

# **A constitutive view on Entrepreneurship Through Acquisition. Towards a conceptual framework**

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**A constitutive view on  
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Towards a conceptual framework**

**VANOORBEEK HANS**

## Preface and Acknowledgments

The purpose of the thesis is to perform research from a more theoretical and academic point of view on a phenomenon that I experience daily in my current job: Entrepreneurship Through Acquisition (“ETA”).

Although most people will not have heard of the term as such, some people will probably know in their family, circle of friends or acquaintances someone who after a long career decided to become an entrepreneur by acquiring a company.

In fact, I have been involved in private equity over the last 25 years. I actually invest myself (together with a business partner) our personal funds in SME’s, with an enterprise value ranging between €5m and €30m. In this context, I regularly meet MBI candidates or ETA candidates through networking events. While the MBI candidate is looking for a job opportunity in case we do a deal, the ETA candidate is looking for a co-investor providing potential additional funds in case he would not have sufficient funds to (entirely) acquire the company of his/her dreams himself. From our perspective as an investor, we are always interested to meet these kind of motivated and ambitious people, who possess the necessary management skills to run a potential or even existing investment and are even prepared to invest part of their own funds in the company for which they will work, having therefore aligned their incentives with ourselves.

Having met many of these ETA entrepreneurs on a regular basis, I often noticed that they lacked certain skills or perspective needed to acquire the company of their dreams.

Hence my academic involvement, as a business school can help such nascent entrepreneurs getting on the learning curve, providing them with the necessary background, basic skills and knowledge to engage in their ventures.

Partially out of idealism, I am therefore deeply involved with ETA as an academic. On the one hand, I am an Adjunct Professor at the Vlerick Business School since 2012, where I am the co-founder for the Platform of Entrepreneurial Buyouts (PEBO), a platform preparing senior experienced candidates for ETA through practice oriented teaching sessions and where I equally teach “Entrepreneurship through Acquisition” as an elective in the MBA program. I do this by providing the students with a practitioners’ perspective.

On the other hand, while I am equally an adjunct professor at INSEAD teaching the LBO (Leveraged Buyout) elective in the MBA program, I am also involved for many years in the jury of the popular REP class (Realizing Entrepreneurial Potential), judging in fact potential ETA candidates and their investment proposals.

Although ETA has been approached from different angles in existing research, no dedicated scientific doctorate study has been made on the phenomenon as such.

I am personally convinced that this phenomenon of ETA is more widespread as many think and deserves more attention as it currently receives, in particular as one compares it with the attention given to start-ups.

This study wants to focus in particular on ETA cases involving more seasoned and senior managers and less on the recent MBA graduates.

Before the thesis really starts, it only remains for me to say thank you to some people who helped me to go through this “academic marathon”.

Foremost, I would like to thank my supervisors Prof. dr. Eddy Laveren and Prof. dr. Miguel Meuleman who – over the last five years - have taken the time to help me through this at times heavy process, in particular as I had to combine this PhD with an already extremely busy full time job. Both gentlemen have helped me tremendously through their regular feedback in order to keep the academic standards in place, while providing me with valuable feedback and advice.

I also would like to express my gratitude to Mrs. Cloë De Moor from Vlerick Business School, who assisted me with the practicalities of the Qualtrics questionnaire and the Vlerick Database.

Without the (nascent) ETA managers themselves, this thesis would have been impossible. Thanks to those hundred seventy people who responded to the questionnaire.

Finally, doing a thesis while also working full time has presented many pressures especially for my wife and children whose lives for the past few years have been dominated by thoughts of ETA, while their father and husband was often hiding himself in his PhD retreat. To them I offer an immense “Thank You”.

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## Abstract (English)

### **A constitutive view on Entrepreneurship Through Acquisition (ETA). Towards a conceptual framework.**

The purpose of the thesis is to analyze the phenomenon of “Entrepreneurship through Acquisition” or ETA. An ETA transaction as opposed to a buyout is defined here as a smaller and more entrepreneurial version of the classical leveraged management buy-in. Previous research on entrepreneurship and transitions into entrepreneurship, have always been predominantly focused on start-up entrepreneurship. ETA is a relatively widespread phenomenon and an alternative way to become an entrepreneur. The main focus here lays on the study of the middle-aged senior (nascent) ETA entrepreneur.

Besides making a typology of the nascent and actual ETA entrepreneur, the influence of different forms of entrepreneurial capital and the likelihood of ETA entrepreneurial entry has been analyzed in the first part of the thesis. While work and/or managerial experience, prior start-up or shareholdings and parental background do not have a significant impact on the likelihood of becoming an ETA entrepreneur, self-employment, the higher the amount an ETA entrepreneur is prepared to invest and a certain age do increase the odds of acquiring a company.

A second part of the thesis analyzes the investment criteria of an ETA manager, while comparing them between nascent and actual ETA managers and comparing them with the IC of other types of similar investors like private equity (LBO and MBI), venture capital, business angels and search funds. The latter and the MBI investors being the most similar. “Potential market growth”, “professionalization and improvement potential”, as well as “stable demand and recurring customers” were found to be the three most important investment criteria, showing little differences, except for “location” and “technology”, between the nascent and actual ETA entrepreneur. Three criteria, i.e. “potential market growth”, “technology” and “sales turnover” have the strongest significant influence on whether a company finally gets acquired or not.

A third part of the thesis measures the social identities of the (nascent) ETA entrepreneurs and their impact on the nascent-active gap. Using the framework of Fauchart & Gruber for founder identities measured by the scale developed by Sieger et al., the Darwinian founder social identity is the predominant social identity of the (nascent) ETA entrepreneur. On the other hand, no significant relationships between one of the social identities and the likelihood to actually become an active ETA entrepreneur in a given time period compared to when they do not have this identity, were found.

## Abstract (Dutch)

### **Een constitutionele visie op “Ondernemerschap door acquisitie”. Naar een conceptueel kader.**

De ambitie van deze thesis is om ten gronde het fenomeen van “Ondernemerschap door Acquisitie” of in het engels “Entrepreneurship Through Acquisition” (ETA) te bestuderen. Een ETA transactie, in tegenstelling tot een buyout transactie wordt hier gedefinieerd als een meer ondernemende versie van de klassieke management buy-in maar dan op een kleinere schaal. De meeste bestaande research over ondernemerschap en de weg naar dit ondernemerschap heeft traditioneel vooral gefocust op start-up ondernemerschap. ETA komt echter relatief vaak voor en is een waardig alternatief om ondernemer te worden. In deze studie ligt de focus vooral op de studie van wat oudere en ervaren (aspirant) ETA ondernemers.

Naast het maken van een typologie van de aspirant en effectieve ETA ondernemer, werd de invloed van de verschillende vormen van ondernemerskapitaal en de daaruitvolgende waarschijnlijkheid om via ETA ondernemer te worden, geanalyseerd in het eerste deel van de thesis. Werk- en management ervaring, voorafgaande ondernemerschapservaring via start-up of aandeelhouderschap en de achtergrond van de ouders, hebben geen significante invloed op de waarschijnlijkheid om een ETA ondernemer te worden. Het hebben van een zelfstandig statuut, de bereidheid om een groter bedrag te investeren en het bereiken van een zekere leeftijd hebben daarentegen wel een positieve invloed.

Een tweede deel van de thesis analyseert de investeringscriteria van een ETA manager en maakt de vergelijking tussen aspirant en effectieve ETA managers en tussen de ETA manager en andere types van soortgelijke investeerders zoals risicokapitaal, private equity, business angels en search funds. “Marktgroeipotentieel”, “professionalisering- en verbeteringspotentieel” en “stabiele vraag en recurrente klanten” kwamen naar voor als de meest belangrijke investeringscriteria, met kleine verschillen tussen aspirant en effectieve ETA ondernemers, met uitzondering van “locatie” en “technologie”. Drie criteria, zijnde “marktgroeipotentieel”, “technologie” en “omzet” hebben de sterkste impact op het feit of een bedrijf nu effectief gekocht wordt of niet.

