already knew each other and had an investor-investee relationship lasting between three months to four years.

### 2.3.1 Data collection methodology

A questionnaire survey was developed and carried out among a group of BAs and entrepreneurs. The aim was to obtain and compare both perspectives about BAs' goals. Following identity theory, a process of confronting and validating data by a direct counterpart identity, in this case, the entrepreneur, is an essential step in the construction of the self (Burke, 2016; Burke & Stets, 2009; Riley & Burke, 1995). Data were collected using a laddering self-administered questionnaire in April 2018 (Appendix 2.1) as adopted by Puustinen et al. (2012) instead of using the traditional laddering faceto-face interview of Canova et al. (2005) and Bagozzi et al. (1998). The questionnaire was pilot tested previously with a small group of three BAs. Each BA was asked to identify the four main reasons why it is important for them to be a BA, writing the first reason in the first box of the first row, at the bottom of the page. Then, each BA should write why that reason is important for her\him in a second row, and continue to answer in the same way until reaching the fifth level, or a level of abstractness from which it was difficult to continue. The participants applied the same procedure for each of the four most important reasons for being BAs, creating a linked network of their goals, with each goal being directly linked to the goal adjacent to it. Entrepreneurs were invited to fill in the questionnaire thinking about the specific BAs they have a relationship with and reporting the reasons they think motivate those BAs to be BAs. Thereafter, the procedure was similar to the one followed by the BAs configuring two independent data sets of respondents. This option lets us maintain a separate analysis of each group, and simultaneously establish a comparison between the results of the two groups.

## 2.3.2 Data analysis methodology

In this research, we built on categories of goals proposed in the literature reviewed, which are grouped in five broad categories of goals - economic, functional, emotional, symbolic and entrepreneurial. As far as data analysis is concerned, the hierarchy of BAs' goals followed the coding process described for text coding in Grunert, Beckmann and Brandi (2001). The two major concerns are indexicality, i.e., to extract the maximum contextual and meaningful information from each goal described and to find the adequate level of abstraction of each category to minimise loss of information resulting from the aggregation of similar terms. Four levels of knowledge were created: the first one containing the raw text coming directly from the respondents, the second with the hierarchical relation between the goals, a third one with the synonyms of the terms based

on which categories are formed, and a final one with the post-categorisation of the terms organised hierarchically.

The coding process used as much of the contextual information as possible (Gutman, 1997), particularly the respondent's background, experience and situational involvement with the startups. Each respondent goal was evaluated iteratively as follows: firstly, to identify a single relevant term captured in each respondent phrase; secondly to reevaluate the term in the interconnected context of the respondent's words; thirdly to compare each term with other terms of other respondents to validate the similarity of meanings, and finally to compare the sequence of categorised terms for each respondent for final context adequacy. All the process included several iterative reviews until a final categorised set of terms were considered satisfactory. To increase face validity, as suggested by Hardesty and Bearden (2004), the authors' turned to an external expert advisor – the President of FNABA (Portuguese Business Angel Federation), member of EBAN (European Business Angels Network) to: (i) evaluate the adequacy of the proposed categories of goals; (ii) code and uniformise the terms for those categories; (iii) and verify the adequacy of each code for the common terms used in the BAs' vocabulary.

After the coding process, the two data sets – corresponding to the perspectives of BAs and entrepreneurs - were analysed using social network analysis in order to examine the level of abstractness and the centrality of the goals. Two mind maps of BAs' goals (proposed by the BAs and by the entrepreneurs) were created in the form of an implication matrix.

The purpose of the implication matrix is to represent the BAs' goals jointly and to determine the dominant pathways and connections between the goals in the overall map of aggregate relations (Grunert et al., 2001). Operationally, the implication matrix is a square matrix whose size is defined by the number of elements that will be mapped. In this case, 40 salient goals will result in a matrix of forty rows and forty columns. The number in each cell represents the number of times a goal of a row (goes OUT) leads to another goal in a column (comes IN). The goals with zero INs and fewer than two OUTs were ignored, due to low representativeness. The BA goal implication matrixes are provided in Appendixes 2.2 and 2.3 and will be interpreted in the section of analysis and discussion of results.

After constructing the matrix, each goal's level of abstractness was calculated according to the formula: in degrees/(in degrees + out degrees). The in-degrees show how often a goal is the object or end of a relation, whereas out-degrees indicate how often a goal is a source or origin. A goal's level of abstraction helps to identify the goal in the values hierarchy, going from a concrete level of specific action to a more abstract level of values and motives (Pieters, Baumgartner, & Allen, 1995). According to goal-directed theory

(Austin & Vancouver, 1996; Bagozzi & Edwards, 1998) the higher a goal's level of abstractness, the higher it's potential to be a long-term goal, and an end value itself. In contrast, the lower the node's abstractness, the greater the possibility of it representing a concrete and short term goal leading into action (Austin & Vancouver, 1996; Brunsø, Scholderer, & Grunert, 2004; Carsrud & Brannback, 2011).

Gephi software was used to provide easy comprehension and visualisation of the BAs' goals and their relationship. Centrality used to rank the nodes according to their importance, is one of the most researched concepts in social networks (Borgatti, 2005). The Degree centrality (Freeman, 1978), measured by the number of direct ties incident upon only one node, assumes the greater is the number of adjacent nodes, the greater the influence. It is an appropriate measurement for the immediate, short-term and direct influence of the nodes ignoring the global network structure (Borgatti, 2005; Yang et al., 2017). The PageRank algorithm (Brin & Page, 1998), grounded on eigenvector centrality, measures the long-term importance of a node according to the importance of all the nodes related directly and indirectly to that node, through all the network (Bonacich, 1987, 2007).

### 2.4 Analysis and discussion of results

The BAs group included active BA investors from six European countries who generally invest alone and in a group, in their own country and abroad. Most of the BAs are board members of large companies or were previously successful entrepreneurs with a full-time occupation, and business experience ranging from five to forty years. All members of the group are BAs certified by the Portuguese government. Three BAs are retired, and three are full-time BA investors. The entrepreneurs are full-time CEOs of the invested startups, from three different countries, with a university degree, and aged from 24 to 38. The startups are in pre-seed and seed phases, with a couple of months to four years of activity.

The 88 respondents identified a total of 888 goals as underlying reasons for being BAs (BAs proposed 465 goals and 401 goals by entrepreneurs), with an average of 10.09 goals per respondent. Five single goals were discarded since they were not understood or did not fit conceptual definitions of goals, which resulted in a final set of 883 goals. The goals were categorised in 40 categories corresponding to 40 salient goals, which were then classified in five high-level meta-goals: economic, functional, emotional, symbolic and entrepreneurial, as detailed in Table 2.1.

Symbolic and entrepreneurial goals emerge as the most cited goals, with 357 and 266 references, respectively. These findings seem to contradict classical financial perspectives that argue that BAs rely on economic reasons as the main purpose of angel investing

activity, and partially corroborate behavioural perspectives that advocate a broader view, considering goals other than economic ones. Moreover, the high number of angel goals related to the entrepreneurial world like *to be part of entrepreneurship, to help startups grow, to support innovation* or *to awaken the angel identity,* suggest BAs are a special class of investors for whom direct involvement with entrepreneurship plays a critical role. As expected, these results reveal the importance of entrepreneurial goals for BAs, which have not emerged as relevant in other investment areas, such as the stock market investment (Puustinen et al., 2012, 2013).

Since one of the most important aims is to examine whether BAs and entrepreneurs have different perspectives on BAs' goals, all the remaining analyses were carried out separately for each of these groups. The hierarchy of goals was analysed, examining the level of abstractness of goals based on information provided by BAs and entrepreneurs (see the implication matrixes in Appendixes 2.2 and 2.3). This analysis identified more abstract and long-term goals, and less abstract, more short-term goals (Carsrud & Brannback, 2011). The abstractness analysis was complemented by studying the centrality of goals in each network (see Tables 2.2 to 2.5). The graphical representations of links among the goals complemented the centrality and abstractness measurement and will be analysed next (see Figures 2.1 to 2.4).

Tables 2.2 and 2.3 present in more detail the goal ranking according to the centrality of goals for BAs in the view of BAs and entrepreneurs, calculated through the weighted Degree W(g) and PageRank PR(g) algorithms. Data regarding centrality were transformed into a scale from zero to one hundred to facilitate interpretation. A summary of the ten goals with the highest centrality in the view of BAs and entrepreneurs, calculated through the weighted Degree and PageRank algorithms, is presented in Tables 2.4 and 2.5, helping to synthesise relevant results.

A first conclusion that can be drawn from observation of Tables 2.2 and 2.3 is that there is a wide variety of goals motivating people to be BAs, with a high number of these goals being non-economic. The variety is especially noted in emotional, symbolic and entrepreneurial goals. As far as emotional goals are concerned, they comprise different goals such as to be happy, to have challenging experiences, to socialise with great people and to have fun. Symbolic goals are also varied, comprising goals such as to feel fulfilled, to develop oneself, to increase one's self-esteem and to give back to society.

An analysis of the centrality of goals calculated through Degree centrality reveals that BAs and entrepreneurs' perspectives are quite different. The results show, in a first analysis, that while BAs consider their two most relevant goals to be *to develop oneself* (BAw(g)=100) and *to support innovation* (BAw(g)=94), entrepreneurs find that BAs' two

most central goals are to improve one self-esteem (Ew(g)=100) and to make money (Ew(g)=100) (Tables 2.2 and 2.4).

Both groups consider that economic goals are relevant, but entrepreneurs think that to earn money and to get a high ROI are more relevant for BAs than BAs do (Tables 2.2 and 2.4). To make money via a highly profitable exit is an obvious BA goal (McKaskill, 2009b) since it is advocated that many people become BAs just to make money (Shane, 2009, p.28). That may result from the cashed-out entrepreneur previous experience that has already developed a startup successfully and knows how to make money (Mason, 2008). The goals to get a high ROI and manage risk are also considered relevant BA investors' motivations (Zacharakis & Shepherd, 2007). However, the results related to the differences found between the two groups of respondents suggest entrepreneurs perceive that BAs are closer to financial investors, focused on achieving economic goals. This perception is not entirely coherent with the image and goals that BAs establish for themselves. One explanation for the entrepreneurs' perspective is that perhaps angels like to convey the idea they act as rational investors, driven by purely financial outcomes and disregarding non-economic motivations (Hoffmann & Fieseler, 2012). Another possibility is that angels' practice with entrepreneurs is different from their theory, with the real angel behaviour showing they are closer to financial investors driven by economic motivations. Finally, another potential reason is that some entrepreneurs cannot perceive some goals that are really important for angels due to limited contact with BAs unknowing all the actions performed by them, and their personal reasons for investing.

Functional goals are very lowly ranked, and both groups perceive this type of goal to be of little relevance (Tables 2.2 and 2.4). Emotional goals are moderately ranked and understood similarly by BAs and entrepreneurs. There is one clear exception with the to *be active* goal, which is considered much more relevant by the BAs (BAw(g) = 50) than by the entrepreneurs (Ew(g) = 20) (Tables 2.2 and 2.4). The angel literature already suggested to be active was a very important goal for BAs. Researchers state that apart from a few cases in which BAs are not involved because they lack the time (Mason & Harrison, 2002b), have no inclination (Hill & Power, 2002) or knowledge to contribute (McKaskill, 2009a), the majority of BAs expect to play an active role in the invested startups (Fili, 2014a). Also according to the literature, playing an active role is a primary motivation for one-third of BAs (Morrissette, 2006), and considered the driving force behind angel investors (Politis & Landstrom, 2002). Perhaps entrepreneurs understand that an active BA role may, in some cases, result in no value added (Sapienza et al., 1996), not enough value, or even the wrong kind of value (Boué, 2002). The difference perceived between BAs and entrepreneurs regarding to be active, can also be due to sensitive matters concerning BAs' involvement since entrepreneurs may not be comfortable or agree with the terms, frequency and role the BA expect to have in the startup (Mckaskill, 2009).

As far as symbolic goals are concerned, there are also some differences between BAs and entrepreneurs' perspectives. *To develop oneself* ranked first in the list of goals identified by BAs, with BAw(g)=100, is much lower in the list based on entrepreneurs' opinions (Ew(g)=47), which reveals a substantial difference between the two groups. *To develop oneself* includes issues related to personal and professional development and continuous learning. The explanation for the first place in the BAs ranking is that probably BAs recognise in their activity an opportunity for personal development, expanding their knowledge, as well as their skills in specific areas of investing. The results confirm the stream of angel literature suggesting that BAs appreciate the immediate benefits and outcomes obtained by the proximity of experienced angel investors (Mason, Botelho, & Harrison, 2013a; San José, Roure, & Aernoudt, 2005).

Co-invest and learn with successful BAs are also mentioned as important reasons to be an angel (Preston, 2004). BA investing is also understood as a two-way learning street since BAs learn from entrepreneurs as entrepreneurs learn from BAs (Rose, 2014). Different perceptions also occur in other goals such as to do networking, ranked BAw(g)=59 and Ew(g)=23, revealing that BAs want to continue doing their networking much more than entrepreneurs perceive (Tables 2.2 and 2.4). *To support their own country* obtained BAw(g)=35 and Ew(g)=7, showing higher patriotic motivations among angels than entrepreneurs think.

Another notable discrepancy is found in the goal to be successful. However, in contrast, this goal is highly ranked by the entrepreneurs, with Ew(g)=67, only getting BAw(g)=9 in the view of BAs. These findings suggest that BAs, known as successful people (e.g. Fili, 2014; Mason & Botelho, 2014), are not likely to expect angel activity to contribute directly to enhancing their success. One possible explanation is that BAs ground their success indirectly on the entrepreneurs' success, who effectively have the hard work to lead the startup and push for its success (Eric, 2011; Hill & Power, 2002; Shane, 2009). The BA goal *to improve one's self-esteem* was recognised as considerably central by both BAs (BAw(g) = 80) and entrepreneurs (Ew(g) = 100), with the latter finding this to be the most central BA goal, jointly with to make money. According to the literature, self-esteem comprises social recognition and status (Rose, 2014), to make a huge difference in people's lives (Peterson & Murtha, 2010) and give an investor's life meaning (Politis & Landstrom, 2002), among other issues. Other symbolic goals considerably central to both BAs and entrepreneurs are *to feel fulfilled* (BAw(g) = 79, Ew(g) = 60) and *to be updated* (BAw(g) = 74, Ew(g) = 80).

Several entrepreneurial goals have been identified. Three of them are ranked in the list of the ten most central goals in the set of BAs or in the set of entrepreneurs - to support innovation, to mentor entrepreneurs, and to invest in new business. While to support innovation BAw(g) = 94 and to mentor entrepreneurs BAw(g) = 71 emerged as central for BAs goals, it is surprising that to mentor entrepreneurs Ew(g) = 30 is ranked low by entrepreneurs. These results suggest that BAs and entrepreneurs may have different expectations regarding the angel role. Angels expect to contribute with high levels of mentoring and money (entrepreneurial role) while entrepreneurs expect angels to contribute with much more money than mentoring, configuring a stronger financial view of the angels' profile (financial role).

Finally, the low ranking of *to have a great exit* is remarkable in both groups – entrepreneurs (Ew(g)=3) and BAs (BAw(g)=12). Two situations may occur here. First, to work toward exits seems a low priority for BAs, as suggested by Van Osnabrugge (2000), who argues that BAs prefer to wait for VCs to do the exit part of the job, even if the main challenge for BAs is to achieve an exit (Mason et al., 2015). Secondly, it is quite unlikely for BAs *to have a great exit* since research shows that only 7% of angel exits achieve returns above ten times the invested capital, and only 1% above 30 times (Rose, 2014; Wiltbank & Boeker, 2007). Perhaps BAs are not over-enthusiastic about exits or do not have easy access to those startups that permit fantastic exits and become unicorns (Aldrich & Ruef, 2018), because they are rare. Possibly, BAs get satisfaction from the process more than from the final result, becoming satisfied to invest in accessible and local startups, just for the pleasure of the entrepreneurial "game". Perhaps *to have a great exit* is perceived as a barely achievable goal, with a small probability of success.

#### Table 2.1 - Business angels' goals categorisation examples (continues)

Economic goals	Goals result from putting money into a startup with an expectation of economic gain within a certain time.				
To make money	E.g. To earn money; get more money; obtain extra income; I want to broaden my income; avoid losing money.				
To manage risk	E.g. Risk diversification; never rely on just one income; to spread my risk; investment diversification.				
To get a high ROI	E.g. I may get a good return on investment; capital growth; maximise investment return; ROI; potential high ROI.				
Functional goals	The goals are instrumental and deliver what is expected. The functional goals are based on convenience and efficiency. Examples: to save time and effort.				
To invest conveniently	E.g. Lack of time for direct management; more time for other activities; I have time and availability; it is a qualified investment type; greater scrutiny of each business; doing so with limited risk; diversification and collective investment decision; a good business decision.				
To reinvest	E.g. I can reinvest some of the capital; continue the investment cycle; reinvest in more startups; increase the invested capital; continue to invest; continue to invest in startups; invest in more ideas; increase the number of investees.				
To benefit from public incentives	E.g. To benefit from additional public investments; enjoy tax benefits; minimise tax losses; benefit from public co-investment.				
Emotional goals	Goals related to emotions and experiences, playful activities, hedonic sensations, or the excitement and stimulation of investor senses				
To live a pleasant life	E.g. To live comfortably; because I want to retire early and enjoy life; playing is an important part of life; allows a comfortable life for my family and me.				
Tobe active	E.g. Keeping alive and aware; the intellectual stimulus, helps keep me mentally alive; prolonging the connection to the business world; gives me a way to remain in the market; keep healthy; to keep the mind working; feel involved; active participant in something positive for society; train the brain; I am retired, I do not expect to retire at 65 and play cards; I hope being an angel investor is a kind of a mental gym for me.				
E.g. It is an inspiring experience; participate in new challenges; because I like risk and adrenaline; passion/interest in a particular idea; informal ar effervescent business world; dare to interact with different professional worlds with different visions and personalities, to venture through new pro- roads.					
To have fun	E.g. For the fun of beating the risk / reward matrix; for fun; a playground; a game and it depends on having guts; some play cards, some play video games, BAs play startups; have fun while trying to support someone with money, experience and ideas; because work is very good, but it is not everything.				
Symbolic goals	Goals related to personal transformations and social meaning, or gains in social contexts, positive meanings attached to the self, improvement of self- esteem, altruism.				
To develop oneself	E.g. Personal and professional growth; continuous evolution and personal growth; personal evolution and continuous learning; improve personal and professional level; develop myself on a personal and professional level; be more efficient; perceive the world better and make better decisions; personal development; enrich me with different but convergent ideas and principles; grow as a person; grow as a business-person; improve my skills in analysing startups; carry on developing know-how; improve my bottom line in the evaluation of investments; allow me to enrich my method of risk analysis; I make better investments; better decisions on future investments; absorb experiences of successful people with a given track record.				
To improve one's self-esteem	E.g. Increase my status; pursue social / emotional wealth; personal recognition; social recognition; be recognised as an expert.				
To feel fulfilled	E.g. Personal fulfilment; personal fulfilment and happiness; personal satisfaction; get personal satisfaction; for a greater fulfilment and connection with people; like what I do; makes life more interesting; pleasure to learn and perform; have a better life experience for myself; personal achievement; personal satisfaction; personal fulfilment and satisfaction, life meaning; besides the intellectual stimulus, will also help me become a well-rounded business person; self-fulfilment; to live with a purpose; a sense of purpose.				
To be updated	E.g. to be updated on the world evolution; to be updated on the evolution of things; being online; continuous update; stay young with the young; staying young (not getting old); maintain a business vision open to new opportunities and trends; anticipate future developments; get up to date and up to date in technology and innovation; contact with a new reality for me; to know first-hand innovative services and products; be aware of new trends in the market; identify trends to track my customers better; better understand the motivations of the young generations; get contact with new ideas and new people; remain in touch with the most innovative part of business life; because the world changes every day and is always innovating; to be updated on new technologies and business models.				

#### Table 2.1 - Business angels' goals categorisation examples (continuation)

Entrepreneurial goals	Goals directly associated with BA activity related to involvement with entrepreneurs and the ecosystem
To support innovation	E.g. Enjoy innovation and being in the front-runner group; innovation is part of professional life; take part in innovative projects; be involved in an ecosystem of innovation; contribute to an innovative business; being able to test more ideas/innovation; I support innovation, and some ideas will explode; being part of creating solutions for the world; stay connected to innovative projects; strengthen innovation; helping to create innovative projects; opportunity to keep in touch with the innovation ecosystem; take an active role in technological and scientific progress; be curious about technology; contribute to the development of innovative ideas.
To mentor entrepreneurs	E.g. To support new entrepreneurs with my experience; I like to help entrepreneurs to avoid strategic mistakes; advise people from new startups because with good advice entrepreneurs can do better; feel able to make the difference in startups through my experience; it is not like investing in the stock market, as an investment angel I can participate and guide the decisions of the founders; I want to support entrepreneurs because I know how difficult it is; help entrepreneurs to make their dreams come true; interact with entrepreneurial people with a missionary spirit; help entrepreneurs not to repeat the same mistakes I made; opportunity to share experiences and strategic reflection with entrepreneurs; deliver added value to entrepreneurs; my experience in some areas may be helpful; help others grow faster; helping entrepreneurs to succeed.
To have a great exit	E.g. To have a great exit; be a shareholder in a unicorn; what is relevant for me are the exits and not the accounting evaluations; exit is the orgasm of the BA.
To awaken the angel identity	E.g. Because I'm an entrepreneur; a BA is also an entrepreneur; the BA is an entrepreneur and a natural strategist; I have in essence the taste for entrepreneurship; I know what it means to be an entrepreneur; I've been there doing that; entrepreneurial nature; my essence of life; I do not want to work for others; I want to be in control of my time resources; I want to be in control of my time and energy; because I have ownership of my destiny.
To be part of entrepreneurship	E.g. Access to the ecosystem; help entrepreneurship; passion for entrepreneurship; participate in the entrepreneural community; because I see the future of entrepreneurship; involvement with the entrepreneur community; I believe in entrepreneurship and innovation; contribute to the development of the ecosystem; being inside and at the front of new business ideas and new technologies; entrepreneurship represents courage and freedom; join the community of entrepreneurs; contact with entrepreneurs of a new generation; maintain contact with the business world; support entrepreneurship; contribute to entrepreneurship in my country; support the local ecosystem.

Economic	Ew(g)	BAw(g)	Functional	Ew(g)	BAw(g)	Emotional	Ew(g)	BAw(g)	Symbolic	Ew(g)	BAw(g)	Entrepreneurial	E(wg)	BAw(g)
to make money	100	85	to benefit from public incentives	0	12	to live a pleasant life	47	68	to develop oneself	47	100	to support innovation	63	94
to manage risk	60	68	to grab the opportunity	27	9	to have challenging experiences	43	56	to improve one's self- esteem	100	82	to mentor entrepreneurs	30	71
to get a high ROI	73	59	to reinvest	17	9	to be active	20	50	to feel fulfilled	60	79	to invest in new business	70	56
			to plan my career	3	9	to socialise with great people	40	32	to be updated	80	74	to help startups grow	57	47
			to invest conveniently	23	6	to be happy	30	29	to learn	57	68	to be part of entrepreneurship	53	38
			to fit basic needs	13	3	to take care of my family	13	21	to do networking	23	59	to create an entrepreneurial legacy	20	32
						to have fun	20	21	to share knowledge and experience	63	56	to interact with other angels	3	29
						to be part of something extraordinary	10	18	to make a better world	57	41	to awake the angel identity	50	18
						to have a hobby	10	6	to give back to society	30	41	to be involved with startups	23	18
									to support own country	7	35	to have a great EXIT	3	12
									to express benevolence	33	29			
									to be successful	67	9			

#### Table 2.2 - Business angel goals ranked by weighted Degree algorithm (transformed into a 0-100 scale)

Economic	E PR(g)	BA PR(g)	Functional	E PR(g)	BA PR(g)	Emotional	E PR(g)	BA PR(g)	Symbolic	E PR(g)	BA PR(g)	Entrepreneurial	E PR(g)	BA PR(g)
to make money	14.32	32.46	to reinvest	9.37	12.28	to be happy	83.75	94.79	to feel fulfilled	100.00	100.00	to mentor entrepreneurs	11.91	26.35
to manage risk	13.32	20.34	to plan my career	6.87	6.78	to have challenging experiences	5.82	58.07	to express benevolence	17.85	88.29	to support innovation	11.04	21.87
to get a high ROI	11.61	16.12	to benefit from public incentives	0.00	5.92	to live a pleasant life	19.07	43.81	to improve one's self- esteem	48.72	67.64	to awake the angel identity	15.65	17.83
			to fit basic needs	8.95	5.89	to take care of my family	6.77	22.19	to give back to society	21.26	43.32	to invest in new business	8.50	16.19
			to invest conveniently	6.38	5.01	to be active	6.89	18.88	to develop oneself	19.43	33.76	to be part of entrepreneurship	8.64	12.74
			to grab the opportunity	5.63	4.34	to be part of something extraordinary	5.74	17.82	to make a better world	34.90	27.61	to help startups grow	15.51	12.53
						to socialise with great people	12.20	12.90	to be updated	18.17	23.87	to create an entrepreneurial legacy	16.76	9.98
						to have fun	5.02	10.30	to share knowledge and experience	22.17	15.79	to have a great EXIT	2.73	7.26
						to have an hobby	4.09	5.52	to learn	24.65	15.04	to interact with other angels	2.73	5.32
									to support own country	3.34	14.74	to be involved with startups	3.77	3.77
									to do networking	8.85	10.42			
									to be successful	28.67	4.83			

 Table 2.3 - Business angel goals ranked by PageRank PR(g) algorithm (transformed into a 0-100.00 scale)

Comparing at a glance the two short-term perspectives that come out of the weighted Degree algorithm – from BAs and entrepreneurs - (see Table 2.4), one main conclusion emerges. There are two angel investor prototypes. While BAs emphasise the continuity of the entrepreneurial career with self-development and support for innovation as priority goals (the entrepreneurial role), entrepreneurs' view of BAs' goals emphasises financial investors' economic perspective, concerned with making money (financial role). This research suggests that entrepreneurs do not perceive how relevant some non-economic goals are for BAs, such as developing themselves continually, in connection with the entrepreneural world, learning, supporting innovation and mentoring entrepreneurs. Entrepreneurs understand to make money as the most important goal for BAs, jointly to improve one's self-esteem. These different perceptions can make entrepreneurs invest in aspects of the BA-entrepreneur relationship that are not so relevant for angel investors and give less time and effort to other important BA goals.

An analysis of the centrality of goals, calculated through the PageRank algorithm (Tables 2.3 and 2.5), produces some relevant conclusions. As expected, there is a clear dominance of symbolic and emotional goals among the most central goals perceived by BAs and entrepreneurs. The goals identified by BAs as most desirable long-term goals were to feel fulfilled (BA PR(g)=100), to be happy (BA PR(g)=94.79) and to express benevolence (BA PR(g)=88.29). These goals include personal satisfaction, personal fulfilment, personal gratification, happiness, the desire to help others, and a sense of purpose and life meaning (see Table 2.1 for details). This research supports the idea that angel activity can be pleasurable for the BA, creating a sense of satisfaction and sheer joy (Benjamin & Margulis, 2005), giving BAs the possibility to express their benevolence through helping entrepreneurs (Kotler, Kartajaya, & Young, 2004). Also, they invest for altruistic reasons supporting useful social innovation and creating local jobs (Ibrahim, 2008), giving meaning to their life as investors (Politis & Landstrom, 2002).

Analysing Tables 2.3 and 2.5 no substantial differences are found in the results of longterm BA goals perceived by BAs and entrepreneurs. However, some exceptions are noted. BAs expect more long-term emotional outcomes than entrepreneurs understand since almost all these outcomes have a higher ranking among BAs than among entrepreneurs. Another notable issue is the symbolic goal to express benevolence, ranked BA PR(g)=88.29 by the BAs and only E PR(g)=17.85 by the entrepreneurs. Many BAs understand the investing activity as a way to express their benevolence, although entrepreneurs almost ignore this goal. Perhaps BAs do not like to admit to entrepreneurs that, behind the financial investor, a person is searching for emotional and symbolic value. Therefore, BAs do not disclose or express some hidden aspects of their motivations and personal intentions.

	Business angel goals by busi	ness angels	5	Business angel goals by entrepreneurs					
Ranking	Goal	Weight BAw(g)	Туре	Ranking	Goal	Weight Ew(g)	Туре		
1	to develop oneself	100	Symbolic	1	to make money	100	Economic		
2	to support innovation	94	Entrepreneurial	2	to improve one's self-esteem	100	Symbolic		
3	to make money	85	Economic	3	to be updated	80	Symbolic		
4	to improve one's self-esteem	82	Symbolic	4	to get a high ROI	73	Economic		
5	to feel fulfilled	79	Symbolic	5	to invest in new business	70	Entrepreneurial		
6	to be updated	74	Symbolic	6	to be successful	67	Symbolic		
7	to mentor entrepreneurs	71	Entrepreneurial	7	to share knowledge and experience	63	Symbolic		
8	to learn	68	Symbolic	8	to support innovation	63	Entrepreneurial		
9	to live a pleasant life	68	Emotional	9	to manage risk	60	Economic		
10	to manage risk	68	Economic	10	to feel fulfilled	60	Symbolic		

 Table 2.4 - Top ten angel goals ranked with weighted Degree algorithm

Figures 2.1 to 2.4 provide relevant information through the graph representation of the angel goals. The nodes represent the goals that motivate BAs to be business angels. The edges show the relationship or path between each node and the destination-nodes, identified through the answers to the "why" questions. Consequently, these graphical representations show the goals that make other goals achievable and what goals enable specific goals to be reached. The findings reveal, for example, that the most robust relationship involving the money goal is the following: *to get a high ROI ->to make money ->to live a pleasant life* (Figures 2.1 and 2.2).

For an angel investor, making money is an obvious measure of success (Riding, 2008), but giving back to society, supporting innovation and sharing experience are admirable goals in the community's eyes (Severinsen et al., 2012). All the previous goals contribute to increasing BAs' self-esteem and guarantee the respect and admiration of others. The non-obvious curiosity is that the factors contributing to the ranking of BAs' self-esteem in the entrepreneurs' view are not the same factors expressed by the BAs. Considering entrepreneurs' opinion, Figure 2.2 shows the main contributors to improving one's self-esteem were the goals to give back to society, support innovation, make money, express benevolence, and *share knowledge and experience*. Contrarily for BAs, the most relevant contributor to improve angels' self-esteem is the goal *to develop oneself*. Still, entrepreneurs are not aware of this goal's relevance (see *to develop oneself* in Figure 2.1 and Figure 2.2). Furthermore, results reveal that the first ranking position of *to develop oneself* according to angels (Figure 2.1), relates with the goals: *to learn, to do networking, to be updated*, and *to interact with other angels*.