Een derde deel van de thesis meet de sociale identiteiten van de (aspirant) ETA ondernemers en de impact daarvan op de overgang van aspirant naar effectieve ondernemer. Gebruikmakend van het kader van Fauchart & Gruber waar de sociale identiteiten gemeten worden aan de hand van de schaal van Sieger et al., is het duidelijk dat de sociale identiteit van de (aspirant) ETA ondernemer sterk Darwinistisch is. Er werden echter geen significante relaties gevonden tussen het bezitten van deze sociale identiteiten en de waarschijnlijkheid om effectief een ETA ondernemer te worden.

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# Chapter 1. Introduction

## 1.1. Introduction and definitions

Entrepreneurship is all about startups or new venture creation, or so we are told. And so says the academic research on entrepreneurship. It's all about having a good idea one day, starting an innovative business in your garage (with or without the support of a venture capital firm) from scratch, building it into a multi-million or multi-billion dollar company and getting your face on the cover of Forbes.

But what if you don't have an outstanding idea for a new product or service? Can you still be an entrepreneur? Yes, you can!

You can buy someone else's company and run it. Indeed, if you are a manager thinking about making a change in your career or a newly graduated MBA looking to begin a management career and doesn't want to go work in a traditional firm and climb through the corporate ranks, you can acquire an existing business and as the new CEO, grow sales, increase profitability, maybe make a couple of add-on acquisitions, and build it into a larger and more successful company. Buying a business is entrepreneurship too!

Indeed, there are multiple ways into the world of entrepreneurship, including buying an existing business. For prospective entrepreneurs who are motivated by the desire to build and manage their own business, but who may lack an idea or the desire to start a company from scratch, acquiring a small business may be an excellent option to consider.

The purpose of the thesis is to analyze the phenomenon of Entrepreneurship Trough Acquisition ("ETA") and the individuals involved.

An ETA transaction is defined here as a smaller and more entrepreneurial version of the classical leveraged management buy-in. The buyer/investor, the *ETA manager*, purchases a relatively small company, entirely or almost entirely with his/her own funds, putting most of his/her own funds on the line, in order to become an entrepreneur and in order to hands-on manage the company and to further professionalize and enhance the development of the acquired company (own definition and Hunt & Fund, 2012).

At Vlerick Business School, Prof. Miguel Meuleman and myself founded in 2013 the Platform of Entrepreneurial Buyouts (PEBO) and the Entrepreneurial Buyout Academy, using the term "entrepreneurial buyout" to describe an ETA transaction. The purpose of the Academy was to help potential ETA candidates to provide them with the necessary background, basic skills and knowledge to engage in their ETA venture.

The term "Entrepreneurial Leveraged Buyout" or "E-LBO" was already used to describe an ETA transaction in the 80s to differentiate small company LBO's from the dominant scholarly conceptions of the multi-billion-dollar "RJR Nabisco style" LBOs (Malone, 1989). However, Malone failed to differentiate ETA from traditional LBO's on the basis of an ex ante entrepreneurial intent (Hunt & fund, 2012).

Kelly et al. (1986) define ETA, or E-LBO as they call it, as a smaller LBO in which ownership is concentrated in the hands of relatively few owners. The criteria for an ETA transaction are: 1) at least two thirds of the purchase price was generated from borrowed funds, 2) more than 50% of the stock after acquisition was owned by a single individual or his family, and 3) the majority investor devoted himself to the active

management of the company after acquisition. Kelly et al. concluded that contrary to the larger LBO practices reported in the popular press, smaller company LBOs do not seem to rely heavily on selling off assets or laying off employees, the dominant changes in the smaller LBOs lie in the area of increased marketing and revenue enhancement. This looks like an ETA transaction “avant la lettre”. The authors, who published this research, in an era where LBOs were a still a novelty, ended their research ‘that it is not too soon to begin increasing our understanding of this rapidly growing phenomenon’. Not much research has been done since then in this regard.

More recent, Hunt & Fund (2012:31), define ETA as “the acquisition of an existing small or medium-sized business (i.e. SMEs with annual revenues up to \$50 million) by an entrepreneur for the purpose of expanding and enhancing the business through transformational strategies that fundamentally reshape market processes”.

As opposed to a classical buyout, in an ETA transaction, the buyer/investor replaces the existing management team (i.e. often the seller) and will become very hands-on involved with the management of the company. In a classical buyout, the existing management team (or external management in case of an MBI) acquires (a relatively small) part of the company alongside a private equity firm, which often holds the majority. For a schematic overview see Table 1.1.

Therefore is ETA, however much less mentioned in the scholarly literature, equally a true act of entrepreneurship, as opposed to start-up entrepreneurship (Meuleman & Vanoorbeek, 2018) (Hunt & Fund, 2012) (Simon, 2022).

Table 1.1. Differences between a classical MBO and an ETA transaction

Buyout	ETA transaction
<p>An LMBO (Leveraged Management Buyout) is a transaction whereby</p> <ol style="list-style-type: none"> <li>1. the <b>existing management team</b> (or external management team in case of an MBI),</li> <li>2. acquires <b>part of</b> a company</li> <li>3. by investing in the equity of a new entity <b>together with a financial sponsor</b> and supported by bank debt in order to acquire, run and develop the company independently.</li> </ol>	<p>A smaller version of the classical LMBO, whereby the buyer/investor simply buys the relatively small company, almost entirely with his own funds in order to be an entrepreneur in order to further build up the company</p> <ol style="list-style-type: none"> <li>1. In most cases, the <b>buyer replaces the existing management team</b>, i.e. the seller.</li> <li>2. In most cases, the buyer will be a significant, <b>majority or sole shareholder</b>.</li> <li>3. In many cases, there is <b>no financial sponsor</b> needed.</li> </ol>

Source: Professor Miguel Meuleman, The Buy Out Academy (session 1), Vlerick Management School

Hunt & Fund (2012) equally provide a schematic overview of the similarities and marked differences between LBOs and ETA. See Table 1.2. In their analysis they compare the rather larger LBOs, often portrayed as a potent solution to agency problems, particularly agency-owner issues involving the optimal deployment of free cash-flow, to the ETA transactions who have an entrepreneurial ex-ante intent and realize transformational strategies.

Table 1.2. Differences between an LBO and an ETA transaction

Dimension	Defining Characteristics	
	LBO	ETA
Over-Arching Purpose	Identification and capitalization of undervalued assets	Identification and capitalization of undervalued assets
Theoretical Heritage	Agency Theory (Jensen & Meckling 1976; Eisenhardt 1989)	Entrepreneurship Theory (Knight 1921; Schumpeter 1942; Kirzner 1978, 1999; Shane & Venkataraman 2000)
Ownership Trajectory	Public firm taken private and then taken public again	Private firm remains private.
Typical Owner-Investors	Financial sponsor – usually private equity firms or LBO associations.	One or more individual entrepreneurs.
Governance	Classical Owner-Agent structure	“Owner as Agent”
Defining Strategy	Short-term financial engineering	Long-term growth/expansion into new products, services and markets
Approach to Free Cash Flow	Cash flow to service debt.	Cash flow deployed to growth initiatives
Holding Period	Up to several years	Up to several decades or generations
Exit Strategy	Key element of purchase decision. Typically taken public 3 to 5 years after the LBO.	Rarely instrumental to purchase decision.
Ideal Candidate	Underperformance. Financially undermanaged	Underperformance. Operationally or strategically undermanaged
Size	Up to \$100 Billion and 10,000s of employees	Up to \$50 Million or 500 employees
Expense Rationalization	Expense reduction for profit enhancement	Expense reduction for strategic redeployment
Leverage	Leverage is the key to producing high returns. Focus on the “discipline of debt” to influence management behaviors	Leverage holds no special importance because of long-term horizon and “owner as agent” governance.
Management Approach to Risk	Short-term focus due to expectations of return. Potential danger of incoherent long-term commitment.	Long-term focus. “Owner as Agent” governance creates potential for insufficient short-term risk-taking.

Source: Hunt & fund (2012)

Given that in the academic literature, as repeatedly illustrated here below, private equity is mostly associated with Venture Capital, focusing on start-ups, and less with (mature) buyouts, it is equally worthwhile to compare ETA - its similarities as well as its differences – with a typical Venture Capital transaction (De Toro, 2019). For a schematic overview see Table 1.3.



Table 1.3. Differences between a VC transaction and an ETA transaction

Venture Capital	ETA transaction
<ol style="list-style-type: none"> <li>1. The most valuable asset is the co-founder &amp; entrepreneur/manager (the “Jockey”). The owner is in most cases the founder.</li> <li>2. The investment thesis for <u>startups</u> is more qualitative and used to vary from funds, business angels,...</li> <li>3. The company is mostly small, hardly profitable or cash generative, innovative, fast growing and having a strong further growth potential.</li> <li>4. Start-ups are often valued at revenues multiples.</li> <li>5. Only equity financing. No bank financing</li> </ol>	<ol style="list-style-type: none"> <li>1. The most valuable asset is the company and its characteristics (“the Horse”). The company is typically owned by a a business family.</li> <li>2. The investment thesis is very quantitative and standard.</li> <li>3. The company is already a (small) SME, mostly not in an innovative industry, mostly not fast growing. Reducing risk through characteristics such as recurrent and diversified customers, an easy B2B business model, low capex intensiveness is key.</li> <li>4. EBOs are often valued at EBITDA multiples.</li> <li>5. The company is acquired through bank debt</li> </ol>

Source: De Toro (2019) and Hans Vanoorbeek

Until now, the academic research has mainly looked at the ETA phenomenon through the lens of search funds (Dennis & Laseca, 2016) (Hunt & Fund, 2012) (Yoder & Kelly, 2018) (Kelly et al., 2016) (Kelly & Heston, 2022). A search fund is a pool of capital raised to support the efforts of an entrepreneur or a pair of entrepreneurs, often recent MBA graduates from top B-Schools, in locating and acquiring a privately held company for the purpose of operating and expanding it (Morrisette & Hines, 2015) (Kelly et al., 2016) (Kelly & Heston, 2022) (Hunt & Fund, 2012). As recent MBA graduates have usually very little cash (on top of their recently acquired student debts), they can only be involved in ETA through the support of equity providers. This equity could be provided by wealthy individuals, small-cap private equity funds or search funds. In particular the latter, is very popular among MBA graduates.

Search funds started slowly in the 1980s and then picked up steam in the '90s and 2000s. Today, the median search fund spends almost 20 months looking for and acquiring a company, typically in the \$5 million to \$30 million price range, requiring \$2 million to \$10 million of equity capital. These funds typically raise \$500,000 of initial search capital (Kelly & Heston, 2022). Acquisition targets are typically businesses that have an older founder looking to retire, a middle-aged founder looking to turn over the reins, or a warring pair of co-founders that elects to bring in new management. The companies where search funds invest in are mostly – not technology driven – “old fashioned” dull, unremarkable, bread and butter businesses. Many are service companies. Investor returns on search funds are significantly above 35 percent (Kelly et al., 2016) (Kelly & Heston, 2022) and are much more reliable than those in the startup world—the successes are rarely as lucrative, but the failures are far less common.

But on the whole, search funds remain a micro-movement. For example, in the latest study of Stanford Business School (Kelly & Heston, 2022), 526 search funds were formed since 1984 in the US and Canada (107 in search mode and 421 concluded), generating approximately \$10bn in additional equity. Outside the US, 132 search funds were tracked by IESE Business School (Kolarova et al., 2020), having made 56 acquisitions to date whereof 32 in Latin America, 23 in Europe and one in the Middle East. In Belgium, for example, there are currently no search funds yet. Within the small community of searchers and investors, there’s significant doubt that the model will ever go mainstream the way startups and Silicon Valley have.

Morissette & Hines (2015), made an attempt to profile the search fund entrepreneurs, i.e. the principals in a search funds. Most of them conformed to the profile of male (almost all), relatively young (84% below 36 years), recent business school graduate (49% graduated within a year from raising their fund). The majority of them had a private equity, management consulting or investment banking background. In the last year of the survey, only 2% had a general management back ground and only 4% had an entrepreneurial background.

However ETA is equally being performed by former senior seasoned managers of large groups or senior consultants, who aspire to become entrepreneurs and owners of their own company. These ETA managers have generally made some substantial money in their careers and are therefore able to acquire themselves a small SME, entirely or at least as a substantial shareholder. These so-called “self-funded searchers” equally have gained significant experience and expertise in their area of business. ETA managers should with their experience be able to significantly contribute to the company they acquired. ETA is a new step in their careers.

As more than 70% of all self-employed and business owners are between 35-64 years<sup>1</sup> and the most common age to found a company was 35 to 44, entrepreneurship is definitely not a young person’s game (Shane S. , 2008).

Therefore, within the ETA space, different types of searches exist. Please find a schematic over view in Table 1.4.

Table 1.4. Different types of searches in an ETA context

	Searcher Autonomy	Infrastructure	Investor Base	Mentorship	Potential Equity for Searcher (Solo) <sup>(1)</sup>
<b>Traditional Search Fund</b>	• Medium: monthly reporting to disparate investor base; no committed capital; some terms pre-negotiated	• Low: searcher must setup infrastructure individually; limited admin support, if any	• 10-20 investors, each with their own right of first refusal to fund transaction	• Medium: depends on availability of investors; frequency of interaction usually up to the searcher	• 25%
<b>Sponsored Search</b>	• Medium: monthly reporting to in-house investor base; committed capital	• High: office space, IT, admin support, HR and broker/lender relationships in place	• One committed fund; decisions made by investment committee	• Medium-to-high: daily interaction with investor base; incentives aligned; depends on sponsor	• 20 – 30%
<b>Incubated Search</b>	• Medium: monthly reporting to in-house investor base; committed capital	• High: office space, IT, admin support, HR and broker/lender relationships in place	• One committed fund; decisions made by investment committee	• High: daily interaction with investor base with relevant experience; designed to mentor searchers	• 25%
<b>Self-Funded Search</b>	• High: no outside time limits, reporting requirements, or investment mandates	• Low: searcher must setup infrastructure individually; limited admin support, if any	• No pre-determined agreement; terms dependent upon attractiveness and demand	• Low-to-Medium: depends on personal network of searcher; no search capital as incentive to investors	• 30 – 100%
<b>Crowdfunded Search</b>	• Low-to-Medium: reporting depends on investors; disparate investor base; no committed capital	• Low: searcher must setup infrastructure individually; limited admin support, if any	• Varies widely; too early for standard to be developed	• Low-to-Medium: depends on personal network of searcher	• 30 – 100%

(1) Value of % ownership is typically dependent on size and growth rate and ultimate performance of the acquired business.

Source: Dennis & Laseca (2016)

In case of the self-funded search model, i.e. the ETA entrepreneurs studied in this thesis, often older, more experienced managers, as they have the necessary funds, choose not to raise (the vast majority of the) capital

<sup>1</sup> Small Business Administration, The Small Business Economy: A report to the President (Washington D.C.: US Government Printing Office, 2005). See also Shane (2008), p.45.

to acquire their own company and invest a considerable part of their own savings into the business of their dreams they acquire.

Although they have better economics than their other ETA counterparts, as they do not necessary have to share a part of the capital gain with their investors, they, on the one hand, given their significant personal investment, incur a much higher personal risk. On the other hand, given their age and consequential work experience, they are more experienced in the search and acquisition process, as well as in the post-transaction management of the companies, significantly mitigating the risk of the venture.