#### Table 2.5 - Top ten angel goals ranked with PageRank algorithm

	Business angel goals by busir	ness angels		Business angel goals by entrepreneurs					
Ranking	Goal	BA PR(g)	Туре	Ranking	Goal	E PR(g)	Туре		
1	to feel fulfilled	100	Symbolic	1	to feel fulfilled	100	Symbolic		
2	to be happy	94.79	Emotional	2	to be happy	83.75	Emotional		
3	to express benevolence	88.29	Symbolic	3	to improve one's self-esteem	48.72	Symbolic		
4	to improve one's self-esteem	67.64	Symbolic	4	to make a better world	34.9	Symbolic		
5	to have challenging experiences	58.07	Emotional	5	to be successful	28.67	Symbolic		
6	to live a pleasant life	43.81	Emotional	6	to learn	24.65	Symbolic		
7	to give back to society	43.32	Symbolic	7	to share knowledge and experience	22.17	Symbolic		
8	to develop oneself	33.76	Symbolic	8	to give back to society	21.26	Symbolic		
9	to make money	32.46	Economic	9	to develop oneself	19.43	Symbolic		
10	to make a better world	27.61	Symbolic	10	to live a pleasant life	19.07	Emotional		

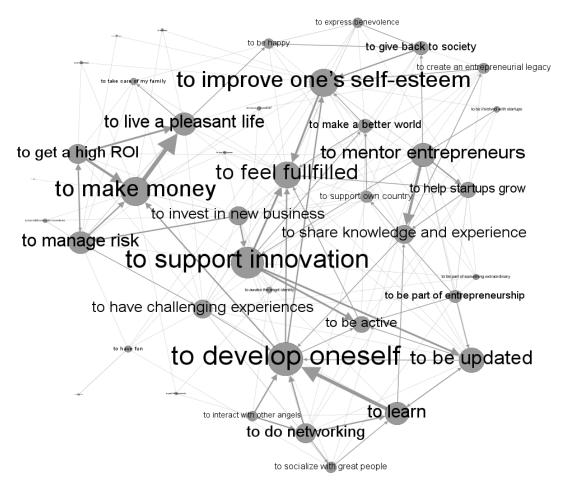


Figure 2.1 - Angel investors' goals identified by business angels, using the weighted Degree algorithm

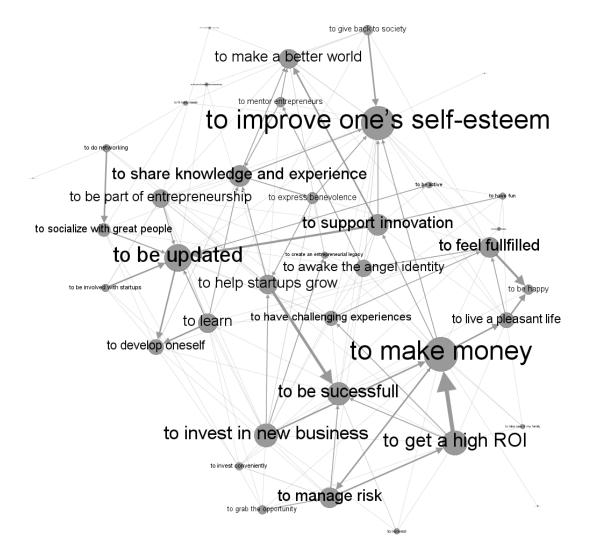


Figure 2.2 - Angel investors' goals identified by entrepreneurs, using the weighted Degree algorithm

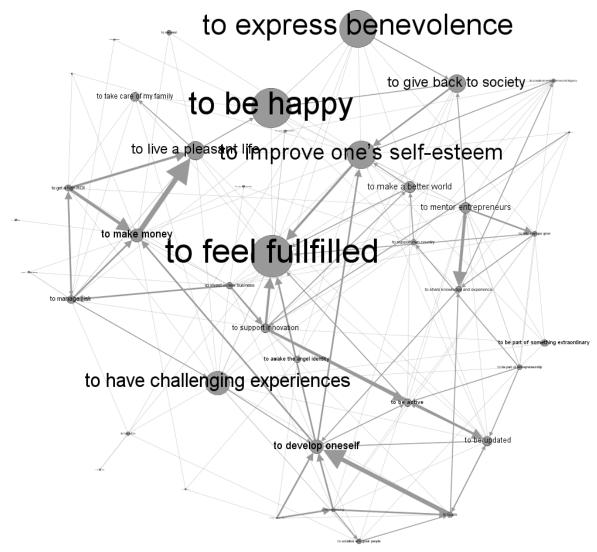


Figure 2.3 - Angel investors' goals identified by business angels, using the PageRank algorithm

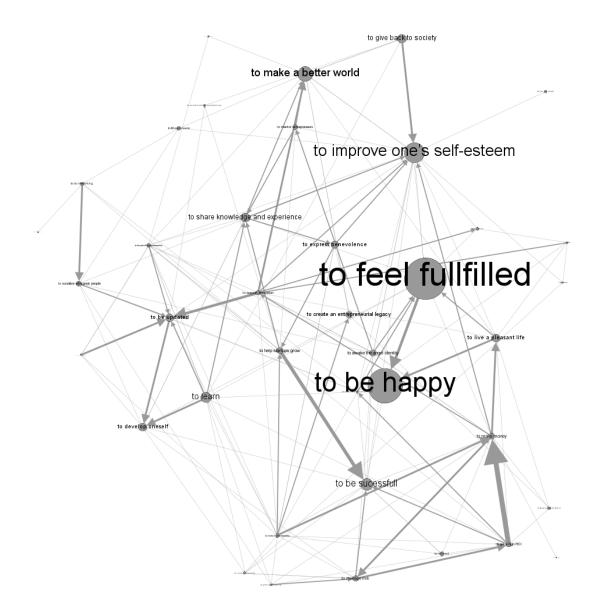


Figure 2.4 - Angel investors' goals identified by entrepreneurs, using the PageRank algorithm

## **2.5** Conclusions and implications for the angel ecosystem

This paper makes an in-depth analysis of the reasons behind angel investing as understood by angels and entrepreneurs, based on a means-ends chain and network analysis algorithms.

### 2.5.1 Conclusions

As far as theoretical contributions are concerned, first, the paper brings marketing and consumer behaviour theory into angel research, providing tools and methodologies that enable a holistic and integrated view of the business angel investor. More specifically, this research uncovers BAs' goals, represented in five dimensions including the four mentioned in the literature on perceived investment value – economic, functional, emotional and symbolic– and highlights the relevance of entrepreneurial goals.

Second, the hierarchy of goals identified through the in-depth network analysis identifies the most relevant short-term and long-term BA goals, revealing considerable differences in BAs and entrepreneurs' perception of several issues. Concerning short-term goals, economic goals such as to make money are considered relevant by both groups, but mainly by entrepreneurs. The results suggest that entrepreneurs tend to overestimate the importance of some economic goals for angels - e.g. to earn money; and to get a high ROI - and to underestimate the relevance of some symbolic goals – e.g. to develop oneself - that suggest a career development motivation (Politis & Landstrom, 2002). Entrepreneurs also tend to underestimate the importance of some BA goals – e.g. support innovation and mentor entrepreneurs – that favour angels' deep connection with entrepreneurship (Rose, 2014; Wade et al. 2003). It is interesting to note that there is a prevalence of symbolic and emotional goals among long-term goals such as to feel fulfilled, be happy, and express benevolence. In this case, there is some homogeneity between the perspectives of the two groups. However, small differences can be noticed, with BAs assigning more relevance to emotional goals, while entrepreneurs seem not able to understand the importance BAs give to certain symbolic angel goals, e.g. to express benevolence.

Considering all the findings of this research, one can infer that for BAs the act of investing is the opportunity, or the instrument, to achieve other types of higher goals besides money, associating the dominant perception of value with the opportunity for selfdevelopment, to feel fulfilled and continue the entrepreneurial career. Contrarily, the entrepreneurs tend to focus their perspective about angels on the economic goals, maximising their expectations, scope and perception of value on the financial role.

### 2.5.2 Implications

### 2.5.2.1 Implications for business angels

This research helps BAs identify, evaluate, and define their own goals. To develop oneself is considered by BAs their most important short-term goal, expressing the aim to grow as a person, improve investor skills, learn, and share new ideas. To support innovation is the second most important goal, reflecting BAs' entrepreneurial nature and their passion for innovation (Cardon et al., 2009). The ultimate long-term goals are to be fulfilled, to be happy and to express benevolence to others. All these goals corroborate the BA literature confirming the perspective that BAs are not purely financial investors (e.g. Festel & De Cleyn, 2013; Politis & Landstrom, 2002; Rose, 2014), and are quite different from VCs in several aspects (Hsu et al., 2014). BAs should be aware of and positively admit their uniqueness, as well as being transparent enough to share their goals with entrepreneurs and gatekeepers to be treated differently. In addition to economic goals, BAs have symbolic and emotional outcomes they need to pursue in order to make their BA experience more complete and satisfactory. BAs need to define their investor identity, identifying the goals they want to achieve in the short and long term. They should plan their BA career to achieve what they aim for, selecting the BA groups, startups and type of involvement and exit that match their goals and values.

### 2.5.2.2 Implications for entrepreneurs

Previous research supports the idea that BAs are strongly influenced by the perception of whether or not they share the same goals with the entrepreneurs they deal with (Bammens & Collewaert, 2014; Collewaert, 2012). A substantial degree of goal alignment between BAs and entrepreneurs is a sine qua non condition for both parties to achieve successful outcomes (Brettel, 2003; Politis, 2008). Entrepreneurs can prepare a pitch, frame the involvement, motivate and attract BA investment, using the appropriate reasons to persuade each type of BA to achieve a deeper alignment of goals and values. If entrepreneurs perceive the importance of certain goals for angel investors, they are more likely to manage the BA-entrepreneur relationship and increase the overall satisfaction of the BA experience. For example, to mentor entrepreneurs may be a relevant goal for a certain BA. In case the entrepreneur creates operational conditions to be mentored there is a higher likelihood of a match, contributing to a more satisfactory experience for both BA and entrepreneur, and enhancing the BA's desire to continue to invest in later rounds. Likewise, managing startup risk can be considered by some BAs as the strongest pillar to control their investment and earn money. In that case, entrepreneurs should consider regularly reporting, and involving BAs to give them the possibility of monitoring, decreasing their perception of risk.

### 2.5.2.3 Implications for gatekeepers and angel leaders

Gatekeepers and BA network leaders should understand that BAs pursue symbolic, emotional, functional, economic and entrepreneurial goals. It is important not to manage BAs as purely financial investors because they are not. This research suggests that managing efficiently BAs implies to help them achieve their multiple goals. The gatekeeper should design BA group activities according to the profiles and the BA group' goals. If the BA goal is to have a fast financial return, then the initial investment should be made at a later-stage, and partial or total exits should be planned and maximized as soon as possible. Suppose the main goal is to have a good time and extract emotional outcome. In that case, the events should be prepared to offering pleasant business moments in attractive premises, with good food and drink, and enough time for easy socialising. Understanding how certain goals are relevant for certain angel investors can align investor expectations, improve communication and define strategies that help BAs have a better involvement experience and satisfaction.

### 2.5.2.4 Implications for policymakers

Firstly, policymakers should implement measures that stimulate BAs' personal and professional development. BAs identified to develop themselves as their most relevant short-term goal. The development of training programs, the stimulation of BA grouping and association, the creation of new learning environments close to entrepreneurs and innovation and all the measures that reinforce certification and angel professionalisation respond to major short-term BA goals. Secondly, making money is not perceived as a long term goal in the perception of BAs and entrepreneurs. Unfortunately, in the startups' world, money recovery and re-capitalisation through an exit for an angel is a long term journey that occurs typically in a period of five to seven years or more (Mahapatra, 2014). Policymakers should increment measures that anticipate alternative forms of earlier capitalisation and financial return for angel investors, such as a secondary BA market, and tax benefits that may compensate for the long financial wait. Tax compensation, politically justified by a higher entrepreneurial purpose, can be understood by BAs as an alternative way to manage risk investing to benefit the entrepreneurial development of the local community (Farrell, 2005). Another highly appreciated measure could be the possibility, or even the obligation, of part of public co-investments with VCs being used to replace the BAs in the startups, allowing them to exit and recover their investments sooner. BAs could reach their medium-term economic goals exiting more rapidly, anticipating the virtuous cycle of reinvesting in new startups, retaining local talent, supporting innovation, and creating more qualified jobs that will please political forces (S. A. Shane, 2009).

## **2.6** Contributions, limitations and future research

The present study has some main contributions. Firstly, to BA research, bringing a holistic marketing perspective to the discussion about the purpose, motivations and goals of angel investors that have been dominated by financial and economic behavioural perspectives. A second substantial contribution is a broader view of angel investor goals and how they are materialised in angels and entrepreneurs' mindset. Additionally, this research uses social network algorithms for data analysis and visualisation, without which it would be almost impossible to interpret and hierarchise short-term and long-term goals. 883 BA goals were identified and organised in five meta-goal categories: economic, functional, emotional, symbolic and entrepreneurial. It was possible to conclude that for BAs, the act of investing is the opportunity or the instrument to achieve higher goals that go beyond economic motivation. The dominant angel perception of value is associated with the chance to develop oneself, feel fulfilled and continue the entrepreneurial career. Additionally, in some cases, entrepreneurs were found to have a distinct perception of BAs' goals, which may hinder goal alignment and achievement of both sides' excellent experiences. Finally, this research contributes to incorporating goal behaviour theory in angel practice, providing practical guidelines for several players in the angel ecosystem.

Despite these contributions, the study has some limitations. Since the BA population is very heterogeneous (Kelly, 2007; Politis, 2008), and the present study is qualitative, pointing to detailed considerations on a small scale, this research should be extended and validated in future research using quantitative multivariate techniques. It would be highly relevant to analyse the relationship and impact of angel goals on some complex factors, such as investment strategy, angel career, type of involvement, and exit strategy. It would also be important to analyse if there are different BA profiles according to the hierarchy of goals, and how goals change in the angel career course. Finally, it will be interesting to continue incorporating marketing and consumer behaviour theory into the entrepreneurship field, developing a higher understanding of how angels' and entrepreneurs' goals can be aligned to reach the common entrepreneurial purpose of startup development and value creation.

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# Appendix 2.1 – Questionnaire administered to BAs and entrepreneurs

For BAs: Please indicate the four main reasons why it is important for you to be an angel investor (begin from the bottom to the top)

For Entrepreneurs: Please think about the BAs you are related to. From your experience with BAs, indicate the four main reasons why you think it is important for a BA to be an angel investor (begin from the bottom to the top)

↑ why is this reason important?	↑ why is this reason important?	↑ why is this reason important?	↑ why is this reason important?
↑ why is this reason important?	↑ why is this reason important?	↑ why is this reason important?	↑ why is this reason important?
↑ why is this reason important?	↑ why is this reason important?	↑ why is this reason important?	↑ why is this reason important?
↑ why is this reason important?	↑ why is this reason important?	↑ why is this reason important?	↑ why is this reason important?
1 <sup>st</sup> reason to be an angel investor	2 <sup>nd</sup> reason to be an angel investor	<sup>3rd</sup> reason to be an angel investor	<sup>4th</sup> reason to be an angel investor

Business angels' goals identified by business angels			IN	21 0	a 10	ר 1	1 -	- A	2	2	27	16	0	10 1		1	1 10		16 3	0 5 1	0	12 1	2 4		2	<b>F</b> 1	0	0 7	10	0	46	8	7
business angels	Abstractness	Ουτ	Goal number																														
to develop oneself	62%	13	1			-			Ū	-		3					3	_		3		2											
to learn	39%	14	2	7	2				-			-		1	-		-			-			2 1		1				-			-	_
to share knowledge and experience	53%	9	3	2 :	1																1					2	1			2			
to invest conveniently	50%	1	4														1																
to grab the opportunity	33%	2	5									1					1																_
to reinvest	67%	1	6																1														
to invest in new business	21%	15	7						1	1	1	1	3	1			1										1		3	1		1	
to plan my career	67%	1	8									1																					
to benefit from public incentives	50%	2	9									1	1																				
to have a great EXIT	75%	1	10																	1													
to get a high ROI	35%	13	11									5	2					1	4	1	L											$\square$	
to make money	55%	13	12				:	1 1					1			1	1		8													$\square$	
to manage risk	39%	14	13			1				1 :	1 3	3		2				1											1			$\square$	
to have challenging experiences	53%	9	14	2							1							1	1	1			1	1		1							
to have a hobby	50%	1	15												1																		
to have fun	29%	5	16										1	1 1	L					1											1		
to fit basic needs	ignored	0	17																														
to awake the angel identity	67%	2	18					1																					1				
to improve one's self-esteem	68%	9	19				:	1									1			4						1				1			1
to take care of my family	71%	2	20																	1	1												
to live a pleasant life	70%	7	21										1				1	2		1	2												
to feel fulfilled	93%	2	22											1							1												
to be successful	33%	2	23									1					1																
to be happy	90%	1	24																												1		
to be active	71%	5	25																	2			1							1		1	
to be updated	52%	12	26	2 2	2												1		1	1		2							2		1		
to do networking	30%	14	27	3 3	3			1														1	1	2	1		1				1		
to socialize with great people	45%	6	28	1 2	2									1	1								1	L									
to interact with other angels	20%	8	29	3			1									:	1						3	3									
to create an entrepreneurial legacy	45%	6	30							:	1						2			1											1		1
to be part of something extraordinary	67%	2	31																									1		1			
to help startups grow	50%	8	32		2	:														2		1				1					1	1	
to be involved with startups	0%	6	33		1												1										1		2	1			
to be part of entrepreneurship	15%	11	34											1								2	2	1		1	1			1	2		
to support innovation	31%	22	35	1 1	1					:	1 1			1						4		4	4			1 1					1	2	
to mentor entrepreneurs	33%	16	36		5						1						1						1	1		1	3	1					2
to express benevolence	40%	6	37														1			1	1											1	2
to support own country	50%	6	38					1	1					1															1			2	
to make a better world	57%	6	39														2			2	1												1
to give back to society	50%	7	40														1 3				2		T								1		

# Appendix 2.2 -Business Angels' goals implication matrix – Goals identified by business angels

Business angels' goals identified by																																	
entrepreneurs			IN	10	7 8	3	4	4 4	1	0 (	0 5	14	8 4	4 1	2	2	7 20	3	8 13	15	8 3	3 14	2	7	) 4	2	8	2 4	8	4	5 1	13	4
	Abstractness	OUT	Goal number	1	2 3	4	5	6 7	8	91	10 11	12	13 1	4 15	16	17 1	8 19	20	21 22	23	24 2	5 26	27	28 2	9 30	31	32 3	3 34	35	36 3	37 38	39 4	10
to develop oneself	71%	4	1		1								1						1	1													
to learn	41%	10	3	3	2	1																2						1					1
to share knowledge and experience	42%	11	3	1													2		1								1	1		1	2	2	
to invest conveniently	43%	4	4	1									1	1						1													
to grab the opportunity	50%	4	5		1								2											1									
to reinvest	80%	1	6																	1													
to invest in new business	19%	17	7	:	1	1	1	1				3	1 :	1						1					2		2	1	1		1		
to plan my career	ignored	0	8																														
to benefit from public incentives	ignored	0	9																														
to have a great EXIT	0%	1	10									1																					
to get a high ROI	23%	17	11		1		1	1 1				7		2				1	1	2													
to make money	47%	16	12				1	1					3				1 2	1	3 1	1									2				
to manage risk	44%	10	13			1	1				3	2					1			2													
to have challenging experiences	31%	9	14		1										1		1 1		2	1		1		1									
to have a hobby	33%	2	15												1		1																
to have fun	33%	4	16																1		1	L							2				
to fit basic needs	50%	2	17																				1									1	
to awake the angel identity	47%	8	18									1					1		2					1					1	2			
to improve one's self-esteem	67%	10	19		1				1							1	1		1 1											1	1	1	1
to take care of my family	75%	1	20																						1								
to live a pleasant life	57%	6	21															1	2		3												
to feel fulfilled	72%	5	22		1																4												
to be successful	75%	5	23					1			1						1 1				1												
to be happy	89%	1	24																1														
to be active	50%	3	25														1		1										1				
to be updated	58%	10	26	3	1			1									1				1	2		1		1							
to do networking	29%	5	27										:	1										3			1						
to socialize with great people	58%	5	28	1												1	1					2											
to interact with other angels	0%	1	29																				1										
to create an entrepreneurial legacy	67%	2	30																												1	1	
to be part of something extraordinary	67%	1	31																														1
to help startups grow	47%	9	32		2	2														5						1		1					
to be involved with startups	29%	5	33	1																		3						1					
to be part of entrepreneurship	25%	12	34	:	1			1			1						1 1					2					1	1	1		1	1	
to support innovation	42%	11	35														1 2		1			4										3	
to mentor entrepreneurs	44%	5	36		2	2																					1					2	
to express benevolence	50%	5	37					1									2										2						
to support own country	50%	1	38																								T					1	
to make a better world	76%	4	39														1		1						1								1
to give back to society	44%	5	40														3		1													1	

# Appendix 2.3 -Business Angels' goals implication matrix – Goals identified by entrepreneurs

# Chapter 3 - What's in it for me? The perceived investment value of business angels

## Abstract

**Purpose** - Besides the extraordinary impact of Business Angels (BAs) as the leading contributors to fund entrepreneurship at the early stage, the value BAs perceive from their investment activity has not yet been fully explored. Based on a holistic perspective resulting from the point of view of marketing and consumer behaviour, this article builds on the concept of perceived investment value to create a new instrument that investigates angels from a holistic approach. It assesses the value perceived by angels in six distinct dimensions - economic, functional, emotional, altruism, self-esteem and entrepreneurial.

**Design/methodology/approach** – Data were collected through a survey questionnaire with 849 BAs from 79 countries. The instrument created was tested through Structural Equation Modelling (SEM) using AMOS.

**Findings** - The results reveal that: (i) BAs are not pure financial investors and expect more than just money from their activity; (ii) angel perceived investment value positively influences their job satisfaction, and (iii) angels satisfied with their jobs are more likely to reinvest their money and engage in positive word-of-mouth.

**Originality** – The development of a scale to measure the angel perceived investment value (APIV), due to the current lack of an instrument to assess this construct. The paper makes it possible to understand the relevance of the non-economic outcomes of investment, including entrepreneurial, emotional and symbolic value. The implications and guidelines for gatekeepers, entrepreneurs and angel leaders are directed at enhancing the perception of value and guaranteeing the maximum satisfaction from angel investment activity.

**Keywords**: Business angel; Angel investor; Perceived investment value; Angel perceived investment value; Entrepreneur; Angel network; Investor goals

# 3.1 Introduction

Business angels (BAs) perform a crucial role in funding companies that are in their initial stages. However, despite the increasing attention assigned by researchers over time to identify distinct BA profiles (e.g., Mason, 2008; Morrissette, 2007; Tenca, Croce, & Ughetto, 2018), there is not enough research to fully understand their characteristics and

motivations (White & Dumay, 2017). Moreover, a clear framework to assess the value perceived by angels regarding their activity has never been proposed.

The purpose of this research is to address this previously mentioned lack of knowledge and answer the question why BAs decide to invest their money and time in startups, partially popularised by the expression "what's in that for me?". Moreover, the aim of this article is to extend the research on the perceived investment value (PIV) on the stock exchange market by Puustinen et al. (2013) and suggest an instrument to assess the value perceived by BAs concerning their activity since such a tool does not exist at present. In this context, this research goes beyond the purely financial ties linking BAs to their activity to include a new human-centred angel investor approach based on tools that include marketing and consumer behaviour. Furthermore, it is intended to test a model, encompassing the relationships among angel perceived investment value (APIV), job satisfaction, positive word-of-mouth and intention to reinvest.

# 3.2 Perceived investment value (PIV)

Customer value, perceived value, or perceived customer value, is recognised as a central concept in marketing and strategy (Khalifa, 2004; Smith & Colgate, 2007). The perceived value concept was initially defined as the utilitarian perception of "what I get for the price I pay" (Zeithaml, 1988, p.13). It suggests the consumer's overall assessment of the utility of a good/service based on the individual's perception of the trade-off between what is received (the benefits) versus what is given (cost and sacrifices). It reflects the interaction between a subject (the customer) with its hierarchy of goals and purposes, and an object with attributes and performances (Holt & Payne, 2001). The perceived value has become a fundamental basis for business activity, generating significant interest from academia and industry (Sánchez-Fernández & Iniesta-Bonillo, 2007). Research on perceived value has evolved from a simple unidimensional construct (Caruana et al., 2001; Dodds & Monroe, 1985; Zeithaml, 1988) to complex and multi-dimensional value perspectives (e.g., Holbrook, 1992; Sheth et al., 1991; Sweeney & Soutar, 2001).

A diversity of models and frameworks have been proposed, reflecting the complex dynamic nature and methodological difficulties associated with the concept of PIV and its measurement (Gallarza et al., 2011). In the retail context, the framework created by Holbrook (1992), the theory of consumption values (Sheth et al., 1991), and the PERVAL scale (Sweeney & Soutar, 2001) are among the most comprehensive approaches (Rintamäki & Kirves, 2017; Sánchez-Fernández & Iniesta-Bonillo, 2007). Recently, for modelling simplification and measurement purposes in retail, Rintamäki and Kirves (2017) created an integrative framework that captures the essential categories of value through four dimensions: (i) economic; (ii) functional (iii) emotional; and (iv) symbolic.

The concept of perceived value has been extended and applied successfully in different areas besides retail, namely in recreation and tourism (Amoah et al., 2017; Chen & Chen, 2010; Petrick, 2002), on-line shopping (Bonsón Ponte, Carvajal-Trujillo, & Escobar-Rodríguez, 2015), on-line services (Yang & Peterson, 2004) and investment (Lounio, 2014; Puustinen et al., 2013; Statman, 2004; Wang, 2015). The relation and similarity between investing and consuming activities were highlighted by Allen and McGoun (2001), who adapted the typology of consumption practices (Holt, 1995) to the field of investment. Allen and McGoun (2001) argue that consuming and investing practices are undertaken for identical reasons, concluding that Holt's (1995) typology can be applied in the investment context. The adapted typology examines the actions of investors, adapting the four streams of actions summarised as follows (Allen & McGoun, 2001): (i) investing as an experience (subjective, emotional and meaningful interactions); (ii) investing as integration (alignment with self-concept and personal style); (iii) investing as classification (possession, status, social display of the invested object, in-group affiliation); and (iv) investing as play (the enjoyable part of investment, socialising, a means to interact and have fun with others). Allen and McGoun (2001) argue that consumers and investors are players of a game (consuming or investing) engaged according to specific rules to obtain desired value compensations. Therefore, BAs can be understood as consumers of financial products or services, undertaking actions (investments and interactions with the entrepreneurs and other angels) that carry the experiential hedonic aspects of entertainment, status, and symbolic personal meanings just like the consumers of goods and services in retail.

Puustinen et al. (2012, 2013) have gone one step further, creating the PIV scale to use in the investment context. This instrument absorbs the essence of both currents of thought that contribute to understanding value: the marketing and the finance perspectives together capture the holistic value of the investing experience (Puustinen, 2012).

# 3.3 The concept of angel perceived investment value (APIV)

APIV is an extension of the PIV concept developed by Puustinen (2012), with specific adjustments due to BAs' particular nature. BAs' traditional definition states that angels are special kind of investors, characterised by investing money of their own, in startups in which they are involved (Avdeitchikova et al., 2008; Mason, 2008a). This basic definition advocates that BAs are different from other investors, namely stock investors or venture capitalists. Firstly, because they invest their own money, and not the money of others. This fact provides angel investors with the capacity to run more risks, decide faster, make lighter due-diligences than venture capitalists that use others' money, and need to provide proper justifications in case of business failure due to fiduciary responsibilities (Van Osnabrugge, 2000). Secondly, contrasting with passive stock exchange investors, BAs

like to be involved actively with the startups they invest in (Politis, 2008), aiming to create value and contribute to the business's success. Entrepreneurial involvement is so important for BAs that some researchers consider it an essential element of the business angel definition (Avdeitchikova et al., 2008) that is not captured by the Puustinen (2013) framework. The APIV can be defined as the holistic perception of the angel investing activity's global value, including economic, functional, emotional, symbolic (esteem and altruism) and entrepreneurial dimensions.

### 3.3.1 Economic APIV

Economic APIV is the perceived economic value obtained by BAs as the result of investing money in a startup or angel fund, obtained from an economic gain upon the occurrence of a liquidity event. It is argued that BAs invest typically in the form of equity finance in the hope of achieving a significant financial return through some form of exit (Mason et al., 2016). Moreover, the annual return of investment (ROI) is many times considered the primary, if not the sole, motivation for investing (Morrissette, 2007), and the first and foremost reason to invest (Osnabrugge & Robinson, 2000). The expectancy of capital growth is the main reason for investing for 45.7% of the angels in Scotland (Paul et al., 2003) and is also perceived as a way to make money that will exceed the returns obtained by other forms of investment (Shane, 2005). BAs' high expectations in relation to startup gains may occur because angels are prototypically cashed-out entrepreneurs (Riding, 2008) who obtained their wealth through one or more successful exits with high capital returns. Since there are high risks in angel investment activities (Mansson & Landstrom, 2006; Wiltbank, 2009), the typical BAs invest a small amount of their wealth (close to 10%) in startups; however, more than 50% of the investments may result in a partial or complete loss (McKaskill, 2009a). Statistically, 9% of the startups generate returns superior to 10 times the amount invested, which compensates for the number of startups that fail (Wiltbank & Boeker, 2007; Wiltbank, Read, Dew, & Sarasvathy, 2009).

Besides the money that is invested in the startups, BAs belonging to networks, groups, and angel funds also have to pay small commissions to their gatekeepers or fund managers. The vast majority of BA groups are based on nonprofit associations (Rose, 2014), or small instrumental companies that are not considered profit centres. Consequently, the fees or commissions the angels pay are not understood as high costs of the activity and tend to be neglected. The rare exceptions are the structured BA groups with professional teams that operate in a similar way to venture capital funds, that receive management fees of between 1% to 3% per year of the money under management, and 15% to 25% from the gains (hurdle rate) obtained on exits (Pompian, 2012). Although the angel market is changing (Mason et al., 2016), the majority of BAs still do not work with professional structures that are considered a "luxury" (OECD, 2011).

### 3.3.2 Functional APIV

Following Puustinen et al. (2013), functional APIV is the perceived value resulting from the convenience of proper angel investing activity outcomes. The service convenience was defined by Farquhar and Rowley (2009, p. 434) as: "a judgment made by consumers according to their sense of control over the management, utilisation, and conversion of their time and effort in achieving their goals associated with access to and use of the service." Convenience captures the extrinsic utilitarian value resulting from the activity as a means to achieve some self-oriented purpose (Holbrook, 1999), such as saving time and effort (Rintamäki et al., 2006). Investing in startups, besides the economic outcome, has the utilitarian value of maintaining an indirect entrepreneurial activity, without the enormous time and energy needed to create a startup from scratch, and manage it successfully (Shane, 2009). As one BA once said: "They [BAs] want to stay in the game, but not stay up to 2 A.M. anymore" (Hill & Power, 2002, p.37). After working hard as entrepreneurs in their own companies, BAs want to maintain the entrepreneurial spirit without the responsibility or the effort to work 60 hours or more per week (Rose, 2014).

BAs primarily invest in companies located close to their homes (e.g., Morrissette, 2007; Shane, 2005). This geographic proximity means less distance, less time consumed in travelling and car driving, more opportunities for involvement in the startups and more free time for other activities. There is evidence of a positive and significant relationship between geographic proximity and angel investment (Herrmann et al., 2016), reflecting the BAs' reluctance to make the time commitment to visit potential invested startups at distant locations (Avdeitchikova, 2006). Moreover, investing in businesses at their hands usually means less time and effort to access deal-flow and personal networks (Mason, 2006a), convenience for monitoring and involving oneself (Politis, 2008). It also shows a sense of social responsibility by supporting local entrepreneurs (Severinsen et al., 2012).

### 3.3.3 Emotional APIV

Emotional APIV is the perceived value obtained directly from the positive emotional experiences or affective states generated by the act of investing as an angel investor. In consumer behaviour, emotional value captures the psychological benefits coming from positive emotions and experiences that are possible to find in consuming and investing such as pleasure, enjoyment, entertainment, passion, search activity, fantasies, feelings, fun and playful activities (Holbrook & Hirschman, 1982; Puustinen et al., 2013; Sweeney & Soutar, 2001).