In order to clearly position ETA, i.e. the topic of the underlying research, vis-à-vis other related concepts, the following Table 1.5 gives a schematic overview of the different situations where an ETA transaction can be applied and this from the viewpoint of the seller, the buyer, the post-acquisition shareholding, and the typical size of the company being acquired:

Table 1.5. ETA criteria as defined by this research

<b>Seller</b>	
Founder	✓
Non-founder owner manager	✓
Family (incl. family offices)	✓
Corporation	✓
Banks/Liquidator (in case of turnaround)	✓
Private Equity (incl. venture capital, business angel,...)	✗

<b>Buyer</b>	
New management (MBI)*	✓
New management (MBI) & Private Equity	✓
New management & existing management	✓
New management & existing management & Private Equity	✓
Existing management (MBO)	✗
Existing management (MBO) & Private Equity	✗
Private investor/Business angel	✗
Family office	✗
Corporation	✗

\* the new management can be one person or a team

<b>Shareholding</b>	
100%	✓
Majority	✓
Significant Minority	✓
Small Minority	✗

<b>Size of company</b>	
Micro (sales €0-2m)	✓
Small (sales €2-10m)	✓
Medium (sales €10-50m)	✓
Large (sales €50m+)	✗

Source: Hans Vanoorbeek

In this thesis, our research is for the first time primarily focused on (nascent) ETA managers, being senior seasoned managers who fund their search themselves (“self-funded search”), instead of post-MBA early-thirties ETA managers, typically present in the historically predominant model of a search fund (“Traditional search fund, Sponsored search or Crowdfunded search”) (see Table 1.4.).

The main reasons why we want to focus in this research on the more seasoned and senior managers and their self-funded ETA efforts and less on the recent MBA graduates are the following:

- 1) Unique data. Given my unique access to data provided by the Vlerick Buyout Academy, which I have been co-teaching over the last 7 years, I am well placed to use these rather unique data for academic purposes. Indeed, as far as I am aware of, this seven-evening lasting program is the only program in the world to teach senior managers how to perform an ETA transaction.
- 2) More financial and entrepreneurial commitment. The senior managers possess all or at least a significant part of the necessary funds to invest into an ETA transaction. Recent MBA graduates don't. Seasoned managers are ready to invest a significant part, if not all, of their life-long savings into an ETA transaction, while giving up their entire career. Recent MBA's equally do not have that downside, in case things go the wrong direction. In other words, the financial entrepreneurial commitment of seasoned managers is not comparable with those of the MBA's. The seasoned managers will have a significant shareholder's position in the acquired company, probably acquiring relatively small companies, and will benefit directly from the equity upside. The recent MBA graduates, probably investing in larger transactions given their investor base, will mainly benefit from the carried interest if things go well. They have less downward risk, unless their loss of time – not to be underestimated as it covers the heydays of someone's career - and effort.
- 3) More impact. Senior managers have experienced a life-long career. They take this vast knowledge, experience and know-how, as well as their extensive network, with them when they acquire a company for themselves. Very often these small companies are in desperate need of such knowledge and experience. In that respect their value added impact on ETA could outweigh the one of the recent MBA's.

I therefore tend to politely disagree with Liles (Liles & Liles, 1974) who saw age having a significant influence on entrepreneurship; the period between 25 and 40 being seen as “free choice” when the individual sees him/herself as able to act while those working in large corporations in their mid-thirties undergo a period of rethinking their goals and ways of life which may provide the impetus for starting their own business.

In the case of a self-funded ETA transaction, whereby money is required to acquire a company and experience to further professionalize and improve it, getting out of your golden cage is a very brave act of entrepreneurship. The yearly success of our program and the many examples in my direct professional environment is the best proof that there is a large amount of senior managers in their mid-forties to mid-fifties interested in performing an ETA transaction. Often to realize their dream of becoming an entrepreneur....

## **1.2. Research Goal**

The purpose of this research is to provide a better understanding of the ETA phenomenon and the individuals involved.

Despite the obvious scale of ETA (see Section 1.4), its direct role in fueling entrepreneurial revitalization of quasi-dormant business assets and its impact on society as a whole, little empirical research has been made yet on this topic.

However, the academic literature has been approaching, mostly subconsciously and in all anonymity, i.e. without mentioning the ETA phenomenon explicitly as such, many different areas in research which are very relevant to the ETA phenomenon. This existing research will allow us to study ETA and the individuals

involved from different angles. Our literature review discloses the different areas of research relevant for studying ETA such as private equity and LBOs, entrepreneurship in the widest sense (entry and exit), family succession and firm continuation.

As far as we are aware, no dedicated scientific doctorate study has ever been made on the ETA as such.

In this thesis, we will focus ourselves on the ETA phenomenon from the buyer's (i.e. the individual who wants to acquire a company) perspective. More in particular, we will mainly focus our analysis on the cases where more seasoned and senior managers are performing an ETA transaction and purchase an existing small business to own and run it themselves ("self-funded ETA") Not on the recent MBA graduates performing ETA transactions ("search fund ETA").

In order to improve our understanding of the ETA phenomenon, the research of my PhD thesis will investigate three important topics, covering different aspects of a still embryonic systematic research effort on ETA.

The thesis will therefore consist of three following different parts:

1. The "Who" question (chapter 3)

The first part of the thesis will be a typology of the people interested in doing an ETA transaction, the ETA entrepreneur vis-à-vis the other start-up entrepreneurs. This typology will analyze in depth the people aspiring to do an ETA transaction, the self-funded ETA entrepreneurs, i.e. focusing on the experienced middle aged (40+ years) candidates rather than the 25-35 year old post-MBA's. It will result in a general description of a nascent ETA entrepreneur and his/her distinct characteristics. It will equally analyze the impact of financial, human, cultural capital on the (nascent) ETA entrepreneur and entrepreneurial entry via ETA. A comparison will equally be made between ETA entrepreneurs who actually successfully acquired a company and the ones who are still looking to acquire one.

2. The "What" question (chapter 4)

A second part of the thesis will try to answer the "what" question, describing a typical ETA target, based on the investment criteria the ETA managers use to select their ETA targets. These investment criteria or the "ideal" ETA company characteristics will be compared with investment criteria in other related investment areas, such as private equity, business angels investments or venture capital. A comparison will equally be made between ETA entrepreneurs who actually successfully acquired a company and the ones who are still looking to acquire one.

3. The Social Identity and the nascent-active gap (chapter 5)

The third part of the thesis will analyze the intentions of the nascent ETA candidate as a "founder". This analysis will be based on the Theory of Social Identity and the three founder identities of Fauchart & Gruber (2011). The Social Identity of the (nascent) ETA entrepreneur will be measured through the 15-item scale of Sieger et al. (2016). A comparison will equally be made between ETA entrepreneurs who actually successfully acquired a company and the ones who are still looking to acquire one.

## **1.3. Contribution to Academic Research**

### **1.3.1. Summary: The Core Building Blocks - the 5 C's**

Following the structure suggested by the editors' of the Academy of Management Review (Lange & Pfarrer, 2017), we double check our thesis against these five building blocks:

#### *Common Ground*

Although very little academic research has been written on ETA as such, we identified the existing academic literature on related research which allows us to study ETA and the individuals involved from different angles. Our literature review therefore thoroughly covers and synthesizes the different existing areas of research relevant for the study of ETA such as private equity, venture capital and LBOs, entrepreneurship in the widest sense (entry and exit), family succession and firm continuation.

#### *Complication*

Although ETA has been researched, often rather as a side project of other research, little empirical research has been made yet on the ETA phenomenon as such. However, ETA is most likely a more widespread phenomenon than people realize and currently very popular at all the major business schools in the world amongst the graduate or post-graduate students, as illustrated by the increasing popularity of search funds and the existence of many practitioners' books on ETA. Nevertheless, ETA, as a dedicated topic on its own, is hardly and certainly not systematically covered in the academic literature. Although ETA performed through search funds receives some predominantly non-academic attention, ETA via self-funded searches, i.e. made by experienced managers, has barely received any academic interest.

#### *Concern*

Given the very limited academic research exclusively dedicated to the study of ETA, it goes beyond saying that the literature studying ETA is indeed incomplete to say the least. This gap in the literature researching ETA is the more surprising given ETA's scale and importance and its direct role in fueling entrepreneurial revitalization of quasi-dormant business assets, often related to the retiring baby boom generation and its impact on society as a whole. The study of ETA, as a form of entrepreneurship next to the academically extensively covered start-up entrepreneurship, deserves its rightful place in the literature.

#### *Course of Action*

Building on existing research and using a relatively unique database of self-funded – nascent and actual - ETA managers, we developed our knowledge of the ETA phenomenon, almost starting with a blank sheet, through three separate studies, whereby we each time compare the ETA entrepreneurs who actually successfully acquired a company and the ones who are still looking to acquire one. Firstly, we developed a typology of the typical ETA candidate, allowing us to obtain a better understanding of the characteristics of a nascent or actual ETA manager. We equally analyzed the impact of financial, human, cultural capital on the (nascent) ETA entrepreneur and entrepreneurial entry via ETA. Secondly, we attempted to answer the “what” question, describing a typical ETA target, based on the investment criteria the ETA managers use to select their ETA targets. These investment criteria or the “ideal” ETA company characteristics will be compared with investment criteria in other related investment areas. Finally, we analyzed the intentions of the nascent ETA candidate as a “founder” based on the Theory of Social Identity and the three founder identities of Fauchart

& Gruber (2011). The Social Identity of the (nascent) ETA entrepreneur will be measured through the 15-item scale of Sieger et al. (2016).

### *Contribution*

These three studies could lay the foundations for a further in-depth academic study of ETA or alternatively a study of other aspects of ETA. Moreover, given ETA's significance for policymakers and practitioners, this study has certain some practical use for different constituencies such as recruitment agencies, private equity firms, selling shareholders, HR managers, policy makers and last but not least the ETA candidate him/herself.

#### **1.3.2. Contribution to the literature of Chapter 3 (the "who" question)**

Our results in this Chapter take into account some of the shortcomings of previous research and thus contrast with previous findings in several ways.

Previous findings on attempts at transitions into entrepreneurship, have always been predominantly focused on start-up entrepreneurship or at least not be exclusively focused on ETA entrepreneurship. As opposed to previous research on entrepreneurial entry, this research focuses exclusively on the (nascent) ETA entrepreneurs and ETA as the sole mode of entry. We analyzed and defined for the first time nascent entrepreneurship in the context of ETA.

As opposed to most of the other research on ETA, we focus here for the first time mainly on the middle-aged senior (nascent) ETA entrepreneur, who has had a long successful career with many years of managerial experience and wants to acquire a company for him/herself mainly funded with his/her own money (self-funded search). Given the paucity of ETA data, the Vlerick data of nascent ETA entrepreneurs are therefore quite unique to investigate these experienced (nascent) ETA entrepreneurs, by far the largest category in the ETA space.

Consistent with the existing research, we analysed the impact of human, financial and cultural capital in the context of ETA. However, we refined this analysis by adding some measurement variables specifically tailor made to the ETA environment, often inspired by the research on MBI's. Some of these variables have not been investigated before in the context of entrepreneurship, as they are only relevant in an ETA context and provide us with new insights in this alternative form of entrepreneurship and hence in the study of entrepreneurship in general. This study certainly contributes to the existing academic knowledge of nascent entrepreneurship and entrepreneurial entry, in particular as it highlights the ETA mode of entry, as opposed to most academic research where start-up entrepreneurs are in the middle of the spotlight.

#### **1.3.3. Contribution to the literature of Chapter 4 (the "what" question)**

The analysis in this chapter will try to answer the "what" question, describing a typical ETA target, based on the investment or decision criteria the (nascent) ETA entrepreneurs use to select their ETA targets.

The academic literature on investment criteria is abundant, almost every country and every asset or sub-asset class has its own dedicated article describing its investment criteria. After extensive research to uncover a single study that covers all possible investment criteria of one type of investor, let alone across different types of investors, it is clear that no such comprehensive study exist.

This chapter provides an updated and systematic comprehensive literature review of academic research performed on investment criteria used in the different sub-asset classes of private equity investments. In

fact, our literature review provides the description of investment criteria on two axes: per investor type and per main investment criteria group.

We therefore contribute to the literature by providing a relative exhaustive and comprehensive overview of the literature on investment criteria across different investor types and cover for the first time in a systematic way the investment criteria of an ETA entrepreneur.

By analyzing the differences and similarities between the investment criteria of the different sub-asset classes and the investment criteria of ETA, we were able to develop a framework of reference, situating the literature on investment criteria according to its relevancy for ETA.

Investment criteria of ETA transactions have clearly never been analyzed in the academic literature before. This chapter therefore makes the first systematic and academically substantiated analysis of investment criteria used in an ETA context. The main systematic comparison will be made between search fund investment criteria and the investment criteria of a seasoned experienced self-funded (nascent) ETA entrepreneur.

Besides the typical investment criteria, the chapter also covers other investment criteria related topics, sometimes specific to ETA, which were sporadically and certainly not systematically covered in the existing academic literature such as location of the target (geography), ideal size of company (profitability, employment, turnover), preferred type of industry, relevance of experience in the industry, preferred deal scenario, valuation expectations, preferred shareholding situation (majority v. minority, with/without partner), preferred business scenario or preferred seller.

Finally, this chapter did equally attempt to shed the light on the differences of investment criteria between the nascent ETA entrepreneurs (who are still looking to acquire their company) and the ETA managers (the ones who actually acquired their company). Such an analysis has not been performed before.

As this was the first academic study on the investment criteria of the ETA entrepreneur, our analysis does certainly make a contribution to the knowledge of the 'what' question in an ETA environment.

#### **1.3.4. Contribution to the literature of Chapter 5 (Social Identity and the nascent-active gap)**

Research on the social identity of firm founders and how it affects entrepreneurship is just beginning to emerge (Sieger et al., 2016). In this chapter we examined for the first time the founder social identities of (nascent) ETA entrepreneurs by measuring them and by investigating whether they have an influence on becoming an active ETA entrepreneur.

This study performed here makes different contributions to the prior literature.

First, it provides us for the first time in the literature with an understanding of the founder social identity of the (nascent) ETA entrepreneur.

Secondly, the empirical context of our study differs from most other previous research. Contrary to most other studies performed on founder social identity and its relationship with entrepreneurship, is that our observations were obtained in a real world setting, involving more seasoned and experienced entrepreneurs, and not in a student environment (e.g. the GUESSS database). The business proposals the students develop may not be representative of those developed by entrepreneurs seeking to invest a significant part of their



own savings and net worth in their own business and taking on a substantial debt load in order to finance their acquisition.

Finally, this study enables us to examine the influence of the entrepreneur's social identity as a founder or - for the first time here in the literature - as an acquirer of a company, helping us to explain the transition from nascent to active (ETA) entrepreneurship.

The contributions to the literature are explained in more detail at the end of each chapter.

#### **1.4. The economic relevance of ETA**

ETA can help with the generational transition which currently faces numerous SME's and as such make a significant contribution to our economy. An ETA transaction has therefore a positive contribution to society as it could provide a solution for the succession issues in family owned companies (baby boomers) and is an intrinsic part of entrepreneurship, with its positive impact on society overall. In fact, they are a real alternative for succession issues in family companies and at the same time a way to allow aspiring people to realize their entrepreneurial dream. A win-win. Buying a company is as entrepreneurial as starting one. It provides people with an entrepreneurial challenge.

Recent research has shown that more than \$10 trillion in baby boomer-owned business assets will be passed down or sold by 2025 (Lobel, 2008).

The Baby Boomer generation, i.e. the demographic group born during the post-World War II baby boom, approximately between the years 1946-1964, faces nowadays the inevitable challenge of transitioning their business to new managers and owners.

However, the challenge is not going well, with 53% of Baby Boomer business owners globally (Europe 57.5%) not having commenced a succession process. By 2020 this generation will be aged between 56 and 74, with the weighting heavily toward the older age. They present between 15% and 30% of the population in countries across the globe (Europe's average is 25%) and they presently control much of the privately owned business around the world. Many of these businesses may be small but as a group they are a global powerhouse all living the same transition issues (Shrapnel, 2014).

According to Hunt & Fund (Hunt & Fund, 2012), conservatively estimated, ETA account of at least \$25 billion of new entrepreneurial activity each year, approximately 20,000 to 30,000 ETA transactions per year, in the US alone, most of which is directed towards the transformation of under-performing businesses.