According to Zuckerman et al. (2015, p.352) "sensation seeking is a trait defined by the seeking of varied, novel, complex, and intense sensations and experiences, and the willingness to take physical, social, legal and financial risks for the sake of such

experience." Besides trading to save, manage risk, and speculate, some investors trade simply because they find it entertaining. In a subconscious demand for arousal, BA sensation seekers look first for the angel experience's intensity and novelty, not for the money (Dorn et al., 2008, 2009). Some literature suggests that angel investment occurs mostly due to passion, fun, pleasure and enjoyment (Rose, 2014). BAs get involved not essentially because of the money, but to capture the adrenaline and rush of emerging startups. It is "a compulsory gambling obsession: the exhilaration experienced just before the check is written" (Benjamin & Margulis, 2005, p.133), for the stimulation resulting from searching and risk-taking behaviour (Freear et al., 2002) and for the excitement of being a part of new startups (Linde & Prasad, 2000).

Angel investing is an enjoyable activity (Mckaskill, 2009), that involves the joy of working with entrepreneurs who appreciate experienced investors who like to be appreciated (Benjamin & Margulis, 2005). BAs develop an emotional attachment to the entrepreneurs and the startups they invest in, contrarily to venture capitalists that see the financial rewards as their only incentive (Ibrahim, 2008). Some BAs invest only to obtain emotional goals, simply for fun and pleasure (Ramadani, 2009), considering that investing is more intellectually stimulating and more exciting than other hobbies (Bek, 2011; Freear et al. 2002). As several researchers report, the BAs' activity has been considered "cheaper and more fun than buying a yacht" (van Osnabrugge & Robinson, 2000, p.117) and "more fun than reading books or playing golf" (Shane, 2009, p.26). Dorn and Sengmueller (2009) found that investors who report enjoying investing or gambling are more active and turn over their portfolio at twice the rate of their peers. It has been proved that positive emotional experiences tend to have the opposite effect (Chaudhuri, 2006).

### 3.3.4 Symbolic APIV

Symbolic APIV is the perceived symbolic value resulting from angel investment activity comprising both esteem and altruism, gaining meaning through personal transformations or social contexts.

### 3.3.4.1 Symbolic Self-esteem APIV

According to the symbolic interactionist theory, people behave and interact with others governed by their self-conception, which needs to be verified in the others' eyes (Turner, 2012). When individuals receive positive feedback from others, their identity is confirmed, the self-esteem is enhanced, and self-meanings are reinforced and internalised, which further increases commitment to that identity, generating meaningful lines of activity (Burke & Reitzes, 1991). Increased self-esteem is associated with self-

development and improvement goals related to personal and professional growth (Irving & Williams, 1999).

The literature suggests that some people engage in BA activity to cause a positive impression and enhance their reputation, associating themselves to good investors and good startups (Ramadani, 2009). Making successful investments enhances self-image and self-esteem (Benjamin & Margulis, 2005; Duxbury et al., 1996). New opportunities for continuous learning offered by the activity of BAs also provide various contributions to improving self-esteem. Angels learn with experienced BAs in syndicates and angel groups (Riding, 2008) and with the entrepreneurs with whom they share knowledge (Rose, 2014). BAs also learn from previous failure (Gupta, 2000), through entrepreneurial events and training programs organised by angel academies and BANs (Business Angel Networks) (Christensen, 2011), through learning by doing and learning by implementing (Wiltbank & Sarasvathy, 2002). Learning and self-development have been identified as very important reasons that motivate people to invest and awaken the angel identity (Preston, 2004) and were positively associated with investment frequency and follow-on investment (Farrell, 2005).

### 3.3.4.2 Symbolic Altruism APIV

Research demonstrates that using time and money to benefit others leads to higher levels of happiness (Aknin et al., 2013). In the context of APIV, altruism corresponds to positive feelings of benevolence in social contexts, understood as genuine human concerns of BAs for persons' well-being for their own sake (Blum, 2015; Khalil, 2004).

The literature suggests that many BAs feel an altruistic call: (i) to transfer their time, money and experience to help emergent entrepreneurs to make their dream come true (Ramadani, 2009); (ii) to help entrepreneurs avoid repeating the same mistakes they (BAs) already made (Ramadani, 2012); (iii) to assist less experienced BAs to become more investor-ready (Paul et al., 2003); (iv) give back to the entrepreneurial community that made them wealthy (Ibrahim, 2008); and (v) to create local jobs and stimulate the local economy (Shane, 2009).

Sullivan and Miller (1996) segmented BAs according to their economic, hedonistic, and altruistic motivations. When motivated by feelings of altruism, BAs are more resilient and able to hold their investments for longer periods (McKaskill, 2009a; Zacharakis & Shepherd, 2007) and stay longer with an underperforming startup than venture capitalists (Mason & Harrison, 2002b). BAs sometimes reveal altruism when investing their own money, time and credibility in the entrepreneurs before anyone else, often from scratch, when the startup is in a pre-revenue phase. Hill and Power (2002) argue that BAs rely on their support for entrepreneurship to feel fulfilled and live with a higher purpose.

According to Paul et al. (2003), BAs believe in the unbelievable (not yet proven) and invest in the investible (not yet ready) strongly supported by altruistic values.

### 3.3.5 Entrepreneurial APIV

The entrepreneurial APIV is the perceived value obtained from the involvement with entrepreneurship per se. David Rose, the founder of New York Angels, confirms BAs' commitment and devotion to the entrepreneurial cause (Rose, 2014, p.28). He argues BAs are "...often strong believers in the ethos of entrepreneurship, excited by the prospect of supporting small companies that they believe may one day transform some segment of the business world, spurring economic growth for the benefit of millions." This entrepreneurial need may sometimes be understood as a result of the angels' entrepreneurial career (Politis & Landstrom, 2002).

Becoming a BA may be the corollary or a natural step in the entrepreneurial career, once an entrepreneur, an entrepreneur forever. The fortune of a BA is often the result of a successful and passionate entrepreneurial career that provides a considerable amount of human capital that can be used in favour of entrepreneurship (Fili, 2014). Because of that success and know-how, some BAs play the role of an established entrepreneurial elite which is committed to developing and perpetuating the ethos of entrepreneurship (Wade et al., 2003). BAs are highly experienced in creating successful companies from scratch and enjoy the chance to share their wisdom and knowledge with mentor entrepreneurs (Hindle & Wenban, 1999; Kelly, 2007). A substantial number of BAs view themselves as entrepreneurs, "co-creators" and "co-founders" of new ventures, rather than pure financial investors (Fili & Grünberg, 2016). Research sustains the existence of similarities between BAs and entrepreneurs concerning their entrepreneurial behaviour. Both groups search actively for new business opportunities, look for innovative solutions, exhibit a high degree of risk-taking, manage resources and add value (Filion, 2011; Lindsay & Craig, 2002; Politis, 2008).

# 3.4 The relation between APIV, angel job satisfaction, word-of-mouth, and reinvestment intention

Value and satisfaction are two distinct, yet complementary constructs (Eggert & Ulaga, 2002). According to Puustinen et al. (2012, 2013), PIV can be considered a cognitivebased construct that captures the value obtained from the perceived benefits and sacrifices of the investing activity. Job satisfaction is essentially an emotional-affective consequence of how people feel about their job and its various aspects (Aziri, 2011; Oliver, 2014; Spector, 1985). Moreover, the perceived value reflects a pre or post-evaluation phenomenon or both, while satisfaction is only a post-evaluation outcome that requires a personal experience (Caruana et al., 2001; Tam, 2004). In the BA investment context, APIV can be measured at any stage of the investment process, including the pre-investment phase. In contrast, angel job satisfaction can be considered an evaluation of the angel investment activity's overall experience.

Positive correlations between perceived value and satisfaction, have been identified in several areas including public services (Michalos, 2003a), retail (Rintamäki & Kirves, 2017), real estate (Shim et al., 2008), stock investment (Puustinen, 2012; Puustinen et al., 2013) and business to business markets (Sánchez, Vijande, & Gutiérrez, 2012). Several authors consider perceived value a complete explanatory antecedent of global satisfaction (Babin & Kim, 2001; Caruana et al., 2001; Gallarza et al., 2011; Mcdougall & Levesque, 2000).

Job satisfaction and general satisfaction have been positively and significantly related (Bowling, Eschleman, & Wang, 2010; Brayfield, Wells, & Strate, 1957), particularly among males, that constitute more than 90% of BAs (Harrison & Mason, 2005). In the early years of angel activity, the angel occupation was not considered a job, but mainly a "nice hobby" for wealthy managers and successful entrepreneurs (Hill & Power, 2002; Van Osnabrugge & Robinson, 2000). The perception of it as a career was introduced by Politis and Landstrom (2002) arguing that angel activity is a natural step of the "entrepreneurial career", even if the large majority of the BAs maintain other occupations to reconcile with their angel activity (José, Roure, & Aernoudt, 2005).

Being a BA requires, by definition, active involvement in pre and post-investment tasks (Fili & Grünberg, 2016; Lahti, 2011; Politis, 2008; Wirtz et al., 2017). The classical BA role either as a fulltime job or as a recreational hobby is to provide "smart money" to the investee startups (Avdeitchikova, 2008b). That implies a close involvement with the invested startups with a substantial amount of work and "hands-on" assistance (Madill, Haines, Jr, & Riding, 2005). According to Marcus (2017), it is the capacity to experience the job as a pleasurable activity that gives the basis for a high degree of job satisfaction, creating a good fit between the person and the occupation. Although Puustinen et al. (2013) have found that PIV positively impacts on job satisfaction, there is no such evidence in the context of BAs. Nevertheless, it is reasonable to anticipate that the perception of BAs' value is positively related to angel job satisfaction. Therefore, the following hypothesis is proposed:

#### *H1: The angel perceived investment value positively influences angel job satisfaction.*

Word-of-mouth information sharing lowers the information costs (Baker & Ricciardi, 2014), and plays a crucial role in the context of BAs since most angels are primarily identified and located by the word-of-mouth referrals of entrepreneurs and other investors (G. Benjamin & Margulis, 2005). European Business Angels Network (EBAN) (2018) argues that word-of-mouth plays a major role in finding investment opportunities,

matching co-investors, and recruiting new members for groups and networks. Successful BAs and well-developed networks make their entrepreneurial commitments and good reputation by positive word-of-mouth recommendation (Politis & Landstrom, 2002).

Additionally, the tacit endorsement and word-of-mouth of the BAs are precious assets for the entrepreneurs to facilitate investment attraction (Hill & Power, 2002). Moreover, BAs are partial owners of the invested startups. Research supports the idea that ownership engenders self-enhancement motivation that is positively associated with positive word-of-mouth intentions (Kirk, McSherry, & Swain, 2015).

Some research (de Matos et al., 2013; Eggert & Ulaga, 2002) reveals that customer satisfaction positively influences word-of-mouth and repurchase intention. Evidence from the investment context suggests investors' satisfaction contributes to reinvestment (e.g. Baharun et al., 2014; Piansoongnern et al., 2007; Shim et al., 2008). Considering all that was said, it is reasonable to expect that BAs satisfied with their activity are more likely to engage in positive word-of-mouth and reinvestment. The following hypotheses are proposed:

H2: Angel job satisfaction positively influences reinvestment intention.H3: Angel job satisfaction positively influences positive word-of-mouth.

Figure 3.1 presents the conceptual model proposed in this paper and its underlying hypotheses.

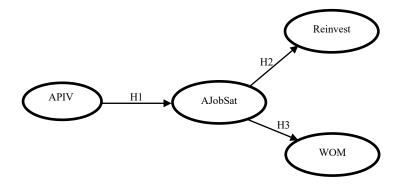


Figure 3.1 - Conceptual model and hypotheses

## 3.5 Research methods

This paper's methodological approach follows the procedure used by Puustinen (2012), adapting the concept of Perceived Investment Value (PIV) used in the context of stocks (Puustinen, et al., 2012; Puustinen et al., 2013) as a basis to build on and extend it to the field of BAs and propose the APIV framework.

The aim of this study was to reach a wide range of BAs in several countries. An online questionnaire was prepared for this purpose and a database of BAs was created using the following sources: (i) the database of the Portuguese Federation of Business Angels (FNABA), an affiliate of the European Business Angels Network (EBAN); (ii) the database of IAPMEI - Certified Business Angels investing in Portugal; and (iii) the personal database of one of the authors, a professional BA connected through LinkedIn many BAs worldwide. Finally, the research had the support of the World Business Angels Forum (WBAF) that passed on the survey to its members. The questionnaire included questions designed to measure APIV, job satisfaction and reinvestment intention, and questions to characterise the BAs' sociodemographic profiles.

The operationalisation of the APIV was grounded on three pillars: (i) the PIV instrument (Puustinen et al., 2013) adapted from marketing and retail to the context of stock exchange investment; (ii) a qualitative study on BAs, developed by the authors that uncovered forty angel meta-goals; and finally (iii) validation of the relevance of the items by an external expert advisor and the President of FNABA. The qualitative study applied the laddering technique (Reynolds & Gutman, 1988) and the means-end chain model (Gutman, 1982) to 53 BAs and 35 entrepreneurs to uncover 883 goals for angel investment. For parsimony reasons, the qualitative study is not presented in this paper. However, the goals identified in that study were categorised into 40 meta-goals that represent the dimensions of the six goals discussed in the literature review of the present paper: economic, functional, emotional, self-esteem, altruism and entrepreneurial values. The APIV scale included in the questionnaire encompasses a set of 29 items representing the six APIVs already discussed in the literature review (see Appendix 3.1).

The scale of job satisfaction in the present study was developed based on the scales of Duffy et al. (2012) and Hmieleski and Corbett (2008) and encompassed six items (Appendix 3.1). The scale for assessing word-of-mouth (WOM) was composed of eight items and was adapted from Harrison-Walker (2001) and Kirk et al. (2015). The reinvestment intention scale also comprised eight items and was created based on Puustinen et al. (2013). All the questionnaire uses a seven-point Likert-type scale ranging from strongly disagree (1) to strongly agree (7).

The sociodemographic questions assess information on the BAs' gender, age and country of residence. Finally, questions related to the BAs' experience specifically concern the following issues: (i) number of years of experience as a BA; (ii) number of startups invested in; (iii) amount of money invested within the scope of BA activities; (iv) geographical area where investments are made; and (v) the percentage of time dedicated to BA activities. The questionnaire was pre-tested with five BAs, and minor changes were introduced regarding the rewording of some items. It was administered online from the middle of January to the end of March of 2019. A total of 10 000 BAs were contacted by mail, and a response rate of 12% was obtained, corresponding to 1 225 answers coming from 79 different countries. Of those, 376 questionnaires were not complete. Therefore, the remaining 849 completed questionnaires represent a final response rate of 8.5%.

The majority of the BAs who answered the questionnaire are males (84.1%), between 41 and 50 years old (35%), or between 51 and 60 years old (31%) (Table 3.1). The sample encompasses BAs from a wide range of countries, as shown in Table 3.2.

Gender	N %	Number of invested startups	
Female	133 15.	7 Mean; median	13.8;
			7
Male	716 84.	3 Standard deviation	25.8
Age		Experience as a BA	
20-30	31 3.7	Number of years	8.21
31-40	132 15.	5	
41-50	299 35.	2 The geographical area where investments are	%
		made	70
51-60	261 30.	7 Country of residence	44.8
61-70	102 12.	Only outside	3.1
>70	24 2.8	Country of residence and outside	52.2
Investment amount in BA activities		% of time dedicated to the BA activities	
$(\epsilon)$			
<20k	106 12.	5 Mean	32.4
[20-50k]	79 9.3	Standard Deviation	26.8
]50k-100k]	140 16.	5	
]100k-250k]	146 17.	2	
]250-500k]	143 16.	<i>% angel time distribution</i>	
]500k-1M]	108 12.	7 to angel groups	22.4
]1M-3M]	65 7.7	to startups	467
>3M	61 7.2	to ecosystem	309

	Euro	ope		America	s	Africa		Rest of the v	vorld
Develope	ed	Developir	ıg	Develope	ed	South Africa	6	India	30
Portugal	85	Turkey	10	USA	159	Nigeria	5	Australia	17
UK	63	Poland	8	Canada	22	Angola	1	Singapore	11
Spain	51	Romania	5			Cote D'ivoire	1	UAE	4
Italy	48	Macedonia	5	Subtotal	181	Ghana	1	Hong Kong	4
France	37	Russia	3	% of Sample	21.32	Kenya	1	Israel	3
Germany	36	Croatia	3			Mauritius	1	Lebanon	3
Finland	18	Estonia	3			Morocco	1	New Zeeland	3
Denmark	17	Lithuania	3			Tanzania	1	South Korea	3
Switzerland	16	Hungary	2			Uganda	1	China	2
Netherlands	15	Montenegro	2					Iran	2
Sweden	15	Albania	1					Kazakhstan	2
Belgium	10	Armenia	1					Malaysia	2
Norway	5	Bosnia	1					Philippines	2
Luxembourg	5	Bulgaria	1	Developi	ng			Saudi Arabia	2
Austria	4	Czech R.	1	Brazil	49			Bahrain	1
Ireland	4	Latvia	1	Argentina	8			Bangladesh	1
Greece	3	Serbia	1	Mexico	3			Indonesia	1
Malta	2	Slovenia	1	Barbados	1			Japan	1
Andorra	1	Ukraine	1	Peru	1			Kuwait	1
Iceland	1			Uruguay	1			Thailand	1
								Vietnam	1
Subtotal	436	Subtotal	53	Subtotal	63	Subtotal	19	Subtotal	97
% of Sample	51.35	% of Sample	6.24	% of Sample	7.42	% of Sample	2.2	% of Sample	11.43

As far as the experience as a BA is concerned, respondents have, on average, 8.2 years of angel experience, invested, on average, in 13.7 startups, most of them (50.6%) with an amount between 50-500k. The majority (51.8%) of the respondents invested both in the country of residence and abroad. There is a wide diversity among BAs concerning the number of startups invested, as revealed by the standard deviation of 25.5. Most of the angels have invested in up to 7 startups. The BAs surveyed dedicate, on average, 32.2% of their working time to angel activity, mainly using this time to give support to the startups (46.9% of their angel time). The APIV scale was tested through Structural Equation Modelling (SEM) using AMOS. More specifically, AMOS was adopted to test the three hypotheses proposed in the literature review.

# 3.6 Analysis of results

An exploratory factor analysis confirmed that all items belong to the original construct, and a confirmatory factor analysis (CFA) examined the psychometric properties. AMOS 20 with a maximum likelihood estimation was used to assess the model. Following Hausman and Siekpe (2009), standardised loadings from CFA were evaluated for the purification process. A minimum factor loading score of 0.7 was used to confirm convergent validity (Hair et al., 2019). Consequently, some items were removed to improve the measurement

model (Ent5, Ent6, Eco1, Eco2, Eco3, Func4, Em4, and Est1). Table 3.3 identifies all the items and construct properties. The goodness of fit indices shows a good fit. However, considering that the  $\chi^2$ /df is larger than 3 and as it varies with size, we decided to test the model with a more homogeneous sample. For that reason, 427 responses from BAs from European developed countries were randomly selected. As the results ( $\chi^2$ /df=2.397; TLI: 0.927; CFI: 0.935; SRMR: 0.0566; RMSEA: 0.057) show a good fit we decided to proceed with the whole sample, which is more representative of the whole population of BAs.

			Standard Loading	Cronbach's alpha	<sup>8</sup> AVE	CR
Ent4	<	Entrep	0.728			
Ent3	<	Entrep	0.839			
Ent2	<	Entrep	0.666	0.893	0.595	0.854
Ent2 Ent1	<	Entrep	0.815			
Func1	<	FuncAPIV	0.867			
Func2	<	FuncAPIV	0.779	0.788	0.577	0.800
Func3	<	FuncAPIV	0.585	0.700	0.277	0.000
Eco6	<	EconAPIV	0.809			
Eco5	<	EconAPIV	0.756	0.819	0.613	0.826
Eco4	<	EconAPIV	0.782	0.017	01010	0.020
Em1	<	Emotions	0.773			
Em2	<	Emotions	0.784	0.824	0.631	0.837
Em3	<	Emotions	0.826			
Alt4	<	Altruism	0.861			
Alt3	<	Altruism	0.772			
Alt2	<	Altruism	0.853	0.898	0.690	0.899
Alt1	<	Altruism	0.834			
Est5	<	Esteem	0.864			
Est4	<	Esteem	0.898		0 770	
Est3	<	Esteem	0.857	0.926	0.770	0.930
Est2	<	Esteem	0.890			
AJS1	<	AJobSat	0.813			
AJS2	<	AJobSat	0.862			
AJS3	<	AJobSat	0.751	0.000	0.000	0.021
AJS4	<	AJobSat	0.909	0.928	0.693	0.931
AJS5	<	AJobSat	0.857			
AJS6	<	AJobSat	0.795			
ReInv2	<	ReinveInt	0.845			
ReInv5	<	ReinveInt	0.940			
ReInv6	<	ReinveInt	0.959	0.963	0.854	0.967
ReInv7	<	ReinveInt	0.927			
ReInv8	<	ReinveInt	0.945			
Wom1	<	WOM	0.856			
Wom2	<	WOM	0.838			
Wom3	<	WOM	0.852	0.004	0 (1)	0.005
Wom4	<	WOM	0.799	0.904	0.616	0.905
Wom6	<	WOM	0.701			
Wom8	<	WOM	0.636			

Note:  $(\chi^2/df=3.454; NFI: 0.920; TLI: 0.935; CFI: 0.941; SRMR: 0.0547; RMSEA: 0.054).$ 

<sup>a</sup>Handley and Benton (2009); <sup>b</sup>Hu and Bentler (1998;1999); <sup>c</sup>Browne and Cudeck (1992); <sup>d</sup>Bagozzi and Yi (2012) RMSEA  $\leq 0.08$  marginal fit<sup>a</sup>;  $\leq 0.05$  good fit<sup>d</sup>; CFI > 0.8 marginal fit<sup>b</sup>; > 0.9 good fit<sup>b</sup>; > 0.93 good fit<sup>d</sup>

TLI > 0.92 good fit<sup>d</sup>; SRMR  $\leq$  0.07 good fit <sup>d</sup>

The importance of each first-order APIV dimension was verified by second-order factor analysis (Table 3.4). Specifically, the second-order APIV construct includes six first-order factors: (i) Economic APIV; (ii) Functional APIV; (iii) Emotions; (iv) Altruism; (v) Self-esteem; and (vi) Entrepreneurial APIV. For the second-order CFA all indexes suggest a good fit. The second-order model proposed is supported. Overall, one can claim that APIV can be assessed through the six first-order dimensions.

 Table 3.4 - Second-order factor analysis.

First-order	Path	Second- order	Estimate	Standardised estimate	pvalue
Entrep <sup>a</sup>	$\leftarrow$	APIV	1.000	0.805	-
FuncAPIV	$\leftarrow$	APIV	0.765	0.481	***
EconAPIV	$\leftarrow$	APIV	1.296	0.636	***
Emotions	$\leftarrow$	APIV	1.531	0.789	***
Altruism	$\leftarrow$	APIV	1.505	0.759	***
Esteem	$\leftarrow$	APIV	1.893	0.881	***

Notes:  $\chi 2/df$ : 3.803; NFI: 0.908; TLI: 0.925; CFI: 0.931; RMSEA: 0.057

<sup>a</sup> Reference variable.\* p < 0.1; \*\* p < 0.05 and \*\*\* p < 0.01.

The correlations between constructs ranged from 0.249 to 0.704, and no pair exceeds the 0.9 limits recommended by Hair et al. (2019). As shown in Table 3.5, one can argue that discriminant validity is supported as the squared root AVEs for all the variables are higher than the correlations among any pair of variables. Following the measurement purification process, SEM can be used to test the hypotheses within the research model.

Constructs	Ave	CR	1	2	3	4	5	6	7	8	9
1. FuncAPIV	0.577	0.800	0.760								
2. EconAPIV	0.613	0.826	0.666	0.783							
3. Emotions	0.631	0.837	0.424	0.493	0.795						
4. Altruism	0.690	0.899	0.318	0.366	0.588	0.831					
5. Esteem	0.770	0.930	0.438	0.546	0.704	0.717	0.877				
6. AJobSat	0.693	0.931	0.355	0.586	0.544	0.499	0.594	0.833			
7. Reinvest	0.854	0.967	0.249	0.474	0.460	0.457	0.473	0.683	0.924		
8. WOM	0.616	0.905	0.353	0.432	0.471	0.400	0.551	0.605	0.485	0.785	
9. Entrep	0.585	0.849	0.297	0.444	0.637	0.656	0.695	0.607	0.571	0.486	0.765

 Table 3.5 - Discriminant validity: squared root AVEs versus construct correlations.

Notes: The bold scores are the square root AVE; the off-diagonal scores are the correlations among constructs.

Figure 3.2 shows the results of the structural model. All fit indexes in the research model are acceptable (for the random sample of 427 responses from European developed countries the results are:  $\chi^2$ /df=2.654; TLI: 0.914; CFI: 0.920; RMSEA: 0.062). APIV comprises all six factors: entrepreneurial, economic, functional, emotional, altruism, and self-esteem. Except for functional PIV, all the remaining factors have substantial importance for determining APIV. The second-order model explains 53% of angel job satisfaction (Figure 3.2).

Table 3.6 - Research hypotheses

	Independent variable	Path	Dependent variable	Standardised estimate	p-value	Result
H1	APIV	$\rightarrow$	AJobSat	0.725	***	Supported
H2	AJobSat	$\rightarrow$	Reinvest	0.694	***	Supported
H3	AJobSat	$\rightarrow$	WOM	0.622	***	Supported

Note:  $(\chi^2/df = 3.9, NFI = 0.905; TLI = 0.923; CFI = 0.927; RMSEA = 0.059).$ 

\* p < 0.1; \*\* p < 0.05 and \*\*\* p < 0.01.

Table 3.6 shows, as expected, shows that the model confirms that the APIV positively influences (0.725) job satisfaction. Moreover, it also reveals that satisfied BAs are more willing to reinvest (0.694) and engage in WOM (0.622) about their activity.

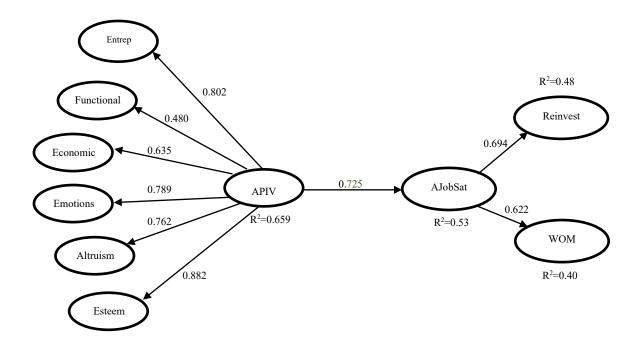


Figure 3.2 - Structural model

### 3.7 Discussion and conclusions

The APIV instrument explains 65.9% of the value BAs obtain from their activity based on a compound of six distinct value dimensions: self-esteem, altruism, emotional, entrepreneurial, economical and functional.

BAs understand the primary perception of value extracted from being angels is symbolic, allowing them to enhance their self-esteem (0.882), continue their personal and

professional development, increase their confidence by feeling enjoyment and value by helping entrepreneurs. Another relevant contribution for symbolic value comes through altruism (0.762) suggesting angel investment provides the feeling of living for a higher purpose, allowing BAs to express benevolence towards other people and contributing by giving back to society creating a better world.

BAs capture emotional value (0.789) by the perception that their activity is a nice way to spend time, permitting moments of excitement and risk-taking filled with diverse pleasurable entertainment components. Equally relevant is the opportunity to stay involved in entrepreneurial activities, the pleasure of beginning something from scratch and the opportunity to be involved with startups and mentor entrepreneurs, which gives the BA a strong sense of entrepreneurial value (0.802).

BAs extract their economic value (0.635) from the overall balance between the potential of gains of investing and the price (costs) they pay, given the risk they bear compared with other investment opportunities. BAs see their investment in startups as a proper way to diversify, earn money and increment their wealth. However, their perceived economic value may be biased. Like other investors, angels tend to minimise the importance of costs and failures in comparison with the potential of the benefits. The explanatory reason is that economic value is based on the overall balance that may be influenced by common investor bias such as overconfidence and overoptimism (Baker & Ricciardi, 2014; Kahneman & Riepe, 1998).

One may conclude that results of APIV contradict the rational economic view of angel literature highlighting that the primary or only motivation of angels is to earn money (Morrissette, 2007; Riding, 2008; Van Osnabrugge, 1998). As expressed by Mason et al. (2015, p. 1): "The ultimate purpose of investing in an entrepreneurial business is to achieve a financial return". Results confirm that, in general, BAs have a relatively lower perception of economic value (0.635) when compared with other types of value.

Our results confirm the primacy of the behavioural perspective (invest for an experience) that is expressed in part in the angel literature aligned with the experientialist view of the angel activity (Benjamin & Margulis, 2005; Ramadani, 2009; Shane, 2009). This perspective suggests that becoming a BA enhances the: opportunity for self-improvement, learning with experienced angels, co-creating value with the entrepreneurs, earning money, having fun and emotional excitement from beginning a startup from scratch without the initial founders' constraints of time and effort.

Finally, although results confirm that BAs capture the functional value (0.480), recognising the time and effort they spend on the angel activity are not valued as the other APIV dimensions previously referred to. In other words, angel investing is not perceived by all as a simple, effortless, or non-time consuming activity. At a glance, this research highlights that the majority of BAs are a special kind of investor with the desire to extract much more value from the angel experience than solely the economic outcome. Results show that the centrality of the angel experience is not grounded on the financial benefit, but in a combined form of symbolic (self-esteem, altruism), emotional, economic and entrepreneurial value.

The perception of value explains 53% of the angel job satisfaction. The satisfaction with the angel job strongly influences the decision to engage in word-of-mouth communication (40%) and reinvestment intention (48%).

The implications of these results are relevant. BAs expect much more than money from their angel activity. They want to improve themselves personally and professionally and plan their angel career and their involvement with angel groups and startups selecting those that offer them the best angel experience. Other players in the ecosystem should understand the angel perceived investment value as an instrument that gives a broader perspective of the BAs that do not condemn them to a rigid financial role.

BAs appreciate several forms of value that must be present and stimulated in their angel experience to guarantee higher levels of satisfaction. It is very important for BAs to broaden their possibilities of involvement with the entrepreneurial world by mentoring activities, learning with others, calibrating a future career, and celebrating the entrepreneurial spirit with other BAs and entrepreneurs. If the entrepreneurs, gatekeepers and angel leaders do not consider all the desired value dimensions, they may jeopardise the angel experience, which may result in deception.

The APIV instrument proposed in this paper has the virtue of beginning with a journey that looks into the angel world through a holistic window, integrating concepts of finance, marketing, and consumer behaviour, and contributes to providing new light on the complex nature of BAs. This study supports a paradigmatic change in the way people have been looking at angel investment. Our results suggest the ultimate purpose of angel investment is not to achieve a financial return but to have the BA experience per se. The journey of the business angel is more important than the financial destination. The journey is itself, the destination.

Regarding the sample size, although the value for the  $\chi^2/df$  is larger than the normally recommended of three, we decided to maintain the whole sample as the sample is very heterogeneous. To validate the  $\chi^2/df$ , which varies with the sample size, we decided to test the model with a more homogeneous sample, and the results were convincing.

Despite the contributions of the present research, it has some limitations. The present paper mainly sought to test the APIV instrument and the consequences of this perceived value. Nevertheless, the determinants of the perception of value among BAs are not fully

examined. Future research should be extended to capture the new perspectives on angel perceived value based on cultural differences, nationality, gender issues, previous experience of the angel career (novice vs veteran) and solo vs group investment. It would also be interesting to broaden the understanding of the changes in angel behaviour, motivated by the evolution of consumer investor behaviour and the BA market.