According to Kelly & Heston (2022), from 1986 through 2021 a total of \$2.3 billion of equity was invested in search funds in the US and Canada alone, generating approximately \$9.8 billion for investors and \$2.3 billion for entrepreneurs. A record \$776 million was invested in traditional searchers and search acquired companies in 2020 and 2021.

In Western Europe, there is equally a substantial supply of existing firms available for purchase. According to the European Commission (2006) one third of European entrepreneurs are due to withdraw from their businesses within the next 10 years. Business transfers are estimated to involve up to 700,000 small- and medium sized firms. In the past these businesses were very largely transferred within the family, this is becoming less frequent due to different factors such as the fact that entrepreneurs have less children, the children are more educated and therefore given a broader choice of career options and finally a more

competitive and globalized environment requires greater managerial and entrepreneurial skills (European Commission, 2003a)

If incumbent business owners do not find suitable successors for their businesses, the economic value of these business may be lost, with negative implications for employment, innovation, entrepreneurial experience and economic growth (Block , Thurik, van der Zwan, & Walter, 2013).

From the perspective of potential entrepreneurs, the preference for taking over an existing business is not much more uncommon: approximately 30% of potential entrepreneurs report that they prefer taking over an existing business to starting a new one (European Commission, 2003b).

For example, at Vlerick Business School, we have been successfully organizing an “Entrepreneurial Buy-out Academy”, drawing on average around forty seasoned (nascent) ETA managers in a given year, as well as a “Buy Your Own Company Conference” since 2012, drawing yearly on average around two to three hundred seasoned (nascent) ETA managers. The large interest in such events is clearly an indication of the size of the attractiveness of ETA as a full-fledged entrepreneurial option in Belgium. As far as we know, at least seventy of the previous participants have already acquired their own company. By doing so, these ambitious ETA managers have undoubtedly injected these companies with a fresh air of entrepreneurship, dynamism and professionalism.

It goes beyond saying that an ETA transaction is often a way to reboost a company, as part of a sort of Schumpeterian creative destruction<sup>2</sup>. ETA often involves the revitalization of under-managed, under-performing business (Hunt & Fund, 2012). An ETA transaction therefore makes a positive contribution to the generational transition of SMEs, the entrepreneurial dynamism in a country and the overall economy.

Given the rather small size of the average ETA transaction and the often confidential nature of the transaction, there is a paucity of available hard data to understand the size of the ETA phenomenon (Hunt & Fund, 2012). ETA, in particular the transactions performed by more seasoned experienced entrepreneurs (self-funded search), are therefore more widespread in our economy as many think and deserves more attention as it currently receives, in particular as one compares it with the attention given to start-ups.

According to a worldwide survey made by the accounting firm PWC (Klockner, 2009), it is estimated that around 35 percent of the family businesses in the developed economies consider ownership succession through a buyout. A large part of this, in particular the smaller SME’s will be sold through an ETA transaction.

## **1.5. Previous dedicated academic & non-academic research on ETA**

Only very few scholars have dedicated ‘exclusive’ research on the ETA topic. With the exception of the journal articles of Kelly et al. (1986) and Hunt & Fund (2012) and the non-academic guide for practitioners from Harvard Business School professors Ruback and Yudkoff (2016), no scholars have, as far as we know, exclusively dedicated a piece of academic research on the topic.

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<sup>2</sup> According to Schumpeter, the "gale of creative destruction" describes the "process of industrial mutation that continuously revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one".(Reinert & Reinert, 2006)

Surprisingly, as in leading US and European business schools such as Harvard, Wharton, Booth, Stanford, Columbia, INSEAD and Vlerick, the topic of “Entrepreneurship Through Acquisition” is taught in a dedicated course, albeit an elective, and overall very popular among students.

The lack of scholarly research on the topic can be explained by the following four reasons:

- ETA is a boundary-spanning and even boundary-breaking domain, where different areas of research intersect and are essential to conceptualize and study the phenomenon (Hunt & Fund, 2012). Most of the research on ETA has often been treated like a Cinderella as part of another related phenomenon and the study of ETA has often fallen between the chairs of other ‘more popular’ areas of research. The academic literature overview described here below confirms this.
- A double theoretical bias towards viewing LBOs, and thus also ETA has even aggravated the here abovementioned intersection issue. Firstly, ETA transactions were always considered to be part of the LBOs, which have been historically viewed in the academic research as vehicles for financial engineering, rather than business rejuvenation. Secondly, the academic research has viewed start-ups and not ETA transactions as the primary entry mode for entrepreneurial activity. There has been some ambivalence (see for example (Carland, Hoy, & Boulton, 1984) and (Thurik & Wennekers, 1999)) and even neglect whether ETA transactions are truly acts of entrepreneurship.
- The paucity of readily available data. No data are publicly available which would greatly enhance the study of ETA. Moreover, given that ETA transactions are often done below every radar screen due to their small size and due to their typical confidential nature (in particular around the price paid for the company or even around the mere fact that an owner sells his/her business), researchers do not easily obtain access to research subjects or data. Hunt & Fund (2012), as well as Ruback et al. (2017) have been using for their ETA data, the available data on post-MBA ETA managers and on search funds. Although search funds transactions are certainly a subsegment of the ETA phenomenon, they remain only a small and less typical fraction of the total ETA transactions made. As they typically include data of recent MBA graduates, they do not cover the vast number of cases where more seasoned and senior managers are performing an ETA transaction and purchase an existing small business to own and run it themselves. This study will more focus on the latter.
- The concept of ETA is not grounded in theory and very intertwined with ‘practice’. This could deter some scholars as they will inevitably be confronted with the ‘non-academic practice’ and this in different fields, often outside their expertise or comfort zone. Entrepreneurship, corporate finance and valuation, entrepreneurial finance, strategy, accounting, fiscal issues, legal issues, cultural issues, legal contracts, negotiating tactics...are all meeting each other in an ETA transaction. Not surprisingly, most of the ETA classes are taught by practitioners and non-academics and are the first books written on the topic all written for and by practitioners. There are easier nuts to crack for academic researchers.

Therefore, most of the existing academic work, remains often limited to a mere statistical description of the ETA phenomenon and is exclusively focused on the search fund form of ETA. (Dennis & Laseca, 2016) (Hunt & Fund, 2012) (Yoder & Kelly, 2018) (Kelly et al., 2016) (Morissete & Hines, 2015) (Kelly & Heston, 2022). Indeed, given its small size, the search fund market, as opposed to the seasoned experienced entrepreneur ETA market, is well mapped by statistical data and this under the supervision of the Center of Entrepreneurial Studies at Stanford Business School (for the US market) and the International Search Fund Center at IESE (for the European market) (Kolarova, Kelly, Davila, & Johnson, 2020).

The research conducted by Richard Hunt (Hunt & Fund, 2012) in the Journal of Entrepreneurial Finance on Entrepreneurship through Acquisition “ETA” is very similar, if not identical to the ETA concept analyzed in

this paper. The article situates ETA in theory as well as in practice. Hunt admits that the scholarly understanding of an ETA has been severely limited by three factors: the paucity of data related to entrepreneurial acquisitions, the tendency to equate entrepreneurship primarily with new venture creation, and the reliance upon explanatory models for the (classic) buyouts that are narrowly conceived notions of 1980s-era, large scale, hyper leveraged buyouts. This article provides the first (and until today the only) comprehensive academic research specifically focused on ETA.

Another recent and relevant book, published by two Harvard Business School professors Richard Ruback and Royce Yudkoff (Ruback & Yudkoff, HBR Guide to Buying a Small Business. Think big. Buy small. Own your own company., 2016), takes the idea “that you can buy an existing small business, right now, and run it as a CEO”, out of the classroom, as it is the topic of one of HBS’s most popular courses, and bring it to a wider audience. The purpose of the book is to guide people, i.e. would-be entrepreneurs, through the process of buying a small business and this in a very practical way. Both professors hope that their readers “find the idea as compelling as our students do – and as we ourselves do – and that you find success in pursuing one of the many unique opportunities available in this little-known market”.

Meuleman & Vanoorbeek (2018) have written a dedicated chapter on ETA in a handbook of Entrepreneurial Finance published by Cambridge University Press.