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# Appendix 3.1: Measurement items used

Scale	Items
	Eco1. is an inexpensive way to invest.
Economic APIV	Eco2. is priced fairly (management fees).
Puustinen et al. (2013),	Eco3. gives me access to public co-investment.
from qualitative study	Eco4. is a great way to earn money.
and BA literature	Eco5. is an efficient way to diversify investments.
	Eco6. increases my wealth adequately in view of the risk I bear.
<b>Functional APIV</b>	Func1. is a convenient way to invest.
Puustinen et al. (2013),	Func2. is an easy way to invest.
from qualitative study	Func3. is not unnecessarily time-consuming.
and BA literature	Func4. allows me to remain active.
Emotional APIV	Em1. is a nice way to spend time.
Puustinen et al. (2013),	Em2. provides the excitement of risk-taking.
from qualitative study	Em3. is entertaining.
and BA literature	Em4. is a challenging experience.
Altruism APIV	Alt1. gives me the opportunity to make the world a better place.
Puustinen et al. (2013),	Alt2. it is a way to give back to society.
from qualitative study	Alt3. gives me the opportunity to express benevolence toward other people.
and BA literature	Alt4. encourages me to have a life with a higher purpose.
	Est1. makes me feel fulfilled.
Self-esteem APIV Puustinen et al. (2013), from qualitative study and BA literature	Est2. boosts my self-esteem.
	Est3. gives me sheer joy.
	Est4. makes me feel valuable
	Est5. increases my self-confidence.
	Ent1. allows me to be part of entrepreneurship.
Entrepreneurial APIV From qualitative study and BA literature	Ent2. gives me the pleasure to begin something from scratch.
	Ent3. gives me the opportunity for involvement with startups.
	Ent3. gives the up opportunity for involvement with startups. Ent4. allows me to mentor entrepreneurs.
	Ent4. anows me to mentor entrepreneurs. Ent5. maintains my entrepreneurship spirit without direct responsibility.
	Ent6. allows me to create an entrepreneurial legacy.
<b>WOM</b> Kirk et al. (2015) and Walker (2001)	WOM1. I mention being an angel investor to others quite frequently.
	WOM 2. I have told more people about angel investments than I have told most other
	investment possibilities.
	WOM 3. I seldom miss an opportunity to tell others about being an angel investor.
	WOM 4. when I tell others about being an angel investor, I tend to talk about it in great
	detail.
	WOM 5. I have only good things to say about being an angel investor.
	WOM 6. I am proud to tell others I am an angel investor.
	WOM 7. I have spoken favourably of being an angel investor to others.
	WOM 8. I recommend being an angel investor to others.
<b>Reinvest</b> Puustinen et al. (2013)	ReInv1. I intend to be an angel investor in the future.
	ReInv2. I will probably invest as an angel investor in the future.
	ReInv3. It is very likely that I will invest as an angel investor in the future.
	ReInv4. I intend to continue to invest my money as an angel investor in the future.
	ReInv5. I intend to continue to invest my time as an angel investor in the future.
	ReInv6. I intend to continue to invest my know-how as an angel investor in the future.
	ReInv7. I intend to continue to invest my reputation as an angel investor in the future.
	ReInv8. I intend to continue to invest in my personal network as an angel investor in the
	future.
Angel Job Satisfaction Duffy et al. (2012) and Hmieleski and Corbett	AJS1. I feel fairly well satisfied with being an angel investor.
	AJS2. Most days I am enthusiastic about being an angel investor.
	AJS3. Each day of work as an angel investor seems like the time flies.
	AJS4. I find real enjoyment being an angel investor.
(2008)	AJS5. I consider being an angel investor rather pleasant.
	AJS6. All in all, I'm satisfied with the work I do as an angel investor.

# Chapter 4 - The angelical angel is dead. Career matters!

## Abstract

Despite the high relevance of Business Angels (BAs), little research has been done on BAs' perspectives concerning their career development. Besides, in recent years, the BAs market is dramatically changing the way BAs work. In consequence, angels are making a new trip in the investing adventure, moving from travelling alone, preparing and deciding by themselves all the details of the trip, to a travel agency model (professionalized angel groups). In the new model, the travel agent (the gatekeeper), organizes the travel experience for a group of angels, taking care of the itinerary and the operational details. In the face of this change, it is of utmost importance to identify what angels perceive to be a meaningful career nowadays. In order to fill this gap, this paper aims to: (i) identify the dimensions of BAs' perceived career development; (ii) analyze the impact of this development on angel job satisfaction; and (iii) examine the impact of angel job satisfaction on reinvestment intention. Data were collected through a questionnaire survey with 474 BAs from seven European countries. A model proposed to achieve the aims of the study was tested through Structural Equation Modelling (SEM) using AMOS. Results highlight that: (i) the perception of personal development is a decisive factor to pursue the business angel career; (ii) personal development has a higher explanatory power on angel career development than fostering innovation; and (iii) the perception of career development has positive impacts on the angel reinvestment intention and angel job satisfaction. The paper ends with implications and guidelines for angels, gatekeepers and entrepreneurs, which may increase the satisfaction with the angel experience and, therefore, contribute to enhance the BAs' activity.

**Keywords:** Angel Investor, Business Angel, Business Angel Career, Career Development, Angel Job Satisfaction, Reinvestment Intention, Personal Development, Innovation

# 4.1 Introduction

One of our societies' characteristics is the centrality of career and occupational activities in people's lives (Cardador & Caza, 2012; Guichard, 2005; Webster & Edwards, 2019). What people do, i.e. their work is considered for most people to be their central identity (Judge & Klinger, 2008). People work for a diversity of reasons but fundamentally to earn money, conquer dignity, guarantee own subsistence and of their families, contribute with volunteer work to communities or causes, build a public self-identity, promote personal growth and structure their lives (Lent & Brown, 2013; Thoits, 2012; Thompson & Bunderson, 2019).

Despite widespread concern about BAs' role as leaders of investment in early-stage (EBAN, 2019), little research has been done on the business angels work and their career. One possible reason is that during many years the angel market was considered invisible, informal, inefficient and misunderstood (Mason, 2006; Wetzel, 1983). From the early days of angel activity, but until today, angel investing was perceived by many, particularly by venture capitalists (VCs), as a hobby-job proper of amateurs (Berns & Schnatterly, 2015; Mason & Harrison, 2008). Even some recent literature suggests that angels may not have enough expertise and may not be prepared to evaluate and invest in truly disruptive high-growth startups (Lerner et al., 2018). The professional career of investing has been seen as a task for professional VCs, and outside of angels scope (Kerr et al., 2014). Fortunately, in recent years, angels are becoming more sophisticated and professional (Huang et al., 2017). The angel market is improving in organization, professionalization and formalization (Carpentier & Suret, 2015; Mason et al., 2019). BAs are acting and impacting in many aspects of the activity similarly to VCs (Cavallo et al., 2019). Angels work has evolved from a "nice hobby" for wealthy managers and successful entrepreneurs (Hill & Power, 2002; Van Osnabrugge & Robinson, 2000), to be a new step of the "entrepreneurial career" (Politis & Landstrom, 2002) and a new professional career option in our days (Rose, 2014). It can be questioned if the 2/3 of the angel investments' failure rate (Wiltbank, 2005, 2009) has some relation with the amateur and "hobbyist" perspective on how angels' work has been developed. It is acknowledged that most angels do not make effective due diligence, and do not spend enough time and resources in the screening processes to access quality deal-flow (Hoyos-Iruarrizaga et al., 2017). Angels focus their main attention on the post involvement/investment activities (Carpentier & Suret, 2015). It also has been recognized in the angel literature that the poor financial results of BAs have created some disappointment (Sohl, 2007) and, in some cases, the abandonment of the angel activity (Farrell, 2005). We argue that this phenomenon is in the root of the professionalization movement that is provoking the transformation of the angel market (Mason et al., 2016). Angels are moving from a money-losing amateur perspective to a money-making professional angel one. Angels began organizing themselves in managed structured groups, syndicates and small investment companies, creating new work roles like the lead investor and the gatekeeper (Paul & Whittam, 2010) and stimulating the professional approach with a long-term perspective (Rose, 2014). In addition, there was an emergence of new players in the market involving crowdfunding, and an increasing interest of VCs investing in very early stage startups and occupying a traditional angel investing space (Block et al., 2018).

All these changes occurring in the BAs' environment and the lack of research concerning the BAs' career created the right momentum for a reflection about the angels' work and deep research on how angels perceive their career development. Therefore, angels are living a great challenging time to answer pertinent and fundamental questions. Can the angel activity, at least for some, be considered "work" or just a nice way to spend time (Shane, 2009)? Should we assume that we are in the emergence of a new paradigm in the angel industry? The old angelical angel investing for pleasure, being substituted for the professional one investing for a career? For this new angel persona, entrepreneurship and startups are an instrument, or a mean, not a final goal. Therefore, the present paper looks into the angel activity from the individual career perspective of BAs, exploring the motives of angel work, and how those motives can be relevant to the development of an angel career, identifying dimensions of BAs' perceived career development. Besides, it analyses the impact of the perceived career development on angel job satisfaction and reinvestment intention.

The article is structured as follows. After this introduction, a literature review section follows, building on the concept of careers and life trajectories. Another literature review section builds on the model's central constructs proposed in this essay and on the two dimensions anchoring the angel career development, namely personal development and innovation support. This section ends with a presentation of the conceptual model and the hypotheses under study. The fourth section describes the methods used in this research, and the fifth exposes the principal results. Finally, the sixth and seventh sections discuss the results, identify the implications and limitations of the present work, and propose avenues for future research.

### 4.2 Careers and life trajectories design

A career can be defined as a sequence of related work experiences and activities throughout a person's life (Lent & Brown, 2013; Wang & Wanberg, 2017.) However, there is evidence of dramatic changes in the way people see their careers in recent decades (Ahn et al., 2017; Callanan et al., 2017; Supeli & Creed, 2016). The most visible aspect of career transformation is the ease and frequency with which people change jobs, companies, new projects and geographical workplaces along with their working life (Callanan et al., 2017; Savickas et al., 2009). The technological and economic dynamism of the post-modern society transformed the idea of a stable and linear job, with fixed temporal stages, in a unique company, for the entire life (Super & Hall, 1978), to a boundaryless career paradigm, focused on multiple projects and temporary positions (Callanan et al., 2017). The career process's ownership and responsibility have been transferred from the institution to the individual (Savickas et al., 2009). The career is not chosen once for all life but repeatedly over time (Savickas, 2012). People no more establish a full contract with a single company, but a protean contract with themselves, incorporating in this contract essential aspects of their lives, such as self-actualization, learning, fulfilment, personal values, goals and meaning (Callanan et al., 2017; Hall, 2002b; Meijers & Lengelle, 2015).

Individuals develop careers that fit their lives, engaging in opportunities that allow to express themselves, accomplish their life projects and make a difference in their communities (Lysova et al., 2019; Savickas et al., 2009). Some career theorists refer no more to the traditional career development concept, but life trajectories design. Individuals design their lives and careers according to the person they want to be and the life they want to live (Savickas, 2012; Savickas et al., 2009). In this context, the individual's life is now the dominant paradigm that incorporates career elements (Baruch, 2006). Anchored in learning theory (Bandura, 1988; Wood & Bandura, 1989), Lent et al. (2002, 2003) proposed the social cognitive career theory (SCCT), suggesting that the choice of a career, results from the interaction between (i) self-efficacy, (ii) outcome expectations, and (iii) personal goals. Following Lent et al. (2003) and Savickas et al. (2009), the BA career can be defined as a long-term learning process that answers personal life goals.

Edgar Schein pointed out there are two types of careers: the external career and the internal one (Schein, 1978, 1990, 1996). The external career is identified as "the formal stages and roles defined by organizational policies and societal concepts of what an individual can expect in the societal structure" (Schein, 1996, p.80). In other words, it is the objective career that exists across the realities, constraints and opportunities in the world of work (Derr & Laurent, 1987). The internal career refers to the career selfconcept and the subjective sense of "where one is going with one's work-life" (Schein, 1996, p.80). It includes one's hopes, goals, values, aspirations and motives that are useful to anchor and develop a long-term personal career story (Schein, 2010). The internal career takes form through "career anchors" formally defined as the "self-perceived pattern of skills, motives and values that drives career decisions" (Schein, 2010, p. 128). Schein (1996, 2010) identified eight generic anchors that guide individuals through career choice and act as stabilizing forces: Security; autonomy; lifestyle; technical; general management; entrepreneurial; service/dedication to a cause; and pure challenge. Since the definition and formalization of the external careers will be in constant change, the need for clarity at the internal career level will become increasingly relevant. This research is mainly concerned with the business angels' internal career discussing the motives that make attractive the idea of becoming a professional angel investor and the fundamental anchors and dimensions that sustain the development of an angel career. Because of the diversity of their investing profiles and motivations (Shane, 2009; Tenca et al., 2018), angels can see themselves reflected in one or more of those proposed anchors and manage their career by identifying those that could be more relevant to their lives and career momentum. Nevertheless, due to the diversity of the angel profiles, this study will focus the attention in two goals revealed by the preparatory qualitative study that have the potential to be understood as common dimensions to approach an angel career as will be explained in the next sections, namely to support innovation and personal development. These two dimensions, that also have a substantial expression in angel literature (McKaskill, 2009a; Politis & Landstrom, 2002; Smith et al., 2010) will be further developed in the next section.

### 4.3 The perceived development of an angel career

### 4.3.1 Angel personal development

People feel successful in a career when they think they can develop themselves and embrace career challenges by pursuing and attaining important and meaningful goals (Locke & Latham, 2006). Donati and Watts (2005) argue that "personal development must itself be understood as a complex, open-ended, career-long and lifelong process, whose aims and objectives are constantly shifting and moving forward, as the individual progresses". Through meaning oriented learning, the information available in the career process is transformed into internalized knowledge, promoting a growing alignment of personal life and career goals (Meijers & Lengelle, 2015). The achievement of intrinsically rewarding personal goals provokes positive effects on well-being, vitality, performance and job satisfaction (Deci & Ryan, 2000; Martin & Bartscher-Finzer, 2014). In a broader sense, personal development is about how individuals learn and change knowledge, attitudes, skills, awareness, that influence the person as a whole (Irving & Williams, 1999; Johns, 2012). In the case of the business angels, it relates to activating all the mechanisms and the intrinsic goals that motivate the sense of personal and professional development (Politis and Landstrom, 2002). Some of those goals include learning investing skills with other angels (Farrell, 2005; Preston, 2004; Smith et al., 2010), networking and socialising with interesting people (Linde & Prasad, 2000) feeling updated (Rose, 2014) and giving back to society (Ibrahim, 2008; Shane, 2009). It is acknowledged a learning curve related to the several phases of the investment process for being a successful BA (Norberg, 2007; Preston, 2004; Wirtz et al., 2017). Angels learn through formal learning courses managed by angel networks or angel academies, but also with less formal processes resulting from the investing practice (Mason & Harrison, 2002; San José, Roure, & Aernoudt, 2005). Much of the research on angel learning is based on adaptations of the experiential learning theory (Kolb, 2015 p.49). The sharing of experiences and points of view are indispensable for an effective personal development process (Scaringella, 2010). Angel groups are adequate contexts to deliver experiential learning through a shared angel experience (Smith et al., 2010), also encouraging co-investing, interaction and socialization with other angels (Fili, 2014a; Ibrahim, 2008). At the ecosystem level, the angel activity moves on the dynamism of rich entrepreneurial summits, hecatombs, parties, festivals, demo-days and other exciting informal events that are adequate to meet and socialize with extraordinary people. The easiness of interaction and contact with inspirational leaders around the world, mentoring and sharing sessions, stimulates the development of personal networks (Edelman et al., 2017). Moreover, listen to pitches, and meeting young founders, is an excellent opportunity to give and receive advice but also to keep the angel updated with the news from the industry and creating opportunities for unforgettable personal experiences and personal development (Fili, 2014b; Paul & Whittam, 2010). At the startup level, the entrepreneur-investor relationship is a compelling combination that enhances both parties' personal development (De Clercq et al., 2007). As argued by David Rose, founder of New York Angels: "it's very much a two-way street, because in addition to the value that I can bring to the startup, the fact that the startup is breaking ground in innovative ways means that I learn as much from them as they do from me." (Rose, 2014, p. 37). It is noted that angel investing is "definitely a practical learning experience...", and "... a process of personal evolution" (Smith et al., 2010, p. 7).

### 4.3.2 Innovation support

The geography of startups and innovation has been changing dramatically in recent years, motivated by a new map of entrepreneurship and venture capital in the world (Florida & Hathaway, 2018b). The traditional spots of Silicon Valley, Seattle and New York lost part of their glamour and hegemony of attracting and nesting new startups (Donvan et al., 2018; Niccolai, 2019). Now, they are facing intense competition for entrepreneurial innovation from fast-growing ecosystems based on cities around the world like Berlin, London, Lisbon, Barcelona, Shanghai, Beijing, Bombay, Bangalore, Sao Paulo or Tel Aviv. The financial capital to support innovative startups became global in the last decade (Florida & Hathaway, 2018a).

BAs have repeatedly been referred to as the most important finance source for young innovative firms (Block et al., 2018; EBAN, 2018, 2019). The estimated number of BAs in Europe has grown from 75000 angels investing  $\in$ 3 billion in 18100 deals in 2007 (EBAN, 2009) to 345000 business angels investing  $\notin$ 7.45 billion in 37200 deals in 2018 (EBAN, 2019). Florida and Hathaway (2018a, p. 8) argue "Of course, innovation and entrepreneurship are local, not national, games. That means mayors and city leaders must take the lead. And it means nations should consider devolving responsibility for innovation and economic policy functions to the local level". Business angels invest locally, typically not far than a few hours' drive, from their home (Avdeitchikova, 2006; White & Dumay, 2017). There is a substantial angel investment coverage to support local innovation, both in terms of geographical scope (since angels live everywhere) and activity sectors (OECD, 2011).

To foster innovation is both a fundamental investment drive of the business angels (McKaskill, 2009b) and a key factor for economic growth and regional development (Bilau & Sarkar, 2015). The support that BAs provide to stimulate innovation, bridging the gap between scientific innovation and entrepreneurship, is a political priority for many

countries (CSES, 2012; Riding, 2008). The goal of being an innovation catalyst is, undoubtedly, one of the most important drivers to become a business angel (Rose, 2014). Recent research has confirmed that business angels play a crucial role in funding innovation with 93% of their most recent investments being done in firms that are engaged in processes of product, service or business innovation (BAF, 2017). Near half of the invested startups have high or very high levels of innovation and intellectual property (IP) protection (Mason & Botelho, 2014). The size and the impact of innovation is a fundamental metric to attract the BAs' interest (Hill & Power, 2002; McKaskill, 2009a) and a definitive criterion for angel investment (Maxwell et al., 2011; 2009). Innovation is definitively the driver of the angel investments that creates the differentiation and the fuel for high growth startups (McKaskill, 2009b). Innovative firms have higher growth and generate much more payoffs (Townsend & Busenitz, 2015). Nevertheless, other reasons beyond economic ones, make BAs support innovation. Angels invest in innovative startups to keep abreast of rapidly evolving markets and technologies (Linde & Prasad, 2000), being in touch with bright new ideas and young people (Hill & Power, 2002). Also, keeping themselves active and sharp (Ibrahim, 2008), and contributing to products or services that make "the world a better place to live in" (Landstrom, 2007, p.58). Finally, angels invest in innovation because, like entrepreneurs, they are innovators by nature (Lindsay, 2004) and understand how innovation is crucial to offer creative solutions in unpredictable changing environments. Empirical research found evidence that innovativeness among BAs is positively related to BA performance (Lindsay, 2004). To conclude, it can be proposed that both personal development and innovation support are two fundamental motivators of a BA career.

### 4.3.3 Business angel job satisfaction

To create their own job, and get personal satisfaction, are recognized to be two primary objectives that motivate some individuals to become BAs (G. Benjamin & Margulis, 2005; Collewaert & Manigart, 2016; McKaskill, 2009a). Previous research suggests metaphorically that angels "buy their last job" investing in startups (Benjamin & Margulis, 2005, p.176). Moreover, they achieve their goals of being "hands-on" investors contributing with their work to the development of the startup doing several adding value activities (Politis, 2016). Some want to be formal startup board members and work heavily assisting the entrepreneurs while others prefer a part-time job or even no regular time allocation (Hoyos-Iruarrizaga et al., 2017). Some angels only do advising and help on strategy, while others participate in operational tasks (Fili & Grünberg, 2016; Politis, 2016). The result of angels' work is important for the entrepreneurs and the angels themselves since it is a great source of personal satisfaction (White & Dumay, 2017). Many angels coming from large corporations realize that the startup world is entirely different from the large corporate world, and consider their initial relationship with the

startups and angel investing as a form of "on-the-job learning" (Paul et al., 2003). In a pioneer study on business angel career development, Politis and Landstrom (2002) identified some business angels who continue or look for their entrepreneurial career grounded on a personal development process with three stages: (i) the corporate career stage (time to build managerial competence); (ii) the entrepreneurial learning stage (time to build entrepreneurial competence); and (iii) the integrated investment career stage (time to apply both competences). This perspective considers business angels as "*entrepreneurial learners*" who want to continue developing their entrepreneurial and investor skills by supporting innovative startups (Politis & Landstrom, 2002, p.81; San José, Roure, & Aernoudt, 2005, p.156).

Although not in the context of BAs, research has demonstrated a very strong relationship between the perception of personal development through work and job satisfaction (Bergmann, 1981; Landy & Conte, 2013; Michalos, 2003b). Specifically, managers' personal development is the strongest predictor of overall satisfaction (Bergmann, 1981), rather than other variables such as compensation, superior-subordinate interaction, or organizational context. Overall job satisfaction has also been positively associated with the protean approach of the career (Blau et al., 2001; Stroh & Brett, 1994) that emphasizes the individual responsibility for career management and personal development (Hall, 2002a, 2004). Possibilities for personal growth, as well as opportunities to learn new skills and gain new professional knowledge, are primary job motivators (Alshmemri et al., 2017; Herzberg, 1969). Therefore, the perception of personal growth on a job increases job satisfaction because it contributes to satisfying the need for self-actualization and the tendency to realize one's potential (Šverko, 2001). Thus, career development has been defined as "a developmental learning process that evolves throughout our lives" (Savickas, 2005, p.417).

Previous research also gives theoretical and empirical support to the relationship between career development and job satisfaction (Adekola, 2011; Chen et al., 2004; Pearson & Ananthram, 2008). In this regard, Chen et al. (2004) found that the gap between career needs and career development programs of people working in innovation activities are significant predictors of job satisfaction, and conclude that the larger the gap between the plans proposed and the individual needs, the lower the level of satisfaction. In the same line, Adekola (2011) found a positive link between career development and job satisfaction in the banking sector. In the case of BAs, it is acknowledged that they manage their own money, investment decisions, and career by themselves. However, even in career self-management cases, the use of action regulation theory (Raabe, Frese, & Beehr, 2007) supports that intentional behaviour regarding career building is strongly linked to increased career satisfaction (Landy & Conte, 2013).

#### 4.3.4 The reinvestment intention

The BAs' different investment strategies let us recognize the angel market heterogeneity and diversity (Freear et al., 1995; Mason et al., 2013b). Some angels invest higher amounts in a few startups; others create portfolios and invest smaller amounts in many startups (Vilalobos, 2007). Some invest in group, networks or syndicates and others choose to invest alone (Paul & Whittam, 2010). Some angels also prefer to invest in earlystage, even co-founding the startup (Festel & De Cleyn, 2013). Others prefer later stages and more mature ones (Lahti, 2011; Lahti & Keinonen, 2016). Some angels invest in a specific vertical sector, and others prefer to diversify to cross-industrial sectors (Sohl, 2007). Finally, some angels reserve money to follow-on investments (Rose, 2014), whereas others prefer to invest initially (one-shot) and let other investors continue investing in later stages (Mason et al., 2019). As it is noticed, not always the angel behaviour is perfectly rational on selecting investing opportunities (Bammens & Collewaert, 2014; Jourdan, 2012). The investment strategy is related to personal and internal circumstances that include the risk profile, the angel background, the amount of money that is allocated, the time to dedicate to the BAs' activity, the angel and the entrepreneur success story and, naturally, to the circumstances of each startup included in the deal (Etula, 2015; Huang et al., 2017; Mitteness et al., 2012). Reinvestment is one of the decisions to consider when designing an investment strategy (G. Benjamin & Margulis, 2005). Some angels reserve money to reinvest in follow-on rounds in the most promising companies they already invested in (Farrell, 2005). To be completely satisfied, angels need to close the virtuous cycle of investment and exit some profitable startups to cash-in and to gain higher track-record and reputation. Satisfaction with the financial performance and successful exits are acknowledged to be essential components of the reinvestment intention (Shane 2005; 2009). However, since exits will not occur before seven years or more after the initial investment (Botelho et al., 2019; Mahapatra, 2014) and nine years in the United States (Rose, 2014), angels will not be capitalized with money coming from the angel activity during a long investment period. Therefore, one of the most critical determinants of the reinvestment intention is probably the satisfaction with the current angels' job. Previous research suggests that involvement with the entrepreneurs is a cause of angel satisfaction or dissatisfaction, that makes the angel more likely to continue investing if satisfied, or decrease the interest to remain in the startup, and try to exit in case of dissatisfaction (Collewaert, 2009, 2012; Collewaert & Fassin, 2011). Consequently, reinvesting may happen as a natural consequence of a regular and satisfactory angel experience as a whole, not necessarily because of the exits, even because they are rare and difficult to achieve (Botelho et al., 2019), or just because it makes sense to wait until the startup reaches a better valuation. Satisfaction is a reliable predictor of repurchase intention in the stock market (Puustinen et al., 2013). Shim et al. (2008) also found empirical evidence that the satisfaction level in the real estate area has a positive effect on the reinvestment intention, showing that the higher the satisfaction, the higher the reinvestment intention. Thus, it can be hypothesized that individuals with a perception of their angel careers' progress, having a satisfactory relationship with the entrepreneurs, the angel groups, and their angel job, are more likely to reinvest, even if they have not yet achieved successful exits.

### 4.3.5 Conceptual model and hypotheses

Based on the previous sections' literature and discussion, the following model is proposed in Figure 4.1. The hypotheses underlying the model are the following ones:

### H1: Perceived career development has a positive effect on angel job satisfaction.

H2: Angel job satisfaction has a positive effect on reinvestment Intention.

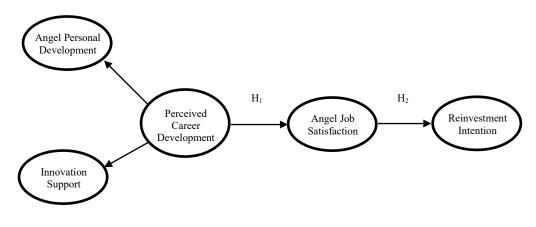


Figure 4.1 - Conceptual Model

# 4.4 Research methods

An international questionnaire survey was undertaken with the purpose of testing the hypotheses and validate the conceptual model. The quantitative online survey was carried out to test and validate a Perceived Career Development (PCD) scale among European angels. The questionnaire also included questions measuring Angel Job Satisfaction and Angel Reinvestment Intention, as well as items to characterize the BAs' socio-demographic profile and the experience as BAs. The Perceived Career Development (PCD) scale was built based on a literature review of the concepts of Angel Personal Development and Innovation, encompassing authors such as Donati and Watts (2005), Irving and Williams (1999) and Johns (2012) from the personal development research field, and McKaskill (2009a), Politis and Landstrom (2002), Rose (2014) and Smith et al. (2010) from BAs literature and backed up by a qualitative study. This qualitative study,

involving interviews with 53 business angels and 35 entrepreneurs, where the laddering technique (Reynolds & Gutman, 1988) and the means-end chain model (Gutman, 1982) was used to identify goals as reasons for angel investing, is not presented in this paper for parsimony reasons. The PCD scale included in the questionnaire of the present study encompasses a set of eight items representing the Angel Personal Development goals (see Appendix 4.1) and five items related to innovation activities that are crucial to BAs' activities (see Appendix 4.1). The six items of Angel Job Satisfaction are based on Duffy et al. (2012) and Hmieleski and Corbett (2008). The eight items of Reinvestment intention are based on Puustinen et al. (2013). The questionnaire was based on a seven-point Likert scale, ranging from strongly disagree (1) to strongly agree (7).

The survey questionnaire assessed BAs' socio-demographic profile to obtain information about age, gender, and country of residence. It also included questions related to the experience of the respondent as a BA, specifically concerning the following issues: (i) Number of years of BA experience; (ii) number of invested startups; (iii) amount invested in the scope of BA activities; (iii) geographical area where investments are made; (iii) the percentage of time dedicated to BA activities; and (iv) from the time devoted to the BA activity, the percentage of time dedicated to several aspects – angel groups, startups and the BA ecosystem.

BAs were identified using several sources: the database of the Portuguese Federation of Business Angels (FNABA) affiliated to the European Business Angels Network (EBAN); the database of Certified Business Angels investing in Portugal, the REDangel's group; and finally, the personal database of one of the authors, professional business angel connected personally through LinkedIn. A total of 3870 emails were sent to BAs of 7 European countries – Portugal, United Kingdom, Spain, Italy, France, Germany and Finland -, and a response rate of 12%, corresponding to 474 answers, was obtained. From those, 138 questionnaires were not complete, remaining 336 complete responses, representing a final response rate of 9%. The survey has been online for two months.

The socio-demographic characteristics of the sample are shown in Table 4.1. 85% of the sample is composed of males, with 74% of the respondents with ages between 41 and 60. The sample encompasses a concentrated geographical representation of respondents of seven European countries. Respondents have an average of 7.6 years of angel experience, dedicate 31% of their time to BAs activities and near 34% invest between €100k and €500k in BAs activities. 47% of BAs respondents invest only in their country of residence, whereas around 51% of them prefer to invest in their country of residence and abroad, and 2% invest only abroad. BAs tend to dedicate near 47% of their time to the startups' activities, and only 21% of their time to angel groups.

Gender	n	%	Invested Startups	n	Residence	%
Female	50	14.9	mean	11.23	Portugal	25.0%
Male	286	85.1			UK	17.9%
Age	n	%	Experience		Spain	14.9%
20-30	6	1.8	nº years	7.6	Italy	14.9%
31-40	46	13.7			France	11.3%
41-50	125	37.2	Investment Region	%	Germany	10.7%
51-60	123	36.6	only in the country of residence	47.0	Finland	5.4%
61-70	28	8.3	only abroad	1.8		
>70	8	2.4	in the country of residence and abroad	51.2		
Investment amount as BA	n	%	% time dedicated to BA	%		
<20k€	47	14.0%	mean	30.6%		
[20-50K]	40	11.9%				
]50K-100k]	57	17.0%	% angel time distribution	%		
]100k-250k]	56	16.7%	to angel groups	21.3%		
]250-500k]	57	17.0%	to startups	46.6%		
]500k-1M]	40	11.9%	to the ecosystem	32.1%		
]1M-3M]	23	6.8%				
>3M	16	4.8%				

 Table 4.1 - Respondent business angels' characteristics (n=336)

### 4.5 Results

Data analysis was carried out using the following software: SPSS and AMOS. A confirmatory factor analysis (CFA) was conducted to examine the psychometric properties of all the constructs analyzed. AMOS 20 with maximum likelihood estimation was used to assess the model. Standardized loadings from CFA were evaluated for the purification process, following Hausman and Siekpe (2009). As a result, the threshold value of 0.7 for the factor loading scores was used to confirm convergent validity (Hair et al., 2010). Therefore, some items (Apd2, ReInv1, ReInv2, ReInv4, ReInv5, AJS1) were removed to improve the model. Table 4.2 shows the items and constructs properties. Table 4.2 confirms the solution's dimensionality, construct reliability (CR) and convergent validity showing good fit. The calculated construct reliability, average variance extracted (AVE) scores and factor loadings all pass when tested against generally accepted levels (factor loadings > 0.70; AVEs > 0.50; CR> 0.70) indicating acceptable measurement properties and convergent validity.

		C4	C	
10010 4.2	Difficitionality, reliability	ly, and converge	in value statistics.	

Table 4.2 - Dimensionality reliability and convergent validity statistics

			Standardized	Crombach'	<sup>s</sup> AVE	CR
			loadings	alpha		
Apd1	<	APD	0.738			
Apd3	<	APD	0.864			
Apd4	<	APD	0.883	0.910	0.649	0.917
Apd5	<	APD	0.820	0.910	0.049	0.917
Apd6	<	APD	0.802			
Apd7	<	APD	0.713			
ReInv3	<	Reinvest	0.842			
ReInv6	<	Reinvest	0.963	0.934	0.84	0.94
ReInv7	<	Reinvest	0.940			
Innov1	<	InnoSupp	0.871			
Innov2	<	InnoSupp	0.879	0.920	0 712	0.000
Innov3	<	InnoSupp	0.812	0.920	0.712	0.908
Innov4	<	InnoSupp	0.812			
AJS2	<	AJobSat	0.854			
AJS3	<	AJobSat	0.710			
AJS4	<	AJobSat	0.906	0.909	0.681	0.914
AJS5	<	AJobSat	0.849			
AJS6	<	AJobSat	0.794			

Note:  $(\chi^2/df=2.426; IFI: 0.963; TLI: 0.956; CFI: 0.963; SRMR: 0.0371; RMSEA: 0.065).$ <sup>a</sup>Handley and Benton (2009); <sup>b</sup> Hu and Bentler (1998,1999); <sup>c</sup>Browne and Cudeck (1992); <sup>d</sup>Bagozzi and Yi (2012) Root Mean Square Error of Approximation (RMSEA)  $\leq 0.08$  marginal fit<sup>a</sup>;  $\leq 0.05$  good fit<sup>d</sup> Incremental Fit Index (IFI) > 0.9 good fit<sup>b</sup>;

Comparative Fit Index (CFI) > 0.8 marginal fit<sup>b</sup>; > 0.9 good fit<sup>b</sup>; > 0.93 good fit<sup>d</sup> Tucker-Lewis Index (TLI) > 0.92 good fit<sup>d</sup>

SRMR  $\leq 0.07$  good fit <sup>d</sup>

The correlations between constructs ranged from 0.541 to 0.748, not exceeding the recommended 0.9 limits (Hair et al., 2010). After examining the individual AVEs and comparing their square-root scores with the correlations among constructs, it is possible to conclude that all square-root AVEs exceed correlation values among the constructs for their respective columns (Table 4.3), demonstrating discriminant validity.

APD CR AJS Constructs Reinvest InnoSupp Ave 1. APD 0.649 0.917 0.806 2. Reinvest 0.840 0.940 0.631 0.917 3. AJS 0.914 0.735 0.681 0.634 0.825 0.712 0.908 0.748 0.541 4. InnoSupp 0.568 0.844

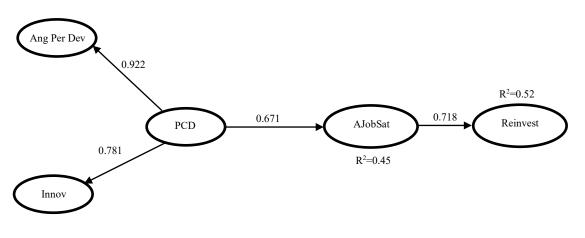
Table 4.3 - Discriminant validity: squared root AVEs versus construct correlations.

Notes: The bold scores are the square root AVE; the off-diagonal scores are the correlations among constructs.

The importance of two dimensions of PCD, APD and InnoSupp, was verified by secondorder factor analysis. Specifically, the second-order PCD construct includes two first-order factors: (i) Angel Perceived Development (APD); and (ii) Innovation Support (InnoSupp). For the second-order CFA, the chi-square is 313.030, and all indices suggest a good fit. Following the recommendations of Marsh and Hocevar (1985) and Day et al. (2015), the target-coefficient (T) was calculated, to validate the existence of the second-order PCD construct statistically. T is a ratio of the  $\chi^2$  for the first order measurement model in relation to the  $\chi^2$  for the second-order measurement model [T= $\chi^2$  1st Order /  $\chi^2$  2nd Order=312.931 / 313.030 = 0.99]. Since the result exceeds the recommended value of 0.7 (Segars & Grover, 1998), the proposed second-order model is supported. As such, BAs perceived career development can be assessed by the two sub-dimensions herewith proposed (APD and InnoSupp).

Following the measurement purification process, the consistency of the convergent and discriminant validities and the second-order construct validity, SEM modelling was used to test the hypotheses within the research model.

The structural model results are shown in Figure 4.2, and all fit indices in the research model are acceptable. Perceived career development comprises two factors: Angel personal development and innovation support. Perceived career development explains 45% of angel job satisfaction (Figure 4.2).





The SEM results are shown in Table 4.4 and, for a 1% statistical significance, confirm the following hypotheses: H1: Perceived Career Development has a positive effect on Angel Job Satisfaction (H<sub>1</sub>=0.671, p < 0.000, R<sup>2</sup>=45%), H2: Angel Job Satisfaction has a positive effect on Reinvestment Intention ( $H_2=0.718$ , p < 0.000,  $R^2=52\%$ ).

	Independent variable	Path	Dependent variable	Standardized estimate	S.E.	p-value	Result
$H_1$	PCD	$\rightarrow$	AJobSat	0.671	0.062	0.000	Supported
H <sub>2</sub>	AJobSat	$\rightarrow$	Reinvest	0.718	0.064	0.000	Supported

# 4.6 Discussion and implications

As it is largely noticed, the angel market has been changing dramatically in recent years (Harrison et al. 2020; Landstrom & Sorheim, 2019; Mason et al., 2019). Simultaneously, the number of deals, the amount of money invested by angels, and the angels' community continue to increase (EBAN, 2019; Sohl, 2018). However, the new organization of angels in groups, angel funds, and networks in many aspects look like VCs (Cavallo et al., 2019). Consequently, the direct involvement with startups, which has been considered a sine qua non condition to define what is an angel (Avdeitchikova et al., 2008b; Lahti, 2011; Mason et al., 2019), is currently questionable by the angel practice provoked by the market change. The angel's work directly involved with the startups is, in many aspects, intermediated, or even replaced by the gatekeeper or the group manager (Paul & Whittam, 2010; Wirtz et al., 2017). The individual investment decision in groups is shared, subject of consensus, sometimes overpassed in the joint investment committees (Croce et al., 2016; Mason et al., 2019; Owen & Mason, 2016). The angel itself lost part of his\her autonomy. Additionally, the early-stage arena is being crowded with the presence of crowdfunding, equity crowdfunding, angels and VCs that are disputing the same investment space in the best startups and creating a market mess (Block et al., 2018).

This research, built on Schein's internal/external career concept, is focused on the BA's internal career. The external career (the formal one) is out of this research scope and is not discussed.

The present study highlights that support innovation is a relevant dimension of the perception of an angel career development ( $\beta$  = 0.781). To support innovative startups is inherent to the angel work and constitutes the essence of the angel investing activity (Block et al., 2018; OECD, 2011; Rose, 2014). Angels themselves, like entrepreneurs, have an innovative orientation (Lindsay, 2004). Therefore, it is not surprising that support innovation has emerged as an important career dimension. One can say that this result is in line with what could be expected from business angels.

Additionally, this study underlines that personal development is another relevant dimension of the perceived career development ( $\beta$  = 0.922), even higher than that of support innovation. Career development positively influences angel job satisfaction, with an explanatory power of 45% of this construct. These results, confronted with angel literature, lead us to undertake critical reflections and implications. First, personal development is very important or even the most relevant dimension of an angel career (Meijers & Lengelle, 2015). The complexity of angel investing nowadays is not compatible with an amateur and hobbyist perspective (Kerr et al., 2014). The initial generations of wealthy stereotyped business angels capitalized by the computer industry's outstanding

results and internet' booming days, invested for fun, hobby, and pleasure (McKaskill, 2009a; Ramadani, 2009). Apparently, the money was not the problem. Nowadays, the circumstances have changed dramatically. The large majority of the estimated one million angels cross the world (EBAN, 2019; Sohl, 2018) have not millions or even thousands of euros to invest annually. EBAN (2019) highlights that individual angels invest an average of 21.5K€ annually. Our results confirm that 42% of the European angels who answered the questionnaire invested 100K€ or less, and only 11.6% invest more than 1M€ (see Table 4.1 for more results). Moreover, the current COVID-19 pandemic crisis is expected to result in a short and long-term contraction of the angel and VC market (Mason, 2020). The money will be a scarce resource for startups and must be invested carefully and professionally. More than ever, a successful angel activity implies self-actualization and permanent learning (Farrell, 2005; Preston, 2004; Smith et al., 2010) or, in other words, a continuous development perspective.

In a time of high complexity and continuous change, the sense of personal career development will be definitively an important factor that anchor angels to play the intelligent, and long-term angel investor game. Angel groups and organizations should be concerned to generate creative environments for experiential investors' learning and suggest that individuals make their angel career plans adjusted to their needs and lifestyle. Angel associations and public policies should encourage individuals to be active angel learners with a long-term career perspective and not support a passive and disengaged short-term view. A truly angel experience must help angels invest in innovative startups, keep updated with the new business, give angels opportunities for personal development, encourage angel involvement, and value co-creation directly with the entrepreneurs. Definitively, angel groups should not consent gatekeepers to do the angel work in their name. Gatekeepers should have the unique role of being facilitators of the angel experience, not agents that difficult the angel experience lived in the first person. That's why BAs are different from VCs. Gatekeepers are not the general partners (VCs' management partners), and angels are not their limited partners (the funds' financial investors). The VC value proposition does not fit the angel's soul. Making sense of an angel career development implies a disposition for a "hands-on" approach and the desire of proximity with the innovative entrepreneurial world that cannot be delegated in gatekeepers or general partners. The angel career is much more than a financial game. The present sample angels dedicate 46.6% of their angel time to activities related to startups, 21.3% to the angel groups, and 32.1% to the entrepreneurial ecosystem. When groups or institutions push or force angels to be uniquely financial investors, angels lose a substantial part of their career perspective and waste the most fulfilling part of the angel experience. Angel groups that propose a business angel experience, but deliver a VC one, are doing a poor service to all the entrepreneurial community.

Finally, this research fully supports the hypothesis that angels, satisfied with their work, will enhance their intention to reinvest ( $\beta$  = 0.718 and with an explanatory power of 52%) and continue in the angel activity. In other words, without a stimulating angel career perspective, in the short term, angels will get disappointed with their work, will not invest more money and will be more likely to abandon the angel activity.

Although the reinvestment intention is related to previous successful exits, since many angels conditionate new investments in startups on their re-capitalization with previous investments (Shane, 2005; 2009), the time until an exit occurs is seven, eight, until ten or even fifteen years (Mahapatra, 2014). Indubitably, angels provide "patient capital" to startups (Harrison et al., 2016; Lumme et al., 1998). However, to maintain angels' interest and motivation in their activity, and while exits do not occur, angel groups and gatekeepers should create initiatives to help angels live the experience of an evolutive career. Some ways of doing this are: to create angel group experiences and give angels continuous experiential learning so that they can feel progressing in their personal career; to implement internal mechanisms for easy exchange of shares between angels (internal market), allowing angels to exit earlier through internal exits; to organize the angel work through structured and professionalized processes that encourage the angels to be involved in the decisions and not be passive investors. These strategies will contribute to increasing BAs involvement and satisfaction, making them more motivated to reinvest and develop an angel career.

# 4.7 Conclusions and future directions

More than ever, angels face an exceptional turbulence momentum that is favourable to clarify some issues regarding their class of investors. The angel career plays a critical role in bringing some light into the early-stage investment mess. "Pressed" on one side by platforms of crowdfunding, equity crowdfunding, venture builders and acceleration programs and, on the other side, "attacked" by VCs, all of them entering in the traditional early-stage investing space (Block et al., 2018), BAs are lost in their positioning. The angels are living a decisive "battle" regarding how to design/develop their angel careers.

By bringing together two different literature streams, on business angels and career development, the present empirical study offers a new contribution to the development of the angel career, an almost ignored phenomenon by the angel scholars. Our results indicate that BAs are no longer following the pure amateur hobbyist paradigm of the angel investing for fun, but are also characterized by a professional character, assigning value to meaningful career development. Through the light of a career development plan managed by themselves in an experiential learning context, angels will invest in the innovative startups they decide to and co-create startup value with their work. The satisfaction with their job and their angel experience as a whole will be critical motivational anchors, particularly in times of continuous change, to continue to invest and remain in the angel activity.

Despite providing important contributions, the present study also has some limitations. First, the study has addressed the internal and subjective aspects of the angel career. The external aspects of the career, the organization of the angel groups, networks and the different roles that can be performed, also need to be considered in future research.

Second, this research has been focused on European angels. Future research may consider other "latitudes", namely distinct countries, cities and ecosystems. Other exciting variables to analyze that may affect the BAs' perceptions of career development and subsequently, angel job satisfaction and the likelihood to reinvest, are gender and amount of investment.

Third, another interesting avenue is to analyze the angel career in the face of the diversity of career propositions and angel styles.

Finally, new phenomena that are occurring in the angel groups' practise should be explored by scholars in future angel career research. Let's point some.

Facilitation. Almost everyone can be an angel. Angel groups and networks for sustainability reasons, let all type of individuals to come in. Some of them invest minimal amounts or even do not invest. They are not effective angel players. Just pay the annual fee to see the "game". Naturally, this practice has several negative consequences for the experience of other angels, the entrepreneurs and all the ecosystem.

Camouflage. This phenomenon occurs with some individuals acting as investors and playing the angel game without being one. They are not visible, do not actively participate, and rarely create value. They just put money and do not aggregate any other value. Should they be allowed to stay in angel groups if they are just financial investors?

Migration. Being an angel is a transitory role. Migrators see angels as the "poor brothers" of VCs. As soon as they can, they migrate to venture capitalism. Is venture capitalism the last step of the angel career?

Hybridization. Several roles are played at the same time without clear rules or boundaries. This is a common phenomenon occurring in many angel groups and networks: pragmatism and multi-investing roles. The main focus is the startup round. Investors, angels, VCs, are understood as more or less the same thing.

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# Appendix 4.1: Measurement items used

Consider your angel investor activity. Please, indicate the extent to which you agree with the following items. A 7-point scale from 1 "Strongly disagree" to 7 "Strongly agree", was used.

Scale	Items
Angel Personal Development From qualitative study and literature (e.g. Hill & Power, 2002; Puustinen, Maas, & Karjaluoto, 2013; Rose, 2014)	<ul> <li>Epd1. It is a good way to develop oneself.</li> <li>Epd2. It is a learning opportunity.</li> <li>Epd3. It encourages knowledge sharing.</li> <li>Epd4. Keeps me updated.</li> <li>Epd5. I can develop my networking.</li> <li>Epd6. Helps to meet extraordinary people.</li> <li>Epd7. It facilitates socialization with other angels.</li> <li>Epd8. Stimulates co-investment with other angels.</li> </ul>
Innovation	Innov1. It is a good way to foster innovation.
From qualitative study and literature (e.g. Festel, 2011; Lindsay, 2004; McKaskill, 2009a; Rose, 2014)	Innov2. It brings about new things to the world. Innov3. It gets me close to new business ideas and new people. Innov4. I invest in supporting technological evolution. Innov5. It keeps me abreast of new technologies.
Angel Job Satisfaction Duffy et al. (2012) and Hmieleski & Corbett (2008)	<ul> <li>AJS1. I feel fairly well satisfied with being an angel investor.</li> <li>AJS2. Most days, I am enthusiastic about being an angel investor.</li> <li>AJS3. Each day of work as an angel investor seems like the time flies.</li> <li>AJS4. I find real enjoyment being an angel investor.</li> <li>AJS5. I consider being an angel investor rather pleasant.</li> <li>AJS6. All in all, I'm satisfied with the work I do as an angel investor.</li> </ul>
<b>Reinvestment intention</b> Puustinen et al. (2013)	ReInv3. I intend to continue to invest my know-how as an angel investor in the future. ReInv6. I intend to continue to invest my reputation as an angel investor in the future. ReInv7. I intend to continue to invest my personal network as an angel investor in the future.

# Chapter 5 - The impact of calling on the angels' perceived value

## Abstract

Business angels (BAs) represent the biggest share of the early-stage investment market, supporting high risky startups, and fostering innovation that impacts the lives of millions. Besides the importance of the angels' investing role, no theoretical or empirical reflection on the angels' calling has been done in the BAs domain. Analysing BAs' calling has the potential to give new and relevant insights into the way angels look into their work, which is especially important due to the undergoing work transformation occurring in the angel market, with angels investing through professionalised groups of investors. Therefore, the present paper aims to fill this gap analysing, through structural equation modelling, the impacts of calling on BAs' involvement in their activity and on the value they perceive from their work. The model was tested with data obtained in a questionnaire survey with 869 BAs worldwide. Findings reveal a positive influence of calling both on BAs' involvement on their work with the startups, the angel groups and the ecosystem and on the perceived investment value they extract from their activity. This study explores the sense of calling in the business angels domain, offering conclusions, relevant implications and new challenging research opportunities.

**Keywords**: business angel; angel investor; calling; perceived investment value; career; job satisfaction, involvement.

# 5.1 Introduction

In recent years, calling became a fundamental topic in research on work and career development (Lysova et al., 2019). Aspects relating calling with work meaningfulness, career engagement, behavioural involvement, social comfort, job satisfaction and work-related well-being created a diverse and substantial body of research that is growing in popularity (Dobrow, 2013; Duffy et al., 2018; Lysova et al., 2019). Research suggests that there are three distinct relations people can have with their work: as a job, as a career, or as a calling (Bellah et al., 1985). People who see their work as a job consider it not an end in itself. Nevertheless, they can recognise it as a mean or an instrument to achieve other goals and are mainly motivated by salary or material benefits (Pitacho et al., 2019). People who give more relevance to their career are deeply motivated by their work. Their main concern is career advancement, going further on the occupational structure, and getting increased remuneration, higher social status and higher self-esteem (Wrzesniewski, 2003). Finally, people who see their work as a calling find their work inseparable from their lives and essential to fulfilling their identities (Berg et al., 2010). The work is perceived as deeply meaningful, being associated with the belief that it

contributes to a greater common good and makes the world a better place (Rosso et al., 2010). They also tend to be happier, more committed and engaged with their work (Duffy et al., 2018).

The need for meaning explains why people in a wide range of working contexts don't look to work as a job or a career and aim to develop a calling experience (Berg et al., 2010; Dobrow, 2013). Several studies on calling were made in many professional areas such as nursing care, music, art, management and business, entrepreneurs, academics, priests, pilots, financiers, firefighters, police officers, and in some groups, as older workers (Dobrow & Tosti-Kharas, 2011; Lysova et al., 2019; Raatikainen, 1997).

Since there are no studies of calling that are explicitly applied to the domain of business angels (BAs), one may ask at which point to become an angel is as an answer to a calling. Business angels are primarily understood in the literature and by society as investors whose main expectation is the financial gain (Mason, 2011; 2015; Politis, 2016). Maybe the angel activity's as a calling has not yet resonated as a type of occupation suited to have one. This research seeks to fill the gap of analysing the calling of BAs. As suggested by Thompson and Bunderson (2019, p. 437) "It may be that some occupations lend themselves to the emergence of callings, because they require unique skills and economic sacrifices for a perceived public benefit". This may be the case of the business angel activity that requires managerial skills and the investment of economic resources in risky startups, to help entrepreneurs develop their projects, as well as for the perceived public benefit of creating jobs and supporting the local economy (Rose, 2014; Shane, 2009).

In many cases, angel work seems a project-oriented activity or an answer to a calling. Investments can be understood as opportunities to self-realisation, continuing personal development by helping young entrepreneurs develop their startups. According to the psychologist Hillman (1996, p.6) "Each person enter the world called" and close to 50% of the adults view their work as a calling (Duffy & Dik, 2013; Wrzesniewski et al., 1997); as such, one may consider that, at least, a substantial part of the BAs feels a sense of calling. The types of reasons that motivate individuals to invest as BAs have several common aspects with those referring to calling.

Research on work as a calling shows that individuals can enact their calling in the context of poorly established career structures such as the founding stages in the entrepreneurial world. Entrepreneurs are more focused on processes than on careers (Lysova & Khapova, 2019). The literature suggests that many individuals want their work as angels' investors to be more than just another source of income or an opportunity to advance in their career, but a possibility to obtain intrinsic meaning and make a difference in the world (Abernethy & Heidtman, 1999; McKaskill, 2009a). However, various contextual factors, such as the absence of another job, lack of financial liquidity, no time to be involved, may cause difficulties or deter some individuals from living their angel calling. Research also shows that people can seek to develop a calling through involvement in the calling domain (Buis, Ferguson, & Briscoe, 2019; Dobrow, 2013). Although the literature suggests that the calling may lead to greater involvement and that angels also look for involvement in the startups they invest, no empirical studies are known on BAs' calling and their impacts. Therefore, the purpose of this essay is to fill these gaps extending the angel knowledge base, analysing the impact of calling on the BAs involvement with their work, as well as on the value they perceive from their investing activity.

The chapter is structured, as indicated next. After this introduction, the second section builds on the business angel calling concept, discussing the salient aspects in angel studies, which suggest that some BAs may have a calling. The section also addresses the potential implications of calling in angel involvement with their work and the perceived investment value. The third section describes the methodology used in empirical research. The fourth and fifth sections expose and discuss the principal results. The final section identifies the main conclusions, implications and limitations of the present work, proposing avenues for future research.

### 5.2 The business angel calling

The concept of work as a calling has its roots in the protestant reformation in the sixteencentury, based on the idea that calling represents an obligation inspired by God to devote one's work (whatever it is) in service of others (Thompson & Bunderson, 2019).

Since the reformation, calling has become secularised and influenced by two main streams of thought – the neoclassical and the modern view. The neoclassical perspective conceptualises calling at work as a personally meaningful career project that works toward a pro-social, altruistic and greater common good, originated from an external source to the self (Duffy & Dik, 2013). The neoclassical calling is grounded on a sense of duty or destiny that matches with individual unique, innate characteristics, talents and opportunities (Bunderson & Thompson, 2009). It is an obligation to answer a need in the world, a "transcendent summons" (Dik & Duffy, 2009, p.427) that derive the sense of purpose and meaning through "other-oriented values and goals as primary sources of motivation."

The modern view of calling is based on internal motives of intrinsic interest, self-fulfilment, passion, personal meaning and enjoyment (Praskovaet al., 2014; Thompson & Bunderson, 2019). Calling is presented as an occupation that an individual: (1) feels drawn to pursue; (2) expects to be intrinsically enjoyable and meaningful; and (3) sees as a central part of his/her identity (Berg et al., 2010; Praskova, Creed, & Hood, 2015; Wrzesniewski et al., 1997). Consequently, callings are subjective and internal to persons

and generally directed toward a specific domain (Dobrow & Tosti-Kharas, 2011). People who feel a calling try to, considering their identities, select an intrinsically enjoyable and rewarding work imbued with personal and social meaning, and capable of making valuable contributions to society (Berg et al., 2010) and morally inseparable from their lives (Dobrow & Tosti-Kharas, 2011).

The individuals with a sense of calling possess a sense of urgency and long term view about what they should do (Dobrow, 2004) and develop career meta-competencies that allow them to be more prepared to undertake their callings (Hall & Chandler, 2005b). Dalla Rosa et al. (2019, p.45) highlight that calling is a "career-related goal that could persist across job transitions, and that can help individuals to define who they are, providing a sense of continuity, meaning and direction".

Recently, Thompson and Bunderson (2019) made some effort to integrate the two calling perspectives (the classical and the modern view) suggesting that calling lies on a continuum between neoclassical conceptions of duty and destiny and modern ideal types of self-expression and fulfilment. The main argument is that calling based on a sense of duty and destiny without passion and fulfilment does not have enough power to inspire a strong connection with one's work and callings without a societal contribution are less likely to inspire feelings of meaningful work. Research suggests that people experiencing their work as a calling have several psychological benefits like increased life, health, lower absenteeism, greater job satisfaction, personal success and greater satisfaction with life (Duffy & Dik, 2013; Hall & Chandler, 2005). Specifically, in the context of seeing business as a calling, Novak (1996), supported on a series of testimonials of business leaders, highlights that callings in business hold four characteristics: (i) each calling is unique to each individual; (ii) should fit own abilities and require talent and passion for following it; (iii) reveal their presence by the sense of enjoyment and renewed energies its practice yields; and (iv) require hard work, discernment and experimentation until a sense of depth satisfaction is achieved.

Adding on Bellah et al. (1985), we propose a quadripartite model for angel work orientation to frame how angels experience their activity as hobbies, jobs, careers, or callings.

Those who see their angel activity as a hobby emphasise the enjoyment of the investment process and the pleasant outcomes of being involved (Benjamin & Margulis, 2005; Osnabrugge & Robinson, 2000). They see angel activity at the same level as another hobby like playing golf or reading a book, informal and not regular. They perceive emotional value as a fundamental one.

Those who see their activity as a job aim to get an income or remunerated employment (Mason & Harrison, 2008; Shane, 2009). It can be a C-level role in a startup, a consultancy

role in a couple of startups, or even in the angel group. The work as a job is seen as entirely instrumental and pursued essentially to meet financial needs (Chen & Cooper, 2014). The perceived work value is essentially economic, and BAs intend to obtain benefits and enjoyment outside the workplace (Cammock, 2012).

Those who see their angel activity as a career relate it to achievement and advancement in their work (Bellah et al., 1985). Individuals can invest in increasing their professional level, knowledge, to feel fulfiled or getting prestige and status (Webster & Edwards, 2019). In the case of corporate managers, they can benefit from entering the angels' world to develop their ability to begin a business from scratch and impress top management. They may aim to have a role near governmental bodies, as advisors or managers of public policies favouring angels. The perceived work value is both symbolic and economic, associated with a higher position in the career path to enable self-esteem enhancement.

Finally, those who perceive being an angel as a calling feel their business activity "is a noble field of work" (Novak, 1996, p.31). In this regard, Pope Francis refers to a business calling as "a noble vocation, provided that those engaged in it see themselves challenged by a greater meaning in life; this will enable them truly to serve the common good by striving to increase the goods of this world and to make them more accessible to all" (Turkson et al., 2013, p.5). Understanding the angel activity as a business calling is to enter another level of meaning, involvement and commitment with one's self, the entrepreneurial world and the society.

Two particular calling definitions may be useful to define and better understand calling in the business angel domain. One definition has been proposed by Dobrow and Tosti-Kharas (2011, p.1003): "a consuming, meaningful passion, people experience toward a domain." This definition captures the passionate feelings and meaningful involvement that characterise angels and entrepreneurs toward entrepreneurship (Cardon et al., 2009; McKaskill, 2009a). Praskova et al. (2015, p.102) made another interesting contribution defining career calling as: "a largely self-set, salient, future-oriented career goal that is personally meaningful, other-oriented, and involves active engagement." This definition matches the active, hands-on involvement with the startups, which characterises BAs' behaviour, matching the most common BA's definition (Avdeitchikova et al., 2008; Mason, 2008). It is also in line with Politis and Landstrom (2002), suggesting angel candidates set up the goal to enter the investor career to co-create value to themselves and the invested startups they are involved with (Fili & Grünberg, 2016; Politis, 2008). It also follows the angels' pro-social joy and duty of giving back to society and supporting the entrepreneurs and the entrepreneurial community (Rose, 2014; Shane, 2005), legitimating the nobility of the angel mission.

Considering angel's literature, and also the definitions of calling suggested by Dobrow and Tosti-Kharas (2011) and Praskova et al. (2015), the following definition of BA calling is proposed: Angel calling is an enjoyable, and meaningful passion toward angel investing that leads to active involvement with entrepreneurs for value creation.

Individuals understand their calling as something organic, coming from the deepest of their heart and soul (Weiss et al., 2003) and central to their identity (Dobrow & Tosti-Kharas, 2011). It is also noted as a sense of personal mission (Elangovan, Pinder, & McLean, 2010). A function or career toward which one believes himself/herself to be called (Novak, 1996), grounded on his/her unique talents (Praskova et al., 2015) and emerging as a long-term enjoyable passion towards a domain (Hall & Chandler, 2005). The BAs' literature reveals that BAs tend to be passionate about their investing activity, with this characteristic being more visible in some BAs groups (McKaskill, 2009a; Rose, 2014). Hence, it is mentioned that angels enjoy their activity and invest to capture the thrill of participating in the development of emerging startups and the excitement to close deals and be part of them (Linde & Prasad, 2000). Sullivan and Miller (1996) identified one particular category of angels, the hedonistic investors, whose primary perception of value is on the enjoyment of their highly-risky investments. Some examples of expressions of this passion, found in the context of BAs, include the following ones: "Angels have a great passion for their activities and really enjoy the work they do with entrepreneurs and the contribution they make to early-stage businesses" (Mckaskill, 2009, p.157); "the joy of working with startup companies" (Kerr et al., 2014, p.24); "enjoy the challenge of helping younger visionaries grow a business" (Benjamin & Margulis, 2005, p.9); "enjoy to share building something from nothing" (Degennaro, 2010, p.7); and "enjoy being courted by the entrepreneur" (Hill & Power, 2002, p.109). Consequently, angel investing is not only about passion and enjoyment. It is also about the meaning of being involved in the development of emerging businesses (McKaskill, 2009a). Besides, an angel's fortune is often the result of a successful entrepreneurial career that provides a considerable amount of human capital used in favour of entrepreneurship (Fili, 2014). Because of that success and know-how, some BAs play the role of an established entrepreneurial elite who perceive a call to develop and perpetuate the ethos of entrepreneurship (Wade et al., 2003). As expressed by Rose (2014, p. 28), founder of the New York angels, referring to angels: "they are often strong believers in the ethos of entrepreneurship, excited by the prospect of supporting small companies that they believe may one day transform some segment of the business world, spurring economic growth for the benefit of millions." Hill and Power (2002) argue that BAs rely on their support to entrepreneurship because it is meaningful for them, to feel fulfilled and live with a higher purpose. In the same line, Rose (2014, p.35, p.31) proclaims: "If you are the right kind of person to take the plunge, I promise you that angel investing will be one of the most stimulating and personally rewarding activities you will ever enjoy." And even

more powerfully: "Angel investing can be one of the most enjoyable, fulfilling, and exciting endeavors in which you can engage."

### 5.2.1 Angel calling and active involvement with the BAs work

To develop an angel activity is a process that comprises being engaged with other players and activities in the entrepreneurial ecosystem that include professional associations, angel groups, investor networks, syndicates and, naturally, a more intense relationship with the entrepreneurs and their invested startups (Festel & De Cleyn, 2013; Lovelock & Wirtz, 2007; Norberg, 2007). Typically, angels select themselves the startups, the amount of money they invest, the timing of investment and also the type of involvement they will have with the BA's ecosystem. Angel involvement usually begins before the investment is closed doing startup scouting, screening, listening to pitches, making the investment decision, and performing due diligence. It may continue in post-investment activities to co-create value until a high valuation is achieved, and a formal exit or liquidity event occurs (Fili & Grünberg, 2016; Politis, 2008). Even some significant differences exist regarding their operational involvement's intensity and nature (Lahti, 2011; Politis, 2008); angels and entrepreneurs perceive their involvement with the startups to be their most relevant contribution (Norberg, 2007; Politis, 2008). For BAs, this involvement is more important than the money they invest (Kerr et al., 2014). The involvement of angels on the invested startups led to significantly better financial results than less involved investors that reach more investment failures (Wiltbank, 2009). It is also noted that angels' involvement in their investing activity also includes networking and socialising with other angels (Hill & Power, 2002).