Recently, Prof. Jan Simon, the academic director of the International Search Fund Center at IESE Business School, has written a large dedicated book on search funds and entrepreneurial acquisitions. The book attempts to give a roadmap for buying a business and once acquired how to lead it to the next level (Simon, 2022).

On the other hand, many non-academic books on ETA have been written by practitioners, from different backgrounds and predominantly from the US. These books are often a great blend of entrepreneurial best practices and practical advice. They generally offer a practical step-by-step roadmap to acquire successfully a small business, starting with finding and evaluating candidates for acquisition, valuing and financing such an acquisition, negotiating and structuring such a transaction and finally explaining the legal documentation needed for closing such a transaction.

Ed Pendarvis wrote “Buying a Business to Secure Your Financial Freedom. Finding and Evaluating the Business That’s Right for You” (Pendarvis, 2005). Ed Pendarvis is the chairman and founder of Sunbelt Business Brokers Network, one of the largest small business brokerage networks in the US. Rick Rickertsen wrote “Buyout. The Insider’s Guide to Buying Your Own Company” (Rickertsen & Gunther, 2001). Rick Rickertson is an experienced private equity professional. Arnold Goldstein wrote “How to Buy a Great Business With No Cash Down” (Goldstein, 1989). Arnold is a successful serial entrepreneur who performed several ETA’s himself. Russell Robb wrote “Buying Your Own Business” (Robb, 2008). Russell Robb is a veteran in mergers & acquisitions providing investment banking and corporate advisory services to middle market companies. Richard Joseph wrote “Entrepreneurship Through Acquisition. How to Buy a Business” (Joseph, Nekoranec, & Steffens, 1993). Richard Joseph is the president of an investment management and small business consulting firm. The foreword of his book was written by Edward Moldt, the managing director of the Snider Entrepreneurial Center at the Wharton School in Philadelphia. Walker Deibel wrote “Buy then Build. How Acquisition Entrepreneurs Outsmart the Startup Game” (Deibel, 2018). Walker Deibel is an entrepreneur and investor who has cofounded three startups and acquired seven companies, based in St. Louis.

Ruback and Yudkoff have equally published three articles in the Harvard Business Review on the same topic, respectively titled “Why more MBAs Should Buy Small Businesses” (Ruback & Yudkoff, 2016), “Which MBAs

Make More: Consultants or Small Business Owners?” (Ruback & Yudkoff, 2016) and more recently “Buying Your Way into Entrepreneurship” (Ruback & Yudkoff, 2017).

Finally, [www.searchfunder.com](http://www.searchfunder.com) is an online community hub catering to search fund entrepreneurs. It provides access to crowdsourced information on more than 650 search funds and investors worldwide, comparing strategies with fellow searchers and anonymously rate investors. The site also helps to find interns from top MBA programs, as well as to find the necessary debt and equity once deal is under letter of intent. Another online platform is [www.searchfund.org](http://www.searchfund.org) with provides statistics on the industry, networking opportunities, organizes conferences and provides newsletters.

## **1.6. Situating ETA in the broader existing academic literature**

Overall, relatively limited research has been done on ETA as such and the concept of an ETA transaction has not been clearly defined in existing research. Traditionally, an ETA transaction was considered simply a niche occurrence of small company leveraged buyouts (Hunt & Fund, 2012).

Notwithstanding the very little academic research written on ETA as such, certain attempts have been made in order to define the concept of ETA and situate this phenomenon in the jungle of MBOs, LMBOs, MBIs, VCs, LBOs and the wide world of entrepreneurship.

Therefore different aspects of ETA itself have been analysed through different lenses in the existing academic research.

In fact, the research related to these aspects of ETA is very “boundary spanning” and covered by several domains in the literature on different topics. One therefore could divide this diverse literature in two main domains:

i.) Private Equity related literature (1.6.1.)

ii.) Entrepreneurship related literature (1.6.2.)

Every analysis on ETA will be characterized by numerous intersections between these different research fields.

Although a more detailed literature review will be given per chapter, a short literature review here below is subdivided in the following areas of research closely related to the ETA topic:

- 1.6.1. Private equity literature
  - 1.6.1.1. Traditional agency view on LBOs
  - 1.6.1.2. Strategic Entrepreneurship view of buyouts
  - 1.6.1.3. Management Buy-in (MBI’s)
  - 1.6.1.4. Succession of a family business & firm continuation through private equity
- 1.6.2. Entrepreneurship literature
  - 1.6.2.1. ETA as a mode of Entrepreneurial entry
  - 1.6.2.2. Entrepreneurial Capital and ETA
  - 1.6.2.3. Self-employment and entrepreneurial income

### **1.6.1. ETA & the Private Equity literature**

At large, two largely contrasting perspectives conceptualizing LBOs have gained significant track in the academic literature: agency theory and the strategic entrepreneurship view.

#### **1.6.1.1. Traditional agency view on LBOs**

Prior efforts to conceptualize buyouts and to examine buyout value generation are mostly based on the large LBO model and applied an agency theoretic lens (Jensen & Meckling, 1976).

Agency theory (Eisenhardt, 1989) is concerned with resolving two problems than can occur in agency relationships. The first is the agency problem that arises when (a) the desires or goals of the principal and the agent conflict (and unaligned) and (b) it is difficult or expensive for the principal to verify what the agent is actually doing. The problem is that often in an organization the principal cannot verify whether the agent has behaved appropriately. The second problem is the problem that the principal and the agent may prefer different actions due to the fact that they have different attitudes towards risk.

Agency theory reestablishes the importance of incentive and self-interest in organizational thinking (Perrow, 1986). Much of organizational life is based on self-interest.

Agency theory has for 30 years been the dominant framework for explaining the leveraged buyout phenomenon and can be explained by its main two principles: the costs for business owners (principals) to monitor business managers (agents) and the divergent risk preferences among owners and managers (Eisenhardt, 1989).

Michael Jensen is one of the first authors who uses the agency theory in the context of corporate raiders, takeovers and LBOs (Jensen M. C., 1986) focusing on buyouts principally as a governance and control device. Many have followed, for example: (Lehn & Poulson, 1989), (Kaplan S., 1989), (Baker & Wruck, 1989), (Smith, 1990), (Denis, 1994), (Wruck, 1994) (Cotter & Peck, 2001).

The key idea of agency theory is that, especially in public firms, there are agency problems between owners (principals) and managers (agents of shareholders), i.e. managers will not act in the best interest of the owners. Because managers frequently own trivially small or no equity stakes in their companies and are not closely monitored, agency theory suggests they may not pursue non-profit maximizing behavior to the detriment of the shareholders.

Agency theory attempts to describe this relationship using the metaphor of a contract (as unit of analysis).

By taking the firm private (public-to-private transactions by private equity), by using high leverage (the “L” of LBO), these agency costs are reduced, and as such efficiency in the firm should increase. As Jensen states it (Jensen M. C., 1984): “Corporate takeovers do not waste resources; they use assets productively” and “they do not harm shareholders of the target company, which gain substantial wealth”.

In other words, LBOs provide a “carrot” and “stick” mechanism (Cotter & Peck, 2001) to ameliorate agency costs associated with free cash flows. First, managers start owning a substantial amount of shares, giving them incentives to work harder (the carrot). Secondly, firms borrow heavily to finance the purchase of the (publicly held) shares. This heavy debt burden forces managers to efficiently run the company to avoid default (the stick).

Bruton et al. (2002) used the agency theory as a foundation for hypothesis development and concluded that agency theory explanations of performance are generally valid throughout the buyout cycle (public-private-public cycle of ownership); i.e. increased managerial ownership leads to better firm performance. Their results suggest that agency theory is an appropriate theoretical base for explaining managerial choices during the buyout cycle.

In another article, Jensen (Jensen M. , 1989) predicted that the leveraged buyout organizations would eventually become the dominant corporate organizational form. He argued that the private equity firm itself combined concentrated ownership stakes in its portfolio companies, strong incentives for the private equity professionals (the so-called carried interest) and a lean, efficient organization with minimal overhead costs. The private equity firm then applies performance-based managerial compensation, highly leveraged capital structures and active governance to the companies in which it invests.