There is no scientific research analysing the impact of BAs' calling on the involvement with their work. Nevertheless, callings are also associated with personal feelings of passion making possible a strong inclination towards activities that people feel are very important for them, in which they invest considerable amounts of time and energy (Vallerand et al., 2003). Besides, calling literature highlights that active behavioural involvement with one's work is essential to living a calling (Dobrow, 2013). Moreover, individuals that feel a strong sense of calling experience their involvement in the calling domain as meaningful (Rosso et al., 2010) and central to their identity (Dobrow & Tosti-Kharas, 2011) and do not imagine themselves doing another type of work (Bunderson & Thompson, 2009). Furthermore, a sense of calling urges one to be pro-active and engaged in one's career development process (Hirschi, 2011), reaching more subjective and objective career success (Hall & Chandler, 2005). The dialogue and interaction with others are critical to discover and enhance a calling, increasing individual and group learning, benefiting career development and work purpose (Buis et al., 2019; Novak, 1996). Building on social identity theory, Buis, Ferguson and Briscoe (2019) argue that teams and

groups are essential contexts in which individuals make sense of themselves and their callings. The groups of angels, syndicates and networks, and the interaction with other players of the entrepreneurial ecosystem and the society, provide the appropriate context and experiences that facilitate the activation, development and confirmation of a BA calling. Research on calling highlights feeling a calling is positively related to pursuing the calling professionally and being involved with professional associations according to that calling (Dobrow & Tosti-Kharas, 2011). Considering all that was mentioned before, the following hypothesis is proposed:

*Hypothesis 1. Angel calling positively influences angel involvement with the BAs work.* 

### 5.2.2 Angel calling and perceived investment value

A calling is an activity performed for its own sake, for the personal meaning and value associated with it, rather than a mean to obtain another end (Bellah et al., 1985). The "own sake" of the angel calling is investing per se. Calling literature highlights that individuals experiencing a calling are motivated for value creation for themselves (personal fulfilment, meaning, work satisfaction) and to the society (concerning themselves with others, participating in humanitarian causes, contributing to the common good). Praskova et al. (2015) remark that calling generates altruistic behaviours in favour of others and active engagement in meaningful goals that contribute to the community and society, producing a sense of personal satisfaction and fulfilment. Elangovan et al. (2010) argue that callings lead to action, inspire clarity of purpose and a personal mission in favour of pro-social intentions, uncovering the desire to make the world a better place.

Globally understood, the purpose of the angel activity is value creation in favour of the angel himself(herself), the startup, and society. There is a substantial body of research referring to the reasons and motivations why individuals get involved in the angel activity highlighting the personal benefits they perceive from it (e.g. Benjamin & Margulis, 2005; Edelman et al., 2017; Farrell, 2005; Gaston, 1989; Morrissette, 2006; Stedler & Peters, 2003). Based on the framework of perceived investment value (Puustinen et al., 2013), and angel literature, we framed the angel perceived investment value in five value categories: economic efficiency, emotional, symbolic-esteem, symbolic-altruism, and an additional category – the entrepreneurial dimension. It is abundantly noted on added value literature, an extensive list of actions and tasks angels do for value creation in favour of entrepreneurial startups (e.g. Fili & Grünberg, 2016; Hoyos-Iruarrizaga et al., 2017; Large & Muegge, 2008; Politis, 2008; Sapienza et al., 1996). Literature that identifies specific types of value that angels perceive from their activity is also vast and diverse.

On the one hand, the rational economic view advocates the primary or unique motivation of angels is to earn money (Morrissette, 2007; Riding, 2008; Van Osnabrugge, 1998), highlighting the ultimate purpose of investing in an entrepreneurial business is to achieve a financial return (Mason et al., 2015). On the other hand, the experientialist view suggests that individuals become angels by other purposes more consistent with career and calling development, including the opportunity for self-improvement, learn with experienced angels, help the entrepreneurs, and contribute to society (Benjamin & Margulis, 2005; Ramadani, 2009; Rose, 2014; Shane, 2009).

It is probably for those angels feeling a high sense of calling that money is a means or a necessary ingredient to obtain other outcomes and values than the economic ones. Hence, angels can receive higher regular income working in corporations than in startups that often pay 30 per cent below the market (Sharef & Sedlet, 2013). The literature suggests that the perceived value obtained from work is mainly symbolic for those who experience a calling, integrating both components of self-esteem for the fulfilment it provides and altruism by the social contribution it makes (Bellah et al., 1985; Bunderson & Thompson, 2009). Since angel investing is a heterogeneous market (Harrison & Mason, 2019), and callings are personalised, the two perspectives of value perception are possible, and eventually, complementary.

Answering a career calling reflects conscious and unconscious dynamic processes of goaldirected behaviour (Locke & Latham, 2006). Sullivan and Miller (1996) segmented BAs according to economic, hedonistic and altruistic motivations. BAs reveal altruism helping entrepreneurs make their dreams come true before anyone else, often from scratch when the startup is just a dream in the entrepreneur mind, according to the empathy they create (Klyver et al., 2017). Still, when the "chemistry" between the dreamer and the dream-maker merges, the "wedding" happens, and the investment occurs (Benjamin & Margulis, 2005). Angel literature also highlights the BAs' value creation in favour of others, namely: (i) transferring time, money and experience with the main purpose of helping emergent entrepreneurs (Ramadani, 2009); (ii) helping entrepreneurs avoid repeating the same mistakes they (BAs) already made (Ramadani, 2012); (iii) assisting less experienced BAs to become more investor-ready (Paul et al., 2003); (iv) giving back to the entrepreneurial community that made them wealthy (Ibrahim, 2008); and (v) creating local jobs and stimulating the local economy (Shane, 2009). When motivated by feelings of altruism, BAs are more resilient and able to hold their investments for longer periods (McKaskill, 2009a; Zacharakis & Shepherd, 2007) and staying more time with an underperforming startup (Mason & Harrison, 2002). Following this perspective, Wrzesniewski (2003: 301) argue that callings have societal and not just personal value, with callings being "associated with the belief that the work contributes to the greater good and makes the world a better place." This is the type of purpose commonly shared by business angels when they invest in startups and support innovation "to make this world a better place to live in" (Landstrom, 2007, p.58) and give something back to their local communities (Kotler et al., 2004).

The cycle of self-realisation and fulfilment that characterises a calling (Pitacho et al., 2019) is closed when the angel money invested with the purpose to multiply and generate more money returns to the angels coming from the result of their work and the startups' exits. For those reasons, the exit phenomena outlines a strong symbolic value perception of professional realisation, materialised through an economic outcome. Due to the arguments here presented, the following hypothesis is formulated:

Hypothesis 2. Angel calling positively influences angel perceived investment value

Scholars highlight that callings are motivating forces, acting as goal-generators that promote efforts to engage in career and personal development to answer the callings (Duffy, Allan, Autin, & Douglass, 2014). Praskova et al. (2015, p. 93) propose a dynamic calling concept as "a mostly self-set, salient, higher-order career goal, which generates meaning and purpose for the individual and which has the potential to be strengthened (or weakened) by engaging in goal-directed, career-preparatory actions and adaptive processes aimed at meeting this goal." In the case of the angels, it is also expected that this process of involvement can lead to an increment of the value perceived (Kerr et al., 2014; Wiltbank, 2009). It seems reasonable to postulate that, the more engaged angels are with BAs' work, as a result of experiencing and validating an angel calling, the more they will increment the value they obtain from their investing activity. For the above-cited reasons, the following hypothesis is presented:

H3. Angel involvement positively influences angel perceived investment value

Figure 5.1 presents the conceptual model proposed in this paper and its underlying hypotheses.

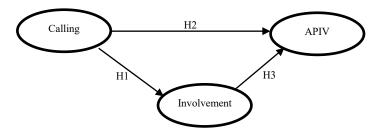


Figure 5.1 - The conceptual model

# 5.3 Research methods

The purpose of this essay is to understand the effect of a calling in the business angels domain, particularly at which point and how much calling affects the relationship with the perceived investment value and angel involvement. This research has relied on quantitative research methods, adapting well-tested scales of calling proposed by Dobrow and Tosti-Kharas (2011) and perceived investment value developed by Puustinen et al. (2013), both adapted to the Business angels context.

An online questionnaire was developed for this purpose, and a database of 10 000 BAs was created using the following sources: (i) the database of the Portuguese Federation of Business Angels (FNABA), affiliated of the European Business Angels Network (EBAN); (ii) the database of IAPMEI – Certified Business Angels investing in Portugal; and (iii) the personal database of one of the authors, a professional BA connected through LinkedIn to angels worldwide. Finally, the research had the support of the World Business Angels Forum (WBAF) that spread the survey to its members.

The questionnaire included questions designed to measure angel calling, angel perceived investment value (APIV), angel involvement, as well as questions to characterise the BAs' sociodemographic profile.

Angel calling was verified using the 12 item scale developed by Dobrow and Tosti-Kharas (2011) to measure the degree to which angels perceive a "consuming, meaningful passion people experience toward a domain" (p. 1001), in this case, angel investing. The scale was adapted to the angel context, and the 12 items were evaluated on a 7-point Likert scale ranging from 1=strongly disagree to 7=strongly agree.

The operationalisation of the APIV followed the Perceived Investment Value instrument (Puustinen et al., 2013), adapted to fit the business angel scope and extended to include the entrepreneurial dimension. The value angels perceive from the relation with the startups and the entrepreneurial world (entrepreneurial value), is fully documented in angel literature (e.g. Fili & Grünberg, 2016; Kelly, 2007; Politis, 2008; Rose 2014; Wade et al., 2003).

A qualitative study with a group of angels was developed to verify the fit with the angel scope, particularly to validate the entrepreneurial dimension. Still, for parsimony reasons, it is not presented here. The APIV scale included in the questionnaire encompasses a set of 29 items representing the five APIV dimensions presented previously. Items were evaluated on a 7-point Likert scale ranging from 1=strongly disagree to 7=strongly agree (for detailed information about the scale see Appendix 5.1).

The angel involvement, based on the scale used by Hoyos-Iruarrizaga et al. (2017, p.11), refers to doing activities associated with the startups, measured by the frequency of

involvement. "The frequency of this relationship is a good pointer to measure the extent of the real, active interest that BAs take in the investee project." This scale was extended to include activities with angel groups and the ecosystem. Angels were asked how frequently they participate in angel activities in general, in activities directly with startups, angel groups, or the ecosystem. Items were evaluated on a 7-point Likert scale ranging from 1=strongly disagree to 7=strongly agree (see Appendix 5.1).

The sociodemographic questions assess information on gender, age and country of residence of the BAs. Finally, there are questions related to the experience as BA, specifically concern the following issues: (i) Number of years of BA experience; (ii) number of invested startups; (iii) amount of money invested in the scope of BA activities; (iv) geographical area where investments are made; and (v) the percentage of time dedicated to BA activities.

The questionnaire was pre-tested with five BAs, and minor changes were introduced regarding the rewording of some items. It was administered online from middle January to the end of March of 2019. A total of 10 000 BAs were contacted by mail, and a response rate of 12% was obtained, corresponding to 1225 answers coming from 79 different countries. From those, 356 questionnaires were not complete. Therefore, the remaining 869 completed questionnaires represent a final response rate of 9%.

The majority of the BAs who answered the questionnaire are males (84.1%), between 41 and 50 years old (35%), or between 51 and 60 years old (31%) (see Table 5.1). The sample encompasses BAs of a wide range of countries, being United States of America (USA) (13.6%), Portugal (7.3%), and the United Kingdom (5.1%) the most representative.

As far as BA's experience is concerned, respondents have, in average, 8.2 years of angel experience, invested in average in 13.7 startups, most of them (50.6%) with an amount between 50-500k. The majority (51.8%) of the respondents invested both in the country of residence and abroad. There is a wide diversity among BAs concerning the number of invested startups, as revealed by the standard deviation of 25.5. Most of the angels have invested only in up to 7 startups. The BAs surveyed dedicate, on average, 32.2% of their working time to the angel activity, mainly using this time to give support to the startups (46.9% of their angel time).

Gender	Ν	%	Number of invested startups		Country of residence	%
Female	138	15.9	Mean, median	13.7;7	USA	13.6
Male	731	84.1	Standard deviation	25.5	Portugal	7.3
Age			Experience as a BA		UK	5.1
20-30	30	3,5	Number of years	8.2	Spain	4.2
31-40	137	15,8	-		Italy	4.1
41-50	306	35,2	The geographical area where the investments are made	%	Brazil	4.0
51-60	267	30,7	Country of residence	45.0	France	3.1
61-70	105	12,1	Only outside	3.2	Germany	2.9
>70	24	2,8	Country of residence and outside	51.8	India	2.4
					Canada	1.8
Amount invested in BA activities (€)			% of time dedicated to the BA activities		Australia	1.5
<20k	108	12.4	mean	32.2	Finland	1.5
[20-50k]	81	9.3	median	25.0	Switzerland	1.4
]50k-100k]	144	16.6	mode	10.0	Denmark	1.4
]100k-250k]	148	17.1	Standard Deviation	26.7	Netherlands	1.2
[250-500k]	147	16.9	% angel time distribution		Singapore	0.9
]500k-1M]	112	12.9	to angel groups	22.3	Belgium	0.8
]1M-3M]	67	7.7	to startups	46.9	Turkey	0.8
>3M	61	7.0	to ecosystem	30.7	Poland	0.7
			-		Others	40.8

Table 5.1 - Business angel investors profile (n=869)

### 5.4 Analysis of results

The model was tested through Structural Equation Modelling (SEM) using AMOS. An exploratory factor analysis confirmed that all items belong to the original construct, and a confirmatory factor analysis (CFA) examined the psychometric properties to assess two measurement models (Byrne, 2001; Hair et al., 2010). The first model included all the constructs of the first-order structure, and the second model considered the second-order constructs.

The goodness of fit for the measurement models was assessed by analysing the:  $\chi^2$ , IFI, TLI, CFI and RMSEA. Convergent validity was assessed by the average variance extracted (AVE), and discriminant validity was assessed by comparing the AVE of each construct with the shared variance between constructs. Based on the analysis of this model a set of items (Ent5, Ent6, Eco1, Eco2, Eco3, Eco8, Eco9, Eco10, Em4, and Est1) were excluded following Byrne's recommendations (2001). A minimum factor loading score of 0.7 was applied (Hair et al., 2019) to confirm convergent validity. Consequently, some items were removed to improve the measurement model.

The goodness of fit of the resulting model ( $\chi 2$  = 2181.57, Degrees of freedom = 775, p < 0.001) is presented in Table 5.2. All indexes analysed exceed the recommended values (Hu & Bentler, 1995), which supports the validity of the model hypothesised.

Goodness of fit measures	Recommended values	Results
χ2 / df	$\leq 3.00$	2.815
Incremental Fit Index (IFI)	$\geq 0.90$	0.939
Tucker-Lewis Index (TLI)	$\geq 0.90$	0.932
Comparative Fit Index (CFI)	$\geq 0.90$	0.939
Root Mean Square Error of Approximation (RMSEA)	≤ 0.060	0.046

Table 5.2 - Goodness of fit for the first order measurement model

Table 5.3 shows the reliability and validity of the measurement model were analysed by examining composite reliability (CR) and the average variance extracted (AVE) scores. The CR, AVEs and factor loadings were tested following generally accepted levels (CR > 0.70; AVEs > 0.50 and factor loadings > 0.70), indicating acceptable measurement properties and convergent validity. Two items have factor loading lower than 0.70, which is also accepted (Hair et al., 2010).

			Mean	Standard deviation	Standardised Loading	Cronbach's alpha	AVE	CR
Ent3	$\leftarrow$	Entrep	5.975	1.081	0.791			
Ent2	$\leftarrow$	Entrep	5.336	1.479	0.692	0.804	0.563	0.837
Ent1	$\leftarrow$	Entrep	5.761	1.211	0.844			
Eco4	←	EconEff	6.015	1.036	0.792			
Eco5	$\leftarrow$	EconEff	5.953	1.087	0.753	0.922	0.5(1	0.790
Eco6	$\leftarrow$	EconEff	5.946	1.118	0.798	0.833	0.561	0.789
Eco7	$\leftarrow$	EconEff	5.552	1.349	0.649			
Em3	←	Emotions	4.800	1.501	0.829			
Em2	$\leftarrow$	Emotions	4.960	1.463	0.786	0.836	0.632	0.837
Em1	$\leftarrow$	Emotions	4.923	1.482	0.769			
Alt4	←	Altruism	5.197	1.474	0.891			
Alt3	$\leftarrow$	Altruism	4.928	1.584	0.794	0.868	0.687	0.868
Alt2	$\leftarrow$	Altruism	5,571	1,403	0.798			
Est5	←	Esteem	4.728	1.586	0.896			
Est4	$\leftarrow$	Esteem	5.081	1.483	0.860	0.930	0.770	0.020
Est3	$\leftarrow$	Esteem	4.883	1.519	0.890	0.930	0.770	0.930
Est2	$\leftarrow$	Esteem	4.910	1.515	0.863			
Cal11	←	Calling	3.817	1.823	0.716			
Cal10	$\leftarrow$	Calling	4.419	1.732	0.731			
Cal8	$\leftarrow$	Calling	4.038	1.855	0.774			
Cal7	$\leftarrow$	Calling	4.577	1.639	0.789	0.910	0.560	0.919
Cal6	$\leftarrow$	Calling	4.004	1.706	0.701	0.910	0.300	0.919
Cal5	$\leftarrow$	Calling	3.596	1.655	0.743			
Cal3	$\leftarrow$	Calling	5.060	1.410	0.779			
Cal2	←	Calling	4.068	1.569	0.784			

 Table 5.3 - First order standardised measurement model

			Mean	Standard deviation	Standardised Loading	Cronbach's alpha	AVE	CR
Cal1	←	Calling	5.595	1.309	0.710			
GenBA3	←	GenAct	4.486	1.4779	0.712			
GenBA2	$\leftarrow$	GenAct	4.740	1.5667	0.876	0.830	0.633	0.837
GenBA1	$\leftarrow$	GenAct	4.935	1.3682	0.791	-		
StarUp4	←	BAStartup	5.064	1.3124	0.799			
StarUp3	$\leftarrow$	BAStartup	5.462	1.3108	0.845			
StarUp2	$\leftarrow$	BAStartup	5.069	1.4012	0.717	0.877	0.594	0.879
StarUp1	$\leftarrow$	BAStartup	5.383	1.3142	0.775			
StarUp5	←	BAStartup	4.744	1.4207	0.709			
BAGro7	←	BAGroup	3.466	1.873	0.790			
BAGro6	$\leftarrow$	BAGroup	4.147	1.771	0.829			
BAGro5	$\leftarrow$	BAGroup	4.101	1.823	0.887	0.871	0.654	0.908
BAGro4	$\leftarrow$	BAGroup	4.311	1.790	0.817			
BAGro2	$\leftarrow$	BAGroup	4.191	1.748	0.744			
BAeco3	←	BAEcos	3.594	1.727	0.821			
BAeco2	$\leftarrow$	BAEcos	3.828	1.838	0.841	0.831	0.633	0.837
BAeco1	←	BAEcos	4.655	1.432	0.719			

Table 5.4 exhibits the convergent and discriminant validity of the first-order constructs. For all the constructs analysed, convergent validity was assessed by the AVE, which is presented in the diagonal, with a minimum threshold value of 0.5 (Hair et al., 2010). Similarly, all constructs present composite reliability (CR) greater than 0.7, indicating the internal consistency of the items. Discriminant validity was assessed by comparing the AVE of each construct with the shared variance between constructs. This shared variance is presented above the diagonal and is represented by the square of the correlation between the variables. In this case, the AVE of each construct is larger than its shared variance with any other construct (Farrell, 2010; Fornell & Larcker, 1981).

Constructs	CR	1	2	3	4	5	6	7	8	9	10
1. EconEff	0.789	0.561	0.255	0.144	0.311	0.218	0.316	0.113	0.101	0.056	0.036
2. Emotions	0.837	0.505	0.632	0.361	0.494	0.423	0.235	0.063	0.086	0.053	0.029
3. Altruism	0.868	0.38	0.601	0.687	0.549	0.408	0.296	0.082	0.163	0.052	0.072
4. Esteem	0.930	0.558	0.703	0.741	0.770	0.518	0.407	0.064	0.109	0.063	0.058
5. Entre	0.837	0.467	0.650	0.639	0.720	0.563	0.286	0.108	0.188	0.062	0.063
6. Calling	0.919	0.562	0.485	0.544	0.638	0.535	0.560	0.176	0.221	0.143	0.132
7. Gen	0.837	0.336	0.250	0.287	0.252	0.328	0.420	0.633	0.403	0.283	0.383
8. Starpup	0.879	0.318	0.293	0.404	0.330	0.434	0.470	0.635	0.594	0.185	0.305
9. GroupBA	0.908	0.236	0.230	0.228	0.250	0.248	0.378	0.532	0.430	0.654	0.356
10. Ecosystem	0.837	0.191	0.171	0.268	0.240	0.250	0.363	0.619	0.552	0.597	0.633

Table	5.4 -	Discriminant validity
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Notes: AVEs are presented along the diagonal; Correlations are presented below the diagonal; Shared variances (squared correlations) are presented above the diagonal.

The importance of each first-order dimension was verified by a second-order factor, as shown in Table 5.5. The goodness of fit was assessed using the same indices presented in the first-order model ( $\chi^2$  = 2411.24, *df* = 809, p < 0.001). As in the first-order

measurement model, all indices analysed exceed the recommended values, providing support for the validity of the hypothesised structural model.

Goodness of fit	Recommended	Results
measures	values	
χ2 / df	$\leq$ 3.00	2.981
IFI	$\geq 0.90$	0.930
TLI	$\geq 0.90$	0.926
CFI	$\geq 0.90$	0.930
RMSEA	$\leq 0.060$	0.048

Table 5.5 - Goodness of fit for the second-order measurement model

According to Marsh and Hocevar (1985) and Day et al. (2015), one can validate the existence of the higher-order structure statistically. As such, the target-coefficient (T) was calculated according to the following formula [T =  $\chi 2$  1<sup>st</sup> Order/ $\chi 2$  2<sup>nd</sup> Order]. In this case, T = 2181.57/2411.24 = 0.905, which exceeds the recommended value of 0.7 (Segars & Grover, 1998), justifying the use of the second-order model.

The regression weights of APIV and Involvement on its dimensions are significant at p < 0.001, and the loadings of the other dimensions on their items are significant at p < 0.001 (Table 5.6).

	Varia	bles	standardised	standardised
			weights*	loadings*
Gen	←	Invol	0.806	
Startup	←	Invol	0.740	
GrupoBA	←	Invol	0.664	
Ecosystem	←	Invol	0.765	
Esteem	←	APIV	0.912	
Altruism	←	APIV	0.780	
Emotions	←	APIV	0.760	
EconEff	←	APIV	0.603	
Entre	←	APIV	0.787	
Eco4	←	EconEff		0.784
Eco5	←	EconEff		0.750
Eco6	←	EconEff		0.794
Eco7	←	EconEff		0.649
Em3	←	Emotions		0.825
Em2	←	Emotions		0.779
Em1	←	Emotions		0.765
Alt4	←	Altruism		0.891
Alt3	←	Altruism		0.787
Alt2	←	Altruism		0.790
Est4	←	Esteem		0.891
Est3	←	Esteem		0.854
Est2	←	Esteem		0.885
Est5	←	Esteem		0.858
Ent3	←	Entre		0.781
Ent2	←	Entre		0.685
Ent1	←	Entre		0.844
Call11	<u> </u>	Calling	l	0.607

Table 5.6 - Second-order model - standardised weights and loadings

	Varia	bles	standardised weights*	standardised loadings*
Call10	←	Calling	weights	0.709
Call8	←	Calling		0.753
Call7	←	Calling		0.77
Call6	←	Calling		0.678
Call5	←	Calling		0.720
Call3	←	Calling		0.760
Call2	←	Calling		0.763
Call1	←	Calling		0.691
GenBA3	←	Gen		0.706
GenBA2	←	Gen		0.877
GenBA1	←	Gen		0.785
StarUp4	←	Startup		0.798
StarUp3	←	Startup		0.841
StarUp2	←	Startup		0.714
StarUp1	←	Startup		0.772
StarUp5	←	Startup		0.707
BAGro7	←	GrupoBA		0.788
BAGro6	←	GrupoBA		0.827
BAGro5	←	GrupoBA		0.886
BAGro4	←	GrupoBA		0.814
BAGro2	←	GrupoBA		0.742
BAeco3	←	Ecosystem		0.813
BAeco2	←	Ecosystem		0.841
BAeco1	←	Ecosystem		0.719

\* p < 0.001

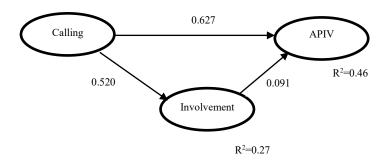


Figure 5.2 - Structural model

Figure 5.2 and Table 5.7 show the results of the structural model. The model confirms that Calling positively influences ( $\beta$  = 0.520) involvement. Moreover, it also reveals that Calling positively influences ( $\beta$  =0.627) APIV and that involvement slightly influences APIV ( $\beta$  = 0.091) concerning their activity.

Table	5.7 -	Research	hypotheses
TUNIC		nescuren	nypotheses

	Independent variable	Path	Dependent variable	Standardised estimate	p-value	Result
H1	Calling	$\rightarrow$	Involvement	0.520	0.001	Supported
H2	Calling	$\rightarrow$	APIV	0.627	0.001	Supported
H3	Involvement	$\rightarrow$	APIV	0.091	0.026	Supported

Table 5.8 exhibits the direct, indirect and total effects of the variables of the model. One can conclude that Calling positively influences the angel perceived investment value, both directly and indirectly. However, the direct effect of Calling on APIV is stronger (93% of the total effect) than the indirect effect. As such, one can claim that involvement partially mediates the relationship between calling and APIV.

 Table 5.8 - Direct, indirect and total effects

		Dependent Variables					
	Dii	Direct Indirect Total					
	Invol	APIV	Invol	APIV	Invol	APIV	
Calling	0.520	0.627	-	0.047	0.520	0.674	
Invol	-	0.091	-	-	-	0.091	

## 5.5 Discussion

This investigation aims to bring research on calling to the domain of BAs and vice versa. We are committed to understanding the role of calling on angel behaviour, namely on the involvement with their work and the value they perceive from their activity, confronting the findings with the angel and calling literature.

Results validate hypothesis one, confirming there is a direct and positive influence (0.520) of BA calling on angel involvement. The contributions for angel involvement are distributed by the involvement with general/common tasks (0.806), with the startups (0.740), with the angel groups (0.664) and with other organisations of the BAs' ecosystem (0.765). These findings provide empirical evidence highlighting the idea of involvement as a fundamental condition for experiencing a calling (Dobrow, 2013). They also corroborate angel literature that suggests that involvement with the startups is a source of meaning and enjoyment, and a predictor of the economic success of the angel activity (Benjamin & Margulis, 2005; Norberg, 2007; Wiltbank, 2009).

Results also reveal that angels organise their time between three centres of activities, spending 46.9% of the angel time directly with the startups, 22.3% with the angel groups and 30.7% in other activities of the ecosystem. This result seems to correspond to the new dynamics of the angel market, characterised by groups of angels investing together through organised groups managed professionally (Mason et al., 2016) at expenses of the "solitary wolf" angel investing practice. Naturally, these market changes affect the role and the nature of their involvement. Since the experience of living a calling with others increases the perception of meaning, sense of belonging, feelings of competence and emotional outcomes (Buis et al., 2019), it is understandable why angels spend their time and attention divided by general/common tasks, angel groups, the ecosystem and the

startups. Moreover, living an angel calling trying to obtain a deeper and meaningful experience is a good reason to explain the angel market changes from solitary individuals to groups. Signs and expressions of appreciation and gratitude coming out from others, strengthen feelings of self-efficacy and self-worth (Grant & Gino, 2010). They also encourage people to invest more time and energy into activities that contribute to their feelings of competence (Bandura, 1977; Ryan & Deci, 2000b).

The contributions for APIV are distributed from the most important to less important by the following values: esteem (0.912), altruism (0.780), emotional value (0.760), entrepreneurial value (0.787) and economic value (0.603). Results also validate hypothesis two, confirming a direct and strong positive influence (0.627) between angel calling and APIV. The higher the presence of a calling, the higher is the value angels perceive from their activity. Results can be observed under the light of the tripartite model of work (Bellah et al., 1985) suggesting three possible orientations for the relation people have with their work: job, career and calling. It turns out that those who have a job expect mainly economic value (Wrzesniewski et al., 1997). Those who have a career expect increased self-esteem, power, social status from career advancement and achievement (Bellah et al., 1985; Wrzesniewski, 2003) and those who have a calling go in search of self-fulfilment based on service to others, the community or the humanity in general (Rosso et al., 2010).

Thus, results highlight that angels' calling has a relevant impact on the angel perceived investment value, composed of five dimensions. The explanations can be grounded in both the angels' literature and calling theory. Let us have a look into more detail on some specific dimensions of the perceived investment value beginning with altruism. In the neoclassical view of calling, individuals who feel a calling, feel called by an external source to themselves, a "transcendent summons" (Dik & Duffy, 2009, p.427). It can be a calling from others to help the community solve a big problem in the world, a breath of God or a serendipitous fate (Hirschi, 2011). Answer a calling is to carry out a work or a mission, inseparable from own life as a whole (Wrzesniewski et al., 1997), performing an altruistic job that is socially valuable, and favouring the common good of society (Dobrow & Tosti-Kharas, 2011). So, it is not surprising that individuals who perceive an angel calling, also perceive that their activity can be an instrument for altruistic behaviour. According to Paul et al. (2003, p.326), altruism works for some business angels as a "reservoir of goodwill" that is exploited for the common good. That is the case of business angels with a high sense of calling that consider altruism a key factor for investing in new startups (Klyver et al., 2017; Ramadani, 2009). Two studies of the Business angel market in Australia and the US also confirm that 22-23% of the angels may be identified as altruistic investors (Sullivan & Miller, 1996; Vitale et al., 2007). Ahn et al. (2017) argue that altruistic motives are the unique reasons why people with a sense of calling activate other careers or make career changes. Our results confirm the angel investing career is a good field to capture altruistic value. Business angels feeling a sense of calling can perceive altruistic value by giving back to society, supporting entrepreneurs, helping to solve global problems investing in startups focused on, for example, environmental or health solutions, and increasing the development of local communities (Degennaro, 2012; Ramadani, 2012). Also, altruistic motivations are positively associated with self-esteem (Crocker & Park, 2004).

In the self-oriented view of calling, esteem value is considered a mechanism of creation of meaning, suggesting feelings of achievement or affirmation of work, and increasing the sense of self-worth and dignity (Crescioni & Baumeister, 2013; Crocker & Park, 2004; Rosso et al., 2010). Becoming an angel favours the creation of personal meaning and fulfils basic needs of belongingness to the entrepreneurial group, including recognition and appreciation of others, with the effect of strengthening personal and collective identity and self-esteem (Rosso et al., 2010). Specifically, the activity of supporting young entrepreneurs and investing in winning companies make angels cause a positive social impression and expand their social-self (Shir-Wise, 2019), enhancing their reputation (Ramadani, 2009) and self-esteem (Benjamin & Margulis, 2005; Duxbury et al., 1996). Wade et al. (2003) suggest that the narrative of becoming an entrepreneur constitute an accepted ontological basis for understanding the entrepreneurial world. Develop an angel calling helps the experience of becoming, being, and belonging to the entrepreneurial community. Being an angel is being part of an investor elite that has the power and the opportunity to network with successful people, building on the ethos of entrepreneurship (Rose, 2014), with the noble mission to contribute to one activity considered socially, politically, and economically relevant (OECD, 2011). As previous entrepreneurs, many angels extract meaning by answering the calling to re-connect to entrepreneurship and continue developing their entrepreneurial career (Politis & Landstrom, 2002), absorbing esteem and entrepreneurial value. Some of them, do it systematically along with their life, creating a phenomenon denominated habitual and serial entrepreneurship (Ucbasaran et al., 2008; Ucbasaran, Westhead, & Wright, 2006).

Additionally, results corroborate that answering an angel calling is associated with emotional inclinations toward activities individuals find exciting and enthralling. Angel research is consistent in identifying fun and enjoyment as important outcomes derived from investing (Mason, 2008) and significant motivations for individuals becoming angels (Mason, 2006; Mckaskill, 2009). Being an angel with other angels and entrepreneurs enhances the possibility to enjoy the fun and energy of shared activities and social interaction, creating an affective experience of "interpersonal connectedness" (Rosso et al., 2010, p.112). Our results confirm the perception of emotional value, which results from the interaction with the entrepreneurs, the angel group and the ecosystem. As an

example, the emotional value can be perceived by the sense of "togetherness" of listening to a startup pitch and voting an investment decision that provokes "currents of feelings" and "interaction rituals" that enhance the pleasure from the activity shared with others (Collins 2004).

Finally, there is also an impact of calling on the angel perceived investment value that is somewhat determined, although not highly determined, by economic value. As explained by calling theory, individuals with a greater sense of calling are more willing to sacrifice money for their work (Bunderson & Thompson, 2009). Nevertheless, making money is not the driving force of their careers (Ahn et al., 2017). Possibly, BAs with a higher level of calling get satisfaction from the process of investing, more than from the financial result, becoming satisfied to invest in accessible and local startups, just for the pleasure of the entrepreneurial "game" and for esteem and emotional value, and are not counting excessively with the economic outcomes.

To summarise, results confirm angel calling influences positively the perception of value distributed by five dimensions, of which self-esteem plays the central role, working as an aggregator value (0.907). As suggested by Crocker and Park (2004, p. 396), "People may pursue self-esteem because they believe it brings other benefits, such as professional or financial success."

Theoretically, it is equally sustainable the positive influence of involvement on perceived investment value. Angel literature highlights involvement with startups as the most important value contribution perceived by the angels (Norberg, 2007). Even a predictor of financial success for those angels who are highly involved (Wiltbank, 2009). Other studies confirm that the more frequently the contacts of angels with their investee startups, the more likely they feel to be high value-added angels (Hoyos-Iruarrizaga et al., 2017). However, our results confirm a positive but weak direct influence (0.096) of involvement on perceived value. A possible explanation is that angel involvement with the startups is not always appreciated by the entrepreneurs nor by the angels (Collewaert & Fassin, 2011; Fili & Grünberg, 2016; Madill et al., 2005). Macht (2011) highlighted that operational involvement, contrarily to less invasive support, is easily perceived as negative by the entrepreneurs and may lead to rejection of the involvement as a whole, resulting in tensions and frustrations since angels cannot see the value of their input. Collewaert (2009) argues that startups supported by BAs do not always confirm the value-creation argument in terms of their financial valuation.

Consequently, the angels' added value resulting from their involvement is not always positive or proportional to their dedication and effort. Since angel reputation is highly valued in the market (De Clercq; Dirk & Manigart, 2007), it is reasonable to accept that angels manage their involvement carefully, particularly with startups, accordingly with

their perception of reputational gains. Angel reputation affects the ability to attract the best startups, raise new funds, certify, recommend investments, and provoke valuable exits (DeTienne et al., 2015; McKaskill, 2009). The shallow positive impact of involvement on the perceived investment value highlights the ambivalence of this relation. In some cases, angel involvement is perceived as positive and value-adding, whether in others can be negative and counterproductive (De Noble, 2001).

Those angels who feel a calling in contrast with the idea of value appropriation have the perspective of value co-creation. In this case, the alignment of goals and expectancies between angels and entrepreneurs would be easier to obtain, and consequently, the involvement will be conducted to maximise the cooperative participation. Hence, the calling literature suggests a concern with others and intrinsic motivation to follow the calling (Duffy & Autin, 2013). That is in line with the angel literature suggesting that angels tend to treat entrepreneurs as partners, being both intrinsically motivated (Politis, 2008) and pursuing other types of goals in addition to economic maximisation (Duxbury et al., 1996; Sullivan, 1991).

## 5.6 Conclusions and implications

The experience of calling and the search for meaning have been growing in relevance in the way people experience their work and their lives (Lysova et al., 2019). As a significant contribution, this study analyses, for the first time, the effects of calling in the business angels' domain. We built on previous calling literature to propose a definition of angel calling. Conclusions of this work suggest that those BAs who see their work as a calling are more likely to perceive value from angel investing and more likely to be involved in angel activity. The value perceived comes primarily from self-esteem, followed by altruism, entrepreneurial and emotional value, and, lastly, from economic efficiency value. This study highlights that calling can give an extra light about how angel literature may interpret the denominated "black box" of angels' involvement (De Clercq; Dirk & Manigart, 2007). Moreover, we anticipate that the involvement of those angels who perceive their work as a calling tend to be better accepted by the entrepreneurs since they will be more focused on the co-creation of value and not on the extraction of value. Calling is also interesting to explain some of the dynamics occurring in the angel market, of angels organising themselves in groups, which are creators of rich contexts that enhance living a deeper experience of their callings and the construction of meaning (Buis et al., 2019).

Our research highlights that those individuals who develop an angel calling are fully aware that angel investing is a noble entrepreneurial activity, raising their esteem for who they are and what they do. Moreover, it is noted the consequences of postponing, avoiding, intermittently missing or ignoring its own callings (Hillman, 1996). Callings' claims that are not answered have negative implications for an individual's well-being (Duffy, Douglass, Autin, England, & Dik, 2016). The way BAs view their work – as answering a calling, have a job, following a career, or enjoying a nice hobby – affects angels' involvement behaviour and their perceived investment value. Answering a BA's calling involves the entire person, impacting one's life and work as a whole (Ahn et al., 2017; Steger et al., 2010), providing clarity about the individual and his(her) career. Callings are grounded on the individual's deepest values and identity, motivating one's to follow his(her) own path (Praskova et al., 2015). BAs who develop their callings believe in the *"unbelievable"* (very risky projects, not yet proven) and invest in the *"investible"* (entrepreneurs with no track recorded) because angel investing is about their soul. That is what makes angel activity visionary, unpredictable, great, and noble. Considering the crucial role calling seems to play in the context of BAs, those managing angel groups and policymakers should try to understand the callings.

This study has several limitations that must be recognised. First, business angels are a heterogeneous group with substantial differences concerning investing typologies, experience, investment amount, and involvement with their work (Landstrom & Sorheim, 2019; Politis, 2016). Second, based on self-perceptions, our data set with a strong geographical and cultural dispersion involves angels from different contexts and countries. Since it is the first time research on calling is applied to the BAs domain, more qualitative and quantitative analyses should be developed. Further investigation should compare BAs' callings coming from different countries, with diverse backgrounds and cultural contexts. Additionally, our research is cross-sectional, and in a fast-changing entrepreneurial world, as too many things occur in a short time, it could be complemented with longitudinal studies to perceive the dynamics of the angel calling over time. It will be exciting to understand if there are distinct types of angel callings (e.g., impact investment, compared with "normal" investing) and how different types of angels (e.g., economic, hedonistic, altruistic) experience their callings. Another point of interest should be to go further, perceiving how callings affect the relations between entrepreneurs and angels and how callings impact the phase and amount of investment. Finally, another challenging topic for future research is the experience of callings lived in angel groups, comparing them with the callings of those who invest alone. Great and promising new possibilities of research are on the horizon for those who feel a calling to answer them.

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# Appendix 5.1 - Measurement items used

(continues)

Items
EcoEff1. is an inexpensive way to invest.
EcoEff2. is priced fairly (management fees).
EcoEff3. gives me access to public co-investment.
EcoEff4. is a great way to earn money.
EcoEff5. is an efficient way to diversify investments.
EcoEff6. increases my wealth adequately in view of the risk I bear.
EcoEff7. is a convenient way to invest.
EcoEff8. is an easy way to invest.
EcoEff9. is not unnecessarily time-consuming.
EcoEff10. allows me to remain active.
Em1. is a nice way to spend time.
Em2. provides the excitement of risk-taking.
Em3. is entertaining.
Em4. is a challenging experience.
Alt1. gives me the opportunity to make the world a better place.
Alt2. it is a way to give back to society.
Alt3. gives me the opportunity to express benevolence toward other people.
Alt4. encourages me to have a life with a higher purpose.
Est1. makes me feel fulfilled.
Est2. boosts my self-esteem.
Est3. gives me sheer joy.
Est4. makes me feel valuable
Est5. increases my self-confidence.
Ent1. allows me to be part of entrepreneurship.
Ent2. gives me the pleasure to begin something from scratch.
Ent3. gives me the opportunity for involvement with startups.
Ent4. allows me to mentor entrepreneurs.
Ent5. maintains my entrepreneurship spirit without direct responsibility.
Ent6. allows me to create an entrepreneurial legacy.
Call 1. I am passionate about being a Business Angel.
Call 2. I enjoy being a Business Angel more than anything else.
Call 3. Being a Business Angel gives me immense personal satisfaction.
Call 4. I would sacrifice everything to be a Business Angel.
Call 5. The first thing I often think about when I describe myself to others is that
I'm a Business Angel.
Call 6. I would continue being a Business Angel even in the face of severe
obstacles.
Call 7. I know that being a Business Angel will always be part of my life.
Call 8. I feel a sense of destiny about being a Business Angel.
Call 9. Being a Business Angel is always in my mind in some way.
Call 10. Even when not acting as a Business Angel, I often think about being
Business Angel.
Call 11. My existence would be much less meaningful without my involvement as
Business Angel.
Call 12. Being a Business Angel is a deeply moving and gratifying experience for
Call 12. Being a Business Angel is a deeply moving and gratifying experience for me.
me.
me. GenBA1. Deal flow (discovering generic investment opportunities)
me. GenBA1. Deal flow (discovering generic investment opportunities) GenBA2. Startup Scouting (identifying and pre-selecting the best startups)
me. GenBA1. Deal flow (discovering generic investment opportunities)

Scale	Items
(continuation)	
Angel Involvement with the startups Hoyos-Iruarrizaga et al. (2017)	<ul> <li>StarUp1. Share Experience (sharing your industrial experience with the entrepreneurs)</li> <li>StarUp2. Management support (supporting the entrepreneurs in management tasks)</li> <li>StarUp3. Networking (supporting entrepreneurs with networking)</li> <li>StarUp4. Endorsement (taking part in activities of endorsement and reinforcement of the credibility of the startup)</li> <li>StarUp5. Acquisition of new customers (contributing to attracting new customers for the startup)</li> <li>StarUp6. Operational tasks (contributing by doing direct operational tasks in the startups)</li> <li>StarUp7. Attract investment partners (supporting the startup attracting investment partners)</li> <li>StarUp8. Participate in EXIT activities (having an active participation in leading the startup to an EXIT or acquisition)</li> </ul>
Angel involvement with the BA Group Hoyos-Iruarrizaga et al. (2017)	BAGro1. Lead Investor (lead investor, assuming the control of the round) BAGro2. Investment committees (participating in startup investment decision committees of your angels group) BAGro3. Events and seminars for members of the angels group (participating in events and seminars organised by your angels group) BAGro4. General Meetings of the angels group (participating in the General Assemblies\ general meetings of your angels group) BAGro5. Angels BOARD participation and advising (giving advice and mentoring to the leaders\gatekeepers of your angel group) BAGro6. Invite new angels (participating in the attraction of new angels to the group) BAGro7. Gatekeeper (acting as gatekeeper or group leader)
Angel Involvement with other organisations of the BA's ecosystem Hoyos-Iruarrizaga et al. (2017)	<ul> <li>BAeco1. Entrepreneurial events (participation in public entrepreneurial events, Demo Days or other public investor events).</li> <li>BAeco2. Startup Jury Member (participation as a jury member on startup awards).</li> <li>BAeco3. Angel Testimonial (speaking, or giving testimonials in public events concerning your angel investor role).</li> <li>BAeco4. Angel Association (being a member\participating in activities of the National, European or International angels association e.g. FNABA, APBA, EBAN, ABAN, BAE).</li> </ul>

## **Chapter 6 - Conclusions**

### 6.1 The research questions and my angel context

I must confess. I started to think about the purpose of this thesis out of personal concern. I wanted to answer a fundamental question that was disturbing me frequently and for which I had no answer. Why was it increasingly vital for me to be fully dedicated to the angel activity? This fundamental question led me to a series of consequential decisions and dilemmas that I needed to clarify in my angel activity. After all, why did I slept at night and waked up in the morning wanting to be a business angel and not thinking about having another work or desire to pursue another professional career? What were the reasons that pushed me to invest a substantial part of my financial resources, time, energy, and life purpose supporting other entrepreneurs and continuing the path that made me happy as an entrepreneur myself?

I felt the need to stop, synthesise, and create thought about what attracted me to be an angel. I realised that my unanswered questions were common to many other angels, and the PhD began to make sense, not only because of me but to us, the angels. Moreover, I understood that the best angel practice was not enough to answer my fundamental questions. I felt the need to search for more knowledge, gain distance, and come again to the academy, which I left twenty years before. I expected that the PhD could help me to integrate new blocks of thought to make better decisions. I have read with delight almost every type of information about business angels published in the press and scientific journals. However, that was not enough. By themselves, the angel literature and my angel practice were not enough to answer my fundamental questions. I needed to continue adding more knowledge coming out the strict angel literature scope. I read and incorporated in my "Mendeley" (software for organising literature) more than 2000 scientific articles and books related to this thesis that integrates angel, economic, marketing, consumer behaviour, career development, and calling literature. During the last seven years, my daily life has been invested exclusively between my angel activity and this research. I invested substantial time travelling and attending angel seminars, events, demo days, summits, summer schools, winter schools, pitch sessions, startup awards, investment committees, disinvesting committees, angel sharing and podcasting, angel groups, associations, federations and discussing angel policies. Well, the PhD was my obsession, my work, and my pleasure.

I began the entrepreneurial journey as a young tech founder. Created my first startup after university, from scratch, developing it, and sold it eight years later to a telecommunications group. I have experienced what means a successful exit. It made a substantial difference in my life, and I do not speak about externalities, but how internally

changed me. It made me look to myself and the world, with a different perspective, more positive, more optimistic, with higher self-esteem, but much more conscious of the value and the responsibility of the entrepreneurial spirit that make great things happen. The business angel adventure began in my life in parallel with the corporate career motivated by the contractual reasons of incorporation. In my first moment, angel investing was a hobby. I invested essentially alone, amateurishly, doing scarce selection and duediligence, and deciding by intuition and impulse. I have paid the price of learning with some common errors of novice angels. My first investments were financially a disaster. I discovered that overoptimism and overconfidence are two fundamental angel biases of successful entrepreneurs. In a second moment, angel investing was a part-time job in parallel with other occupations. I have created a small group of angels who invested together through a portfolio of five startups. I have learned the advantages of the comfort of a group decision, the pleasant experience of real networking, and how good is trust and cohesion in a small group. According to the widely acknowledged statistics of one profitable startup in ten (e.g., Etula, 2015), financially, it was not so bad, but I understood another fundamental lesson. To have good results, one must dedicate enough time to the scouting activity, making a good selection of projects and entrepreneurs. In a third moment, I realised that angel investing could be a full-time career for me, but not a traditional one (based on stages); a career in the sense of a professional life project grounded in my life goals and values. It was the beginning of a new professional adventure, investing in an extensive portfolio of thirty startups through a big group of 68 angels managed professionally. It was an excellent experience of angel diversity, co-investing with angels from 10 different countries, on-job learning, involvement and co-creating value with the startups. Financially, we had the confirmation that one of the startups of the portfolio will pay all the investment for all, and we have still a couple of promising ones to earn money. In this period, I have learned another essential lesson. It is real that investing in an extensive portfolio of twenty or more startups will increment the chances of good financial returns. The fourth and last stage of my angel experience happened during this PhD. Finally, I understood the answer to my unsettling research question. Now I know, I can look to my angel activity as a calling. That is why I dream about it, and that is the best result I could have from my PhD. Now I finally realised why I am a business angel.

## 6.2 Knowledge claims

This thesis's overall purpose is to develop an updated understanding of the business angels' goals and the value they perceive from their activity. More specifically, this thesis aims to more deeply understand: (i) the BAs' goals, the relationships between them and their hierarchy; (ii) the types of value BAs perceive from investing, and the impacts they have on job satisfaction, positive word-of-mouth and reinvestment intention; (iii) how BAs perceive their career development and the influence of this development both on job satisfaction and, subsequently, on reinvestment intention; and (iv) how the value BAs perceive from investing is influenced by calling and the involvement in their activity. To adequately address the goals and research questions, four essays were written. The general purposes are spread through all the study. The research was designed to integrate the diversity of angel behaviour and their practice, as well as current changes occurring in the angel market. This subsection summarises the thesis's knowledge claims describing the contributions of the essays and how they fulfil the purpose and objectives of the thesis.

#### 6.2.1 Conclusions on angel goals and their hierarchical relation

The first essay was written to have a current and in-depth view of the goals of the angels. The analysis went beyond the traditional economic and financial perspectives, considering new approaches contemplating marketing and consumer behaviour as additional lenses. Qualitative techniques (particularly laddering and means-ends chains) were adopted to allow individuals to describe their goals as reasons for becoming angels and understanding the relational networks formed by their goals. The use of such techniques enabled us to go a step further than previous research, on integrating the diversity of the angels' goals, examining the weight of each goal and the established relationships among them. Additionally, it was possible to organise, classify and rank the various goal nodes using network algorithms, identifying the most relevant ones. This type of analysis, employed for the first time in the business angels' scope, led to crucial conclusions explained below. First, it was developed a framework that categorises the angels' goals into five distinct general categories: economic, functional, emotional, symbolic and entrepreneurial. The relevance of entrepreneurial goals remarks a specificity of BAs, that distinguishes them from another kind of investors such as the stock exchange investors (Puustinen et al., 2013). In general, angels are moved by a diversity of goals that characterise the heterogeneity of the angel market (Landstrom & Sorheim, 2019). However, the degree centrality algorithm (Borgatti, 2005; Yang et al., 2017) reveals that the most important short-term goals for the business angels are to develop oneself and support innovation. To develop oneself includes sub-goals related to personal and professional development and continuous learning, as supported by the career development literature (Donati & Watts, 2005; Meijers & Lengelle, 2015). These findings contradict classical financial perspectives arguing that BAs rely on economic reasons as the main purpose of angel investing activity (Mason et al., 2015; Riding, 2008). Contrarily, they corroborate behavioural perspectives advocating a broader view, considering relevant goals other than economic ones (Fili & Grünberg, 2016; Ramadani, 2012; Rose, 2014). These results indicate the relevance of the angels' personal development as a fundamental short-term motivator of the angel activity. The importance of the short-term goals is given by the sum of the direct adjacent connected goals' relevance. In this case, the angels' personal development depends on goals such as *to learn*, do networking, be updated, share knowledge and experience, and interact with other angels. The long term goals tend to be more abstract and symbolic. So, this research supports the idea that angel activity can be pleasurable for the long-term providing a sense of fulfilment and happiness, and an opportunity to express angels' benevolence helping entrepreneurs and contributing to give back to society.

Another interesting result of this qualitative study is that entrepreneurs and BAs have a different view of the angel goals, with entrepreneurs finding *to make money* and *to improve one's self-esteem* to be the most important short-term goals of BAs. Considering all the findings of the first essay, one can infer that, for BAs, the act of investing is the opportunity, or the instrument, to achieve other types of higher goals besides money. Angels associate the dominant reasons to exert the angel activity with the opportunity for self-development, continue their entrepreneurial career, and to search for long-term fulfilment. Alternatively, the entrepreneurs tend to focus their perspective on angels on achieving economic goals, stressing the maximisation of their expectations on the financial role, but aligned with the sense of fulfilment at the long-term. These different perspectives on angels' goals coming from the angels and entrepreneurs create exciting challenges in understanding the angel role and intriguing implications for the ecosystem.

#### 6.2.2 Conclusions on the value angels perceive from their activity

As already mentioned, this thesis aims to analyse the goals of BAs and examine the value BAs perceive from their investing activity. Thus, in the second essay, the kind of value angels capture from their investing activity is identified and its impact on job satisfaction and intentions of future behaviour – positive word-of-mouth and reinvestment intention - is assessed. To produce empirical evidence, the study built on goals and BAs literature, as well as on the results of the qualitative research to create a questionnaire that reached 849 angels from 79 countries. One important result of the second study was the development of the angel perceived investment value (APIV) instrument, which encompasses the following six distinct value dimensions: self-esteem, altruism, emotional, entrepreneurial, economical and functional. The dimensions identified in the APIV instrument explain 65.9% of the value BAs obtain from their activity. Results highlight that angels give much more importance to the symbolic, emotional and entrepreneurial values they can extract from their activity than to economic outcomes. More specifically, the primary value BAs perceive from being angels is symbolic, related to their personal fulfilment, enhancing their self-esteem, increasing their confidence, and feeling valuable and joyous by helping entrepreneurs. One may conclude that results of APIV contradict the rational economic view of angel literature which highlight that the

primary or unique motivation of angels is to earn money (Morrissette, 2007; Riding, 2008; Van Osnabrugge, 1998, Mason 2015). Results confirm that, in general, BAs have a relatively lower perception of economic value when compared with other types of value. Our results demonstrate the primacy of the behavioural perspective (investing for an experience) that is expressed in part in the angel literature aligned with the experientialist view of the angel activity (Benjamin & Margulis, 2005; Ramadani, 2009; Shane, 2009). This perspective suggests that becoming a BA enhances the: opportunity for self-development, co-creating value with the entrepreneurs, earning money, having fun and emotional excitement from investing in startups. Once again, the perspective to look into the angel activity as a career development process is reinforced. The journey of the business angel is more important than the financial outcome. The journey is itself, the destination. The study also reveals that the APIV considerably contributes to angel job satisfaction, which subsequently favours positive word-of-mouth and increases the intention to reinvest. These findings highlight the relevance of APIV, namely, to ensure the continuity of BAs' activity.

#### 6.2.3 Conclusions on the business angel's perception of career development

The present thesis also enables drawing some conclusions on a positive outcome of being a BA – the perception of career development – and the impacts of perceiving this development. In the last decade, business angels began to work differently. Angels evolved from a hobbyist investing alone perspective to a more organised view, with many angels investing together through groups of investors managed by professionalised gatekeepers (Paul & Whittam, 2010). This new approach's main problem is that angels investing through groups run the severe risk to let themselves enter in a "venturalization process" closer to the way venture capitalists operate and invest, losing their identity. Hands-on involvement has been considered a fundamental definitional dimension of what means being a business angel (Avdeitchikova et al., 2008; Lahti, 2011; Mason et al., 2019). In the new work value proposition, angels are kept away from direct involvement with the entrepreneurs and the startups, delegating most of the tasks in professional gatekeepers. In the third essay, we explored the fundamental dimensions of the angel work that may contribute to perceiving an angel career. Specifically, we built on Schein's internal/external career concept to focus on the business angel's internal career (goals/motives/life/subjective). The qualitative study (first essay) and literature on BAs identified that developing oneself and supporting innovation were the major motivational goals to be a business angel. It was tested whether the accomplishment of these goals corresponded to the dimensional structure of the angel career development perception. The results highlight that both personal development and support innovation are relevant dimensions of an angel career development perception. Additionally, this study underlines that perceived career development has a positive influence on angel job

satisfaction. Finally, the study concludes that satisfied angels are more likely to reinvest and, thus, to continue their angel activity. As previously referred, business angels face a fundamental paradigmatic question regarding how they carry out their work. Will angels remain to have the amateur and hobbyist approach, will angels agency their work to professional gatekeepers and evolve to small venture capitalists? Or will they remain to be angels with a professional career value proposition and to keep the centre of the decision on their own? The results obtained in the third essay indicate that business angels are facing a paradigm shift. The new angel is replacing the amateur hobbyist paradigm of the angel investing for fun with a meaningful long-term career development perspective. The findings suggest that angels will look to their activity through the light of a career development plan managed by themselves in an experiential learning context, investing in the innovative startups they decide to, and co-creating the startup value with their work. The satisfaction with their job and their angel experience as a whole will be critical motivational anchors, particularly in times of continuous change, to continue to invest, and will probably remain to be part of their lives in a long-term angel activity.

#### 6.2.4 Conclusions on the relevance of career calling in the business angel activity

The fourth essay aims to go a step further and analyse the factors that may influence the angel's perceived investment value. More specifically, it intends to examine the impact of calling in this scope. In recent years, calling became a fundamental topic in research on work and career development (Lysova et al., 2019). Several applications were made in many professional areas; however, there are no studies of calling applied explicitly to the domain of business angels. Based on the types of occupations proposed by Thompson and Bunderson (2019, p. 437) that "require unique skills and economic sacrifices for a perceived public benefit", one can claim that angel activity can be considered under the calling umbrella. Indeed, business angels' activity requires managerial skills and economic resources to invest in innovative and risky startups to help entrepreneurs, for the perceived public benefit of creating jobs and developing the economy (Rose, 2014; Shane, 2009). The fourth essay aimed to understand the relation between angel calling, involvement, and angel perceived investment value (APIV). The angel perceived investment value (APIV) instrument, developed in essay 2, was used. Findings confirm a direct and strong positive impact of the angel calling on angel perceived investment value. The results also reveal a direct and positive influence of angel calling on angel involvement – on general/common tasks of BAs, on startups, angel groups, and other companies of the ecosystem -, and a subsequent positive, although weak, effect of involvement on perceived investment value. This result corroborates previous calling literature that emphasised involvement as a fundamental condition for a calling's experience (Dobrow, 2013). Additionally, results show that, in this study, the perceived investment is more determined by self-esteem, with economic and functional value contributing much less to the perception of getting value from the BA investing activity, similarly to what happened in the study conducted in the essay two. The fourth essay's conclusions suggest calling has a crucial role in how BAs carry out their work and perceive value. Hence, angels who see their work as a calling are likely to perceive more value from their work and to be more involved in the angel activity. Moreover, our reflections suggest that those individuals who develop an angel calling are more aware that angel investing is a noble entrepreneurial activity, raising their esteem for who they are and for what they do.

## 6.3 Theoretical contributions

As already said, one of the purposes of this thesis was to contribute to close the gap between academic and practitioners, to provide new clues for angel theoretical reflection and inputs for practice improvement. This gap has been identified recently by eminent researchers of the business angel field, who suggested the increment of the dialogue between practitioners and scholars (Harrison & Mason, 2019; Landstrom & Sorheim, 2019; Mason et al., 2019).

A second contribution to academic thought is to offer a deep contemporary reflection about why individuals become BAs by analysing their goals. The goals have been studied under a new holistic perspective based on marketing and consumer behaviour, integrating the two currents of thought of angel literature, the financial one emphasizing the primacy of economic goals and the behavioural one promoting a broader scope of the angel goals. The angel profile and angel motivations were deeply researched in the firstgeneration of angel studies occurring in the early eighties and nineties and revisited in the two thousand decades (e.g. Benjamin & Margulis, 2005; Freear et al., 1994; Sullivan & Miller, 1996; Van Osnabrugge & Robinson, 2000). At that time, angels were investing essentially alone. However, all the angel market investment circumstances have changed dramatically afterwards (Mason et al., 2016). Many aspects of the angel behaviour and practice changed due to the new group investment approach and the democratisation hype of the investing process (Mollick & Robb, 2016; Townsend & Hunt, 2019). Those facts, occurring in parallel with the emergence of new players in the early stage investing arena (Block et al., 2018), justify the time and the opportunity to revisit matters that impact new angel definitional reflections (Mason, Botelho, & Harrison, 2019).

The third contribution is on the advancement of the angel research literature. Firstly, the BAs goals were examined with laddering and means-ends chains techniques which, as far as we know, were used for the first time, specifically in the context of the business angels. These qualitative techniques came from marketing and consumer behaviour to uncover the reasons, and the reasons behind the reasons why consumers select products (Gutman, 1997; Pieters et al., 1995). They were applied in many other contexts, including

to highlight the reasons why informal investors invest in the stock exchange (Puustinen et al., 2012). The advantage of these techniques is that they allow a broader perspective of the real reasons behind consuming or investing, allowing the creation of mind maps that illuminate utilitarian, but also emotional and symbolic aspects. We applied these techniques to uncover the real reasons behind angel investing. Additionally, this research goes much further to discover the goals behind angel investing, confronting BAs and entrepreneurs' perspectives, and concluding that the angels' personal development goals are more relevant than the economic ones. However, this conclusion is not so clear if we consider the opinion of the entrepreneurs about the angel goals, providing interesting and intriguing practical implications.

The third contribution of this thesis is in advancing angel literature in-breath, through the measurement of the angel perceived investment value. We built on perceived investment value applied to the stock investors (Puustinen et al., 2013) and grounded on marketing, consumer behaviour and microeconomics, to develop an angel perceived investment value (APIV) tool, which permits to assess the different types of value BAs perceive from their activity. Consumer behaviour and marketing perspectives were the additional lenses incorporated in the angel analysis to give a broader, holistic and integrated perspective of the person behind the angel investor. Indeed, the quantitative analysis confirmed that by doing the angel activity, symbolic (esteem and altruism), entrepreneurial and emotional value are more likely to be perceived by the angels than the economic value.

The fourth contribution was to show the crucial role of perceived career development associated with BA work. It was noted the positive impact that a career perspective has on job satisfaction, ensuring the continuation of the BAs' activity and encouraging both positive word-of-mouth and reinvestment intention. In the case of the perceived career development, we confronted angel with career and goal literature to highlight a paradigm change occurring recently in the angel industry: the replacement of the amateur, hobbyist angel paradigm by the new careerist angel that invests for personal development. The model tested suggests that BAs value the career development opportunities provided by the BAs' activity adopting a long-term career development perspective, based on a value-creation and personally fulfilling view.

Finally, we introduced the calling concept into the angel scope. This contribution is particularly important because calling became, in recent years, a fundamental topic in the research on work and career development (Lysova et al., 2019) transforming the way how people see their work. We measured the implication of having a calling both in the angels' involvement on activities and startups, and on the value, they perceive from their activity. We contributed to angel literature advancement, highlighting that angel calling is a useful concept to explain the reasons why some individuals become angels. Calling gives a new light to understand their behaviour and the way they see their work, particularly the

value they perceive to get from it. Individuals with a strong sense of calling will be more likely to be focused on discovering meaning in their work interconnected with their lives and helping others, rather than to pursue economic outcomes.

## 6.4 Practical implications

This thesis provides several implications for angel practice, namely to angels, entrepreneurs, gatekeepers, angel leaders, angel groups, networks, policymakers and, in general, to all the entrepreneurial ecosystem.

#### 6.4.1 Implications to the angels

The business angel industry is currently facing one of its biggest challenges. The democratisation of the investment market, allowing new players to invest in the early stage, demands a clear definition of the role of business angels. Business angels are living an incredibly challenging but decisive time for their future. It is a matter of choosing whether the business angels will remain as early-stage investors with their own identity and maybe reinforcing it, or whether they will disappear as a proper entity being dispersed and absorbed between equity crowdfunding and venture capital groups. This thesis proposes a clear path to understanding the role and positioning of current BAs through the achievement of their goals. First, angels reveal they value a complete experiential approach of their activity, aiming to achieve symbolic, emotional, and entrepreneurial goals in parallel with the economic ones. Since the most relevant goal of the business angels is personal development, it is fundamental that business angels choose those groups and the entrepreneurs that bring them a sense of self-development derived from their angel experience. To do that, angels should have the opportunity to consolidate a personal and career development experience of learning, good networking, good interaction with entrepreneurs and other angels, and feeling progressing and updating. Angels should reject investing proposals and groups whose unique value proposition is financial return since that will not answer the essence of the angel goals. The implication of not meeting important personal goals is dissatisfaction, less likelihood of reinvestment and more possibilities to abandon the angel activity. That is why the experiential value proposition that answers fundamental and deepest personal angel goals cannot be satisfied either by venture capital or by crowdfunding platforms. Both value propositions neglect angel involvement, giving scarce opportunities for personal development, and focusing the experience on just financial outcomes.

A second major implication is related to the way angels look to themselves and their activity. According to a career perspective, the angels' diversity and heterogeneity can be expressed by four dominant views on how angels may see their work: as a hobby, a job, a career or a calling. Naturally, each view relates to different dominating value perceptions.

Those who understand angel activity as a hobby expect emotional value. Those who see it as a job want financial outcomes in the short term. Those who see it as a career, pursue personal and professional development objectives, and those who feel it as a calling want a long-term and meaningful activity that integrates their work and their lives. Angels should be aware of the different perspectives on how the angel work can be carried out. They should make their choices, including the selection of an angel group and the type of involvement they want in activities and startups that are appropriate to the kind of angel experience they want to live. The present thesis reveals to BAs that either having a calling or perceiving a career development process due to their activity, angels are more likely to lead to job satisfaction.

## 6.4.2 Implications to the entrepreneurs

One of the main tasks of any entrepreneurial journey is to guarantee the angels' valueadded and financing to go a step further. Entrepreneurs tend to attract angels to their entrepreneurial ventures, looking for money and another kind of value known as smartmoney or added value. The results of this thesis suggest that entrepreneurs should try to enlarge their criteria of angel attraction to another level of concern. In the hour of attracting angel investment, entrepreneurs should evidence and activate the angel's career perspective and the opportunity to do the startup process together with the angel. Entrepreneurs should touch the major angel goals of personal and career development and explicitly show the angel the possibilities for involvement, learning and co-creating value. The reason is that angels do not want to be only financial investors, but need to reach more goals than the economic ones. If the entrepreneurs are open enough to let angels be involved and offer them a potential angel career path, an essential bell in the angel mind will be activated, enlarging the entrepreneur's changes to be financed.

## 6.4.3 Implications to the groups of angels, gatekeepers and networks

The present thesis reveals that individuals who want to be angels value their personal development and an entrepreneurial experience, including a direct hands-on approach with the startups. A strong implication to answer business angels goals is that angel groups and gatekeepers should be facilitators and not agents that substitute BAs in their activities, not preventing them from obtaining personal non-economic goals. Nowadays, the angel groups' value proposition is confusing with many groups acting like small VCs, or even evolving to clear VCs propositions. The authentic angel experience is personal and non-delegable. Angels are not limited partners of venture capital funds, and gatekeepers are not general partners. A good value proposition for angel groups to attract new members is to centre the value on fulfilling angel fundamental goals and offering angels a clear career development path with a long-term perspective. Reduce the angel activity to

a venture capitalist approach is to limit the scope and richness of the angel experience, provoking disappointment and disengagement of the angels. The angel work is much more than investing money and wait passively for financial results. Angel groups must be promoters and not obstacles of the angel involvement. Moreover, they should consider the angel's heterogeneity and diversity, proposing different strategies to offer BAs the type of experience they want to live. Looking into the future, we suggest that angel groups consider developing their unique value proposition according to angel diversity and segmentation.

If angel groups intend to answer to individuals that see their angel work as a hobby, those groups need to be focused on proposing and delivering emotional value. As such, they may build their value proposition creating activities that guarantee the excitement and the experience of being an angel with direct involvement with the young entrepreneurs and high risky startups, stimulating socialisation and networking between angels and entrepreneurs. They may also help angels to feel the enjoyment of the angel activity, promoting events, parties, investment dinners, and activities that deliver the same type of value one could expect from a hobby. These type of angels appreciate investing for fun, strong disruptive innovation, diversity, fantasy, adventure, gambling, light tasks, and a nice way to spend time. Angel groups building their differentiation on emotional value may focus on creating the angel experience with the glamour and the fantasy that bring great emotional memories. Angels looking for fun may look into this value proposition as one that fits an attractive hobby view of the angel work.

In case the groups want to respond to the individuals that appreciate economic value more than other values or see their angel activity as a job, they could focus their value proposition on financial outcomes. In this type of groups, money "is the king". Groups may define clear remuneration policies for the regular interaction with the startups, guaranteeing that angels can receive a financial contribution or shares by their work of advising and mentoring. It may also be considered a question of internal justice inside the angel groups, which ensures that some angels doing the heavy work of the angel groups should receive some compensation by their work. Groups could plan short-term exit strategies that assure giving money back to less patient angels in a short period, in parallel with long-term exit strategies to guarantee higher outcomes for those patient angels that want to maximise their return. The development of an internal angel market inside the group is a powerful tool that is relatively easy to implement, helping angels obtain financial control and faster liquidity. The angel group costs are also critical for these types of angels and must be addressed by applying fair market criteria. Angels may look into angel investing not only as an investment opportunity but as a potential job or remunerated activity through the startups or the angel group.

The groups that respond to the angels that see their work as a career could use selfesteem improvement and professionalisation as great pillars to reach group differentiation. In this case, angel groups need to have a personalised approach focused on the perspective of personal growth and career development. Groups could answer the need for achievement of the angels and entrepreneurs. Involvement is a critical task. Angels like to feel they can be useful in adding value and being recognised and acknowledged by the entrepreneurs and the other angels doing so. Groups may actively promote learning, experiential learning, vicarious learning, sharing with other angels and entrepreneurs, and networking, as significant opportunities for personal development and, subsequently, self-esteem improvement. Groups could explicitly promote involvement and sharing operational responsibilities with startups, selection, value creation and exiting. Professionalisation appears as a potential career option, offering opportunities to explore different angel career paths such as principals, gatekeepers, and founders of new angel groups. To have an active, visible and recognised role in the angel process maybe even more important than the financial result of investing. Angels will look into this offer as an excellent opportunity to develop their career. A relevant implication of this value proposition is that angel groups should be much more than a pleasant experience. They can encourage and support a great long-term career path with a strong commitment to the angel activity.

If angel groups are responsive to supporting individuals who feel an angel calling, they could build their differentiation on altruism and entrepreneurial value. They could promote the symbolic meaning of investing, the impact of the angel activity and entrepreneurship per se. This value proposition will interest those angels that believe in the ethos of entrepreneurship. Typically, these groups can be suited for angels that were previous entrepreneurs, in many cases, serial or habitual entrepreneurs or entrepreneurial lovers, who have a protean idea of their careers intensively connected with their lives. Groups may evidence their uniqueness, proposing the model of a highly selected entrepreneurial elite of angels that show their expertise according to their entrepreneurial relevance and background. The group can position itself as the entrepreneurs' best friends, with the money, the skills and the experience to be the first choice of the entrepreneurs mentioned before. The entrepreneurial attitude is a "sine qua non" condition to guarantee an investment fit. Another exciting goal is the possibility to invest in very early stages, with the group of angels acting as co-founders of the startups. The groups should encourage their angels to participate in the entrepreneurial process, privileging direct involvement and hands-on approach with the entrepreneurs. Doing and trying is more important than thinking and planning, particularly in the initial startup stages, and is understood by many as the spiritual mantra of entrepreneurship. Being, believing and belonging to the entrepreneurial community works as the great

motivator. Angels can look at this value proposition as an answer to their deepest entrepreneurial calling.

Additionally, groups that respond to individuals with a strong sense of calling could also provide high impact investment opportunities. Those groups may appeal to the noble use of investing in enabling innovation, helping young entrepreneurs, creating jobs, developing local economies, and solving the world's most challenging problems. They need to motivate angel investing around significant causes that transform the world and strongly impact society, such as environment, health, women or immigrant entrepreneurship. Money is not the most critical outcome, but it is crucial to guarantee sustainability and ensure objectives achievement. The most vital aspect is to measure the impact, developing tools and platforms that guarantee a rigorous, visible and feasible measurement process. Results are more important than the individual role or direct involvement to achieve the results. Groups should appeal to the social responsibility of wealth. Angel work may be understood as a calling to contribute to great meaningful causes.

Finally, the groups that want to attract merely financial investors need to build their value proposition on convenience value and provide these individuals with an easy and effortless experience that hardly should be considered "an angel experience". Groups may offer an internal service of doing the hard job of angel investing keeping the individual out of effort on time and energy with administrative processes, involvement, value creation and other operational details. The communication message could be grounded on playing a high-level investor role focusing all the attention on providing money and let the details of investing with the professionals and the gatekeepers. Inherent to convenience value is the perception of a low level of involvement, with a soft compromise with the angel activity. This value proposition keeps smooth boundaries on what can be considered or not angel investing, proposing just a financial approach without the angel experience, similar to the models of equity crowdfunding or small VC groups.

#### 6.4.4 Implications to the policymakers and local ecosystems

The angel market is living a transition phase. First of all, policymakers should develop measures that encourage angels' personal development and organisation, promoting career incentives, motivating angels to progress in their careers, and supporting the professionalisation of angel groups. Second, policymakers should not treat business angels like venture capitalists focusing their support almost exclusively on financial measures that seem adapted from the venture capital world and not cover the most fundamental angel goals. The authorities should perceive angels as much more than pure financial investors. A typical example is the angel involvement, and mentoring work with

the startups, either neglected, scarcely valued and rarely financially supported by angel governmental policies.

Equally important is the public acknowledgement and professional certification of the business angels. A certificate is a matter of relevance for a career evolution, and an opportunity to recognise angels for their unique role to support innovation and promote local development. There is an evident alignment of purpose between business angels, local development policies and incentives for innovation. Policymakers should effectively understand the value angels perceive from their activity, the uniqueness of their role, and the relevance of their work with local entrepreneurs and innovation when developing angel policies. To support innovation and invest locally are fundamental values of the angel activity, and are equally strong political concerns. Business angels, like political forces, stimulate job creation and the development of local economies. Besides, more than any other class of investors, angels invest in disruptive innovation at a very early stage, even before a proof of concept. As previous entrepreneurs, angels are the first ones to believe in the entrepreneurial spirit that transforms local startups in global ones. Policymakers should appreciate business angels as natural allies to foster local innovation and compensate their investment risk, developing strong local tax incentives favouring angel investors. Then, the virtuous cycle of entrepreneurship will happen, enlarging the number of professional angels, increasing the investment in innovative startups, incrementing new local jobs with higher direct and indirect taxes turning back to the local government.

## 6.5 Limitations and suggestions for future research

The first advantage and limitation of this research relate to the researcher's role that is simultaneously an observer and participant of the angel phenomena. This research was developed by a business angel with more than fifteen years of angel experience and deeply involved with the angel community.

A second limitation is associated with the heterogeneity of the angel market and the need to explain the phenomena at a larger scale. Business angels reveal substantial differences concerning investing typologies, experience, preference regarding startup stages, investment amount, and type of involvement. Furthermore, some angels look into the activity as a hobby, while others are full-time professionals. Also, individuals may assume different roles as entrepreneurs, angels and venture capitalists at the same time. It may be harder for themselves to understand the "hat" how they respond to the angel surveys. Therefore, conclusions and generalisations in this domain must be made carefully. Additionally, this study's data set is based on self-perceptions, with a strong geographical and cultural dispersion of BAs who participated in the research. Hence, this research did not analyse differences among BAs living in different geographical countries and their

contexts. It would be important to test the quantitative essays' models in different subsets of the sample representing different world regions and analyse whether the findings are similar to those obtained in the present thesis, or if specificities occur in some geographical contexts.

The third limitation relates to the dynamic nature of the angel market, which is revealing impressive changes in the last decade, aggravated by the dynamic nature of the business angels themselves. Business angels live a double tension currently. On the one hand, they like their autonomous nature and their drive for independence, investing their own money, managing their investment decisions and timing, and having a hands-on approach directly with the entrepreneurs. On the other hand, they could also feel attracted by the opportunity to belong to angel groups with a joint decision, shared governance, and sometimes the indirect involvement with the startups with a hands-off intervention. It is easy to understand that business angels live a transition phase with very relevant implications regarding their role and their process to reach their goals. In this thesis, there was an attempt to identify and hierarchise the most common short-term and long-term meta-goals of the business angels. Nevertheless, it is virtually impossible to consider the BAs as a static reality and the findings obtained as an utterly knowledgeable reality. Hence, our research is cross-sectional and, in a fast-changing entrepreneurial world, too many things occur in a short time. It should be developed more longitudinal research to perceive the dynamics of the angel's goals, their career perception and their callings across time.

A fourth limitation of our research concerns the qualitative study. This study focused on angels that invest through angel groups or a mixed typology (investing alone and through angel groups). We have not considered angels investing exclusively alone. A fascinating avenue of research concerns the angel work investing role through angel groups compared with the solo angels investing alone. New phenomena occurring in the angel groups, their governance, and how they encourage the development of the angel career may be out of scholars' scope and deserve further attention.

This research provided insights into the business angel's internal career, creating knowledge in the relationship between perceived career development and angel job satisfaction. There is much more to study on the angel career's internal and external sides, exploring the new perspectives that market changes are provoking on angels work. More research on angel satisfaction, particularly in angel groups, should be exploited.

Lastly, this thesis gave the first steps in the perception of a calling in the business angels' domain. More qualitative and quantitative studies would highlight how different angel's types experience their callings, and how callings affect their relationship with the entrepreneurs and other angels. Calling could perhaps be explored in the context of social

impact investing versus "normal" angel investing. Another exciting opportunity for future research is how BAs discover and live their callings in angel groups and how it differs from the callings of those angels investing alone. Research should explore angel callings as causes and consequences of the angel involvement in the entrepreneurial activity. It will be fascinating to understand how previous entrepreneurial exits or angel exits impact with the sense of a calling. We close this thesis not reaching an end but discovering extensive and exciting new possibilities of research for those who feel the passion, the opportunity and the calling to answer them.

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# Appendix 1.1 – Business Angels Questionnaire

universidade de aveiro theoria polesis praxis
Business Angels Questionnaire
Dear Angel Investor
The goal of the present survey is to contribute to understand Angel Investors behavior, particularly the value that is perceived, when they decide to invest time and money to create a startup portfolio. This survey is carried out in the scope of a PhD in Marketing and Strategy of University of Aveiro. Your answer is very important to ensure the accomplishment of this research. All the answers to this questionnaire are confidential. Thank you very much for your collaboration by answering this survey.
Next >
Eusiness Angels Questionnaire
Results
If you would like to receive the results of this research, please fill your email address. Thank you very much. HERE

Next •



0% 🧧 📃 100%

### Identity centrality

to which y	ou agi	ree witl	h the fo	llowing	g state	ments.
1 Strongly						7 Strongly
disagree	2	3	4	5	6	agree
0	0	0	0	0	0	0
0	0	$\bigcirc$	$\odot$	$\bigcirc$	0	$\bigcirc$
0	0	0	0	0	0	0
· •	0	0	0	$\bigcirc$	0	$\bigcirc$
	1 Strongly disagree	1 Strongly disagree 2 0 0 0 0	1 Strongly disagree 2 3 O O O O O O	1 Strongly disagree 2 3 4 0 0 0 0 0 0 0 0 0 0	1 Strongly disagree 2 3 4 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	disagree 2 3 4 5 6 0

### Next 🕨

### Calling

Consider your angel investor activity. Please, indicate the extent i	1					,	7
	Strongly disagree	2	3	4	5	6	Strongl agree
I am passionate about being an angel investor.	0	0	0	0	0	0	0
I enjoy being an angel investor more than anything else.	0	0	0	0	0	0	0
Being an angel investor gives me immense personal satisfaction.	0	0	0	0	0	0	0
I would sacrifice everything to be an angel investor.	$\bigcirc$	0	$\bigcirc$	$\circ$	0	0	0
The first thing I often think about when I describe myself to others is that I'm an angel investor.		0	0	0	0	0	0
I would continue being an angel investor even in the face of severe obstacles.	0	0	0	0	0	0	0
I know that being an angel investor will always be part of my life.	0	0	0	0	0	0	0
I feel a sense of destiny about being an angel investor.	0	0	0	0	0	0	0
Being an angel investor is always in my mind in some way.	0	0	0	0	0	0	0
Even when not acting as one, I often think about being an angel investor.	0	0	0	0	0	0	0
ly existence would be much less meaningful without my involvement as an angel investor.	()	0	0	0	0	0	0
Being an angel investor is a deeply moving and gratifying experience for me.	0	0	0	0	0	0	0

Next 🕨





Angel Investor job satisfaction

1						
Strongly disagree	2	3	4	5	6	7 Strongly agree
or 🔿	0	0	0	0	0	0
or 🔿	0	$\circ$	0	0	0	0
es 🔿	0	0	0	0	0	0
or 🔿	0	$\bigcirc$	0	0	0	0
nt 🔿	0	0	0	0	0	0
or 🔿	0	0	0	0	0	0
() () ()		disagree         2           or             or             or             or             or             or             or             or             or             or	disagree         2         3           for         ()         ()         ()           for         ()         ()         ()           sor         ()         ()         ()           es         ()         ()         ()           sor         ()         ()         ()           nt         ()         ()         ()	disagree         2         3         4           for         O         O         O         O           for         O         O         O         O           for         O         O         O         O           or         O         O         O         O	disagree         2         3         4         5           for         O         O         O         O         O           for         O         O         O         O         O         O           for         O         O         O         O         O         O         O           or         O         O         O         O         O         O         O           es         O         O         O         O         O         O         O           int         O         O         O         O         O         O         O	disagree         2         3         4         5         6           for         O

Next 🕨

#### Frequency of Angel Involvement

* General angel in	volvement							
Consider your gene	eral angel involvement.							
								7
		Never	2	3	4	5	6	Always

\* Specific angel involvement in Startup Activities Consider your specific angel involvement. How often do you participate in the following angel activities? 7 1 2 з 4 5 6 Always Never Deal flow (discover generic investment opportunities) 0 0 0 0 0 Startup Scouting (identify and pre-select the best startups) Due diligence (contribute to the due diligence of the startups) Post investment monitoring (take part in the post-investment monitoring of the startups) Share Experience (share your industrial experience with the 0 0 0 0 0 0 0 entrepreneurs) Management support (support the entrepreneurs in management tasks) Networking (support the entrepreneurs with networking) 0 0 0 0 0 0 0 Endorsement (take part in activities of endorsement and reinforcement of the credibility of the startup) Attraction of new customers (contribute to attract new customers for 0 0 0 0 0 0 0 the startup) Operational Tasks (contribute by doing direct operational tasks in the startups) Attraction of investment partners (support the startup attracting 0 0 0 0 0 0 0 investment partners) EXIT activities (active participation to conduct the startup to an EXIT,

a sell, or other liquidity event)





* Specific angel involvement in Angel Group Activities							
onsider your specific angel involvement. How often do you particip	oate in	the fol	lowing a	ingel activ	vities?		
	1 Never	2	3	4	5	6	7 Alway:
Lead Investor (be a lead investor, assuming the control of the round)	0	0	0	0	0	0	0
investment committees (participate in startup investment decision committees of your angels group)	0	0	0	0	0	0	0
Events and seminars for members of the angels group (participate in events and seminars organized by your angels group)	0	0	0	0	0	0	0
General Meetings of the angels group (participate in the General Assemblies\ general meetings of your angels group)	0	0	0	0	0	0	0
Angels board participation and advising (give advice and mentoring to the leaders\gatekeepers of your angel group)	0	0	0	0	0	0	0
Invite new angels (participate in the attraction of new angels to the group)	0	0	0	0	0	0	0
Gatekeeper (act as gatekeeper or group leader)	0	0	0	0	0	0	0

Specific angel involvement in Entrepreneurial Ecosystem Activit	ies						
onsider your specific angel involvement. How often do you partici	pate in	the fol	lowing	angel activ	ities?		
	1 Never	2	3	4	5	6	7 Always
Entrepreneurial events (participate in public entrepreneurial events, Demo Days or other public investor events)		0	0	0	0	0	0
Startup Jury Member (participate as a jury member on startup awards)		0	0	0	0	0	0
Angel Testimonial (speak, or give testimonials in public events concerning your angel investor role)		0	0	0	0	0	0
Angel Association (are a member\participate in activities of the National, European or International angels association ex.FNABA, APBA, EBAN, ABAN, BAE, etc)	0	0	0	0	0	0	0
AFOR, EDAN, ADAN, DAE, EU)							

### **Reinvest intention**

	1 Strongly disagree	2	3	4	5	6	7 Strongl agree
I intend to continue to be angel investor in the future	0	0	0	0	0	0	0
I will probably invest as angel investor in the future	0	0	$\bigcirc$	0	0	0	0
It is very likely that I will invest as angel investor in the future	0	0	0	0	0	0	0
I intend to continue to invest my money as angel investor in the future		0	0	0	0	0	0
intend to continue to invest my time as angel investor in the future	0	0	0	0	0	0	0
I intend to continue to invest my know-how as angel investor in the future		0	0	0	0	0	0
I intend to continue to invest my reputation as angel investor in the future	( )	0	0	0	0	0	0
intend to continue to invest my personal network as angel investor in the future	0	0	0	0	0	0	0





Angel investor word of mouth

	Consider your angel investor activity. Please, indicate the extent to which you agree with the following statements.
--	--

WOM activity	1 Strongly						7 Strongly
	disagree	2	3	4	5	6	agree
I mention being an angel investor to others quite frequently	0	0	0	0	0	0	0
I've told more people about angel investments than I've told about most other investment possibilities		0	0	0	0	0	0
I seldom miss an opportunity to tell others about being an ange investor		0	0	0	0	0	0
When I tell others about being an angel investor, I tend to talk about it in great detai		0	0	0	0	0	0

1       7         Strongly       3       4       5       6       agree         I have only good things to say about being an angel investor.       0<	* WOM Praise							
I am proud to tell others that I'm an angel investor.       O       O       O       O         I've spoken favorably of being an angel investor to others       O       O       O       O       O			2	3	4	5	6	2.7
I've spoken favorably of being an angel investor to others	I have only good things to say about being an angel investor.	0	0	0	0	0	0	0
	I am proud to tell others that I'm an angel investor.	0	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	0	0
	I've spoken favorably of being an angel investor to others	0	0	0	0	0	0	0
I recommend being an angel investor to others.	I recommend being an angel investor to others.	0	0	0	0	0	0	0

Next 🕨

## Business Angels Questionnaire

0% \_\_\_\_\_ 100%

### Angel Perceived Investment Value

vesting as angel investor							_
	1 Strongly					c	7 Strongly
	disagree	2	3	4	5	6	agree
is an inexpensive way to invest	0	0	0	0	0	0	0
is priced fairly (management fees)	0	0	0	0	0	0	0
allows me to benefit from tax reduction	0	0	0	0	0	0	0
gives me access to public co-investment	0	0	0	0	0	0	0
is a great way to earn money	0	0	0	0	0	0	0
it is an efficient way to diversify investments	0	0	0	0	0	0	0
increases my wealth adequately in view of the risk I bear	0	0	0	0	0	0	
it's an opportunity to have a self-employment is a convenient way to invest	0	0	0	0	0	0	
is an easy way to invest	0	0	0	0	0	0	0
is not unnecessarily time-consuming	0	0	0	0	0	0	
allows me to remain active	0	0	0	0	Õ	0	0
is a good way to develop oneself	0	Õ	Õ	0	0	0	0
is a learning opportunity	0	ŏ	0	0	0	0	0
encourages knowledge sharing	0	Õ	Õ	Õ	0	0	0
keeps me updated	Õ	ŏ	Õ	Õ	Õ	Õ	Õ
develops my networking	Õ	Õ	Õ	Õ	Õ	Ō	Ō
helps to meet extraordinary people	0	0	0	0	0	0	0
facilitates socialization with other angels	0	0	0	0	0	0	0
stimulates co-investment with other angels	0	0	0	0	0	0	C
is a nice way to spend time	0	0	0	0	0	0	C
provides the excitement of risk taking	0	$\bigcirc$	0	0	0	0	C
is entertaining	0	0	0	0	0	0	0
is a challenging experience	0	0	0	0	0	0	0
gives me an opportunity to make a better world	0	0	0	0	0	0	0
it's a way to give back to society	0	0	0	0	0	0	C
ves me an opportunity to express benevolence toward other people	0	0	0	0	0	0	C
encourages me to have a life with a higher purpose	0	0	0	0	0	0	0
makes me feel fulfilled	0	0	0	0	0	0	C
boosts my self-esteem	0	0	0	0	0	0	0
gives me a sheer joy	0	0	0	0	0	0	0
makes me feel valuable	0	0	0	0	0	0	0
increases my self-confidence	0	0	0	0	0	0	0
improves my social status gives me an opportunity to continue the success path	0	0	0	0	0	0	
increases my reputation	0	0	0	0	0	0	0
makes me part of something extraordinary	0	0	0	0	0	0	
its an opportunity to co-manage a company	0	õ	0	0	0	0	0
gives me a competitive advantage	0	0	0	0	0	0	0
is a way to participate in the next big thing	Õ	Õ	Õ	Õ	0	0	Ö
allows me to be part of entrepreneurship	Õ	Õ	Õ	Õ	Õ	Õ	0
gives me the pleasure to begin something from scratch	0	0	0	0	0	0	0
gives me an opportunity to be involved with startups	0	0	0	0	0	0	0
allows me to mentor entrepreneurs	0	0	0	0	0	0	0
aintains my entrepreneurship spirit without the direct responsibility	0	0	0	0	0	0	C
allows me to create an entrepreneurial legacy	0	0	0	0	0	0	0
is a way to foster innovation	0	0	0	0	0	0	C
brings about new things to the world	0	0	0	0	0	0	0
gets me close to new business ideas and new people	0	0	0	0	0	0	0
is a way to support the technological evolution	0	0	0	0	0	0	0
keeps me abreast of new technologies	0	0	0	0	0	0	C

	0		0							
theoria poiesis	e <b>de aveiro</b> s praxis									
			2							
Business Angels Questionnaire										
	00/	100%								
	0%	100%								
S	ociodemographic Charact	eristics and Experience as	Angel Investor							
* Number of investmen										
Please Indicate the hum	ber of startups in which you'	ve invested								
Only numbers may be en	tered in this field.									
* Invested Amount Please indicate the amo Choose one of the following a	ount of money already investe answers	d as angel investor								
⊖ <20k€	○ ]50K€-100k€]	○ ]250K€-500k€]	O ]1M€-3M€]							
◯ [20K€-50K€]	○ ]100k€-250k€]	○ ]500k€-1M€]	⊖ >3M€							
* Sex Please indicate your sea	x.									
Choose one of the following a	answers	○ Female								
* Age Please indicate your age	e									
Only numbers may be en	tered in this field.									
* Experience as Angel										
Please indicate the num	ber of years of experience as	angel investor								
Only numbers may be en	tered in this field									
Sing numbers may be en	and an and nord.									

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0	
Business Angels Questionnaire	
<b>_</b>	
0% 100%	
Sociodemographic Characteristics and Experience as Angel Investor	
* Country	
Please indicate your country of residence	
* Country of investment Please indicate your investment country Choose one of the following answers	
<ul> <li>Only country of residence</li> </ul>	
O Other countries only	
○ Country of residence and outside	
<ul> <li>Investment Modality</li> <li>Please indicate your angel investment modality</li> <li>Check any that apply</li> <li>invest alone</li> <li>through a network group or angel fund</li> </ul>	
* Angel Time Each answer must be at most 100	
Only numbers may be entered in these fields	
T1 - What percentage of your professional time you spend as angel investor? (0-100%)	ļ
* Angel Time Distribution The sum must equal 100.	
Only numbers may be entered in these fields	
T2-What percentage of angel time do you dedicate directly to the angel group? (0-100%)	[]
T3- What percentage of angel time do you dedicate directly to the angel group? (0-100%)	
T4- What percentage of angel time do you dedicate directly to the investee stantaps' (0-100%)	
Remaining:	100
Total:	0

Next +

#### Values

Here we briefly describe different people. Please read each description and think about how much that person is or is not like you. Please choose the circle that shows how much the person described is like you.

* Finally, the last question. Here we briefly describe different people. Please read each description and think about how much that person is or is not like you. Please choose the circle that shows how much the person described is like you.										
t is important to her/him										
	Not like me at all	Not like me	A little like me	Moderately like me	Like me	Very much like me				
to form his/her views independently.	0	0	0	0	0	0				
that his/her country is secure and stable.	$\bigcirc$	0	0	0	0	0				
to have a good time.	0	0	0	0	0	0				
to avoid upsetting other people.	0	0	0	0	0	0				
that the weak and vulnerable in society be protected.	0	0	0	0	0	0				
that people do what he/she says they should.	0	0	0	0	0	0				
never to think he/she deserves more than other people.	0	0	0	0	0	0				
to care for nature.	0	0	0	0	0	0				
that no one should ever shame him\her.	0	0	0	0	0	0				
always to look for different things to do.	0	0	0	0	0	0				
to take care of people he\she is close to.	0	0	0	0	0	0				
to have the power that money can bring.	0	0	0	0	0	0				
to avoid disease and protect his\her health.	0	0	0	0	0	0				
to be tolerant toward all kinds of people and groups.	0	0	0	0	0	0				
never to violate rules or regulations.	0	0	0	0	0	0				
to make his/her own decisions about his/her life.	0	0	0	0	0	0				
to have ambitions in life.	0	0	0	0	0	0				
to maintain traditional values and ways of thinking.	0	0	0	0	0	0				
that people he\she knows have full confidence in him\her.	0	0	0	0	0	0				
to be wealthy.	0	0	0	0	0	0				
to take part in activities to defend nature.	0	0	0	0	0	0				
never to annoy anyone. to develop his/her own opinions	0	0	0	0	0	0				
to develop his/her own opinions.	0	0	0	0	0	0				
to protect his/her public image. to help the people dear to him/her.	0	0	0	0		0				
to be personally safe and secure.	0	0	0	0	0	0				
to be a dependable and trustworthy friend.	0	0	0	0	0	0				
to take risks that make life exciting.	0	0	0	0	0	0				
to have the power to make people do what he\she wants.	0	0	0	0	0	0				
to plan his/her activities independently.	0	0	0	0	0	0				
to follow rules even when no-one is watching.	0	0	0	0	0	0				
to be very successful.	0	0	0	0	0	0				
to follow his/her family's customs or the customs of a religion.	0	0	0	0	0	0				
to listen to and understand people who are different from him/her.	0	Õ	0	0	0	0				
to have a strong state that can defend its citizens.	0	0	0	0	0	0				
to enjoy life's pleasures.	0	0	0	Ö	0	0				
that every person in the world have equal opportunities in life.	0	Ŏ	Ŏ	0	0	0				
to be humble.	Õ	Õ	Õ	Õ	Õ	Õ				
to figure things out himself\herself.	Õ	Ŏ	Ŏ	0	0	0				
to honor the traditional practices of his\her culture.	Õ	Õ	Õ	Õ	ŏ	Õ				
to be the one who tells others what to do.	Õ	Õ	Õ	Õ	Ŏ	Ō				
to obey all the laws.	0	0	0	0	Õ	Õ				
to have all sorts of new experiences.	Õ	Õ	Õ	0	Õ	Õ				
to own expensive things that show his/her wealth	0	0	0	0	0	0				
to protect the natural environment from destruction or pollution.	0	0	0	0	0	0				
to take advantage of every opportunity to have fun.	0	0	0	0	0	0				
to concern himself with every need of his\her dear ones.	0	0	0	0	0	0				
that people recognize what he\she achieves.	0	0	0	0	0	0				
never to be humiliated.	0	0	0	0	0	0				
that his/her country protect itself against all threats.	0	0	0	0	0	0				
never to make other people angry.	0	0	0	0	0	0				
that everyone be treated justly, even people he/she doesn't know.	0	0	0	0	0	0				



Thank you very much for your cooperation!