Although private equity has been experiencing boom and bust cycles over the last decades, Kaplan and Strömberg (2009) expect that a significant part of the growth in private equity activity and institutions is permanent as private equity creates economic value.

There has been a vast amount of theoretical and empirical work on this. Changes in governance and incentive systems as well as activities to increase efficiency have therefore been examined closely.

Cotter and Peck (2001) examine the role buyout specialists play in structuring the debt used to finance the LBO and in monitoring management in the post-LBO firm. Their findings suggest that active monitoring by a buyout specialist substitutes for tighter debt terms in monitoring and motivating managers of LBOs.

A good overview on the literature on private equity and LBOs is the article of Cumming et al. (2007), focusing on global evidence related to both governance and returns (financial and “real” (productivity and broader performance) to private equity and leveraged buyouts.

For example, whether MBO’s create value is thought to be dependent upon the ability to reduce owner-manager agency costs and that in such situations, value creation by reducing agency costs will depend upon pre-MBO agency costs (Chrisman et al., 2012).

A similar conclusion is made by Mike Wright (Wright et al., 2001a) (Wright et al., 2001b), stating that agency theory focuses on buyouts principally as a governance and control device to increase profitability, organizational efficiency and limited attention to growth. This is especially in the context of mature firms, where discipline, incentives and limits to managerial discretion serve to mitigate the destruction downside of firm value.

This focus has severely restricted the ability of scholars to look past the buyout model motivated by financial engineering gains to see instead the entrepreneurial aims and outcomes often associated with buyouts, particularly small buyouts and entrepreneurial acquisitions (Hunt & Fund, 2012).

In the context of ETA, the agency theory and the academic literature around it, seems to have only a limited relevancy.

In certain cases, the agency theory could explain why some ETA transactions would lead to improved efficiency and superior performance. In particular, if in the previous governance structure of the ETA target company, there was a misalignment between the owner/shareholder and the management, i.e. in case the

company was run by external management which did not own any shares in the company. In a small family owned company, the typical ETA candidate, this is rarely the case.

In the vast majority of the ETA transactions, the manager and the owner are quasi-identical or at least the ETA manager is a significant shareholder (see definition of an ETA manager in the Introduction) and therefore fully aligned with the principal (i.e. him/herself). The agency theory does not play here. Equally, every ETA manager will purchase “his/her entrepreneurial dream company” with a lot of leverage, which on its turn could force him/her to run his/her company as efficient as possible.

In general, the agency theory therefore does not fully explain the individual entrepreneurial motivations to perform an ETA transaction. It equally does not discuss the role of capabilities, interests or characteristics of an ETA manager.

#### **1.6.1.2. Strategic entrepreneurship view of buyouts**

In contrast to the traditional agency view on buyouts, Wright et al. (2000, 2001b, 2001a) introduce in different publications an entrepreneurial view of buyouts, which incorporates upside incentive for growth and improvements not associated with pure efficiency gains or more effective monitoring to curtail opportunism. In sum, buyouts may also be done to realize entrepreneurial opportunities and used as a vehicle of renewal, leading to growth, corporate revitalization and strategic innovation. Buyouts do not simply involve improving efficiency in companies in mature sectors.

In fact, in many cases, companies that are acquired in buyouts suffer from a lack of entrepreneurial spirit (Berg & Gottschalg, 2004) due to prior ownership arrangements. The reasons for this are manifold. For example, the non-core units of large corporations are treated as “corporate orphans” as they do not receive the necessary attention or resources from the corporate head office to pursue innovative strategies. Or, in the case of family companies, the risk-aversion of the quasi-retired owner due to wealth preservation concerns led to an unfavorable climate of entrepreneurial activities.

It is clear to Meuleman et al. (2009) that the motivations for these non-LBO buyouts are radically different from the rationale underlying large-scale LBO's. A strategic entrepreneurship view of buyouts incorporates upside incentives for value creation associated with growth as well as efficiency gains.

Berg & Gottschalg (2004) have equally been examining the more innovative and entrepreneurial levers of buyouts like increasing strategic distinctiveness and parenting effects, besides the traditional mechanisms like improved governance or incentive systems. Buyouts can actively contribute to the restoration of an entrepreneurial climate, by giving the management of portfolio companies' sufficient freedom to develop and realize innovative ideas. The new institutional structure and change of governance make managers of post-buyout companies feel released from the constraints of the corporate bureaucracy as many buyout firms reduce their interference with day-to-day operational issues to a minimum, at least as long as financial targets are met. For example in case of corporate restructuring (Hoskisson & Turk, 1990), in the case of chemical companies (Butler P. A., 2001), in the case of large LBOs (done by CD&R and having operating partners involved) (Kester & Luehrman, 1995).

The introduction of entrepreneurial management is equally interpreted to include the exploitation of a wider set of opportunities to achieve wealth and position for owner-managers than from the reduction of agency costs alone (Bull, 1989).



Management buyouts bring about a change in status of the management team from employee to owner. According to the agency model, this change in status provides the financial incentives necessary to ensure that company performance will improve post-buyout as the rewards of better performance now accrue to the management team rather than to the previous owners. Weir & Lang (1998), however, found that, although there is some evidence of improved profitability, with the increase being more common for smaller MBOs, there is no real evidence of better cash management. Their results therefore offer limited support for the role of incentives proposed by the agency model.

The managers feel and act as entrepreneurs in their organizations and are encouraged to make independent decisions and this with a new sense of freedom. The managers post-buyout have a higher level of reported satisfaction in their organizations and in various aspects of their lives than their corporate equivalents (Beaver, 2001). Researchers describe this effect as "LBO fever or adrenalin" (Houlden, 1990): energized and highly motivated management teams are willing to take nearly any action to make their buyout a success.

Bruining et al. (2013) argue that private equity buyouts can be used as an organizational refocusing device that simultaneously increases entrepreneurial and administrative management and therefore may lead to ambidextrous organizational change, i.e. develop entrepreneurial and administrative management practices at the same time. Their findings suggest that buyouts, in particular those with a majority private equity position, positively affect entrepreneurial management to create more value whereas the increased leverage increases administrative management to manage these high debt levels. Concentrated ownership in the hands of private equity firms means a more active monitoring of the business and a strong incentive to take action (Cotter & Peck, 2001).

Bruining & Wright (2002) analyzed the development of entrepreneurial orientation (a concept developed by Lumpkin & Dess (1996) to investigate the relationship between entrepreneurial orientation as a multidimensional construct and firm performance) after a management buyout and on the role played by the venture capital firms in enhancing this entrepreneurial orientation. They conclude that venture capital firms have post-buyout a positive influence on the entrepreneurial activities of the company through the introduction of specialists in top management decision making, using their network, recruiting the right profiles, analyzing the different management plans etc.. A strong knowledge transfer and learning takes place between management and the venture capital firms. Post-buyout an increased pro-activeness and innovativeness was observed. Houlden (1990) equally mentions the positive impact of the buyout specialists on management helping them to focus more on costs and motivate them to generate cash flows and profits. Kester & Luehrman (1995) equally praise the positive effect coming from the constructive interaction between portfolio company managers and their counterparts in the buyout firms, which is often facilitated through direct and unbureaucratic communication channels.

Klein et al. (2013:1) argue for a balanced view of private equity: "Private equity is best regarded as a governance structure that, like all forms of organization, has benefits and costs that vary according to circumstances. Building on the "judgment-based" view of entrepreneurship, we note that managers of privately held firms, as owners, exercise a strong degree of entrepreneurial judgment over the use of assets, unlike salaried executives of publicly held companies. At the same time, however, privately held firms are often constrained from pursuing potentially attractive profit opportunities by the nature of their debt obligations."

Wright et al. (2001a) already admitted that this entrepreneurship lens (as opposed to the agency theory lens) provides some new insights in a variety of buyout types which heretofore have not been incorporated in the buyout theory. They analyze different types of buyouts such as (1) public whole firm buyouts, (2) divisional

buyouts including investor-led buyouts, (3) private firm buyouts, including management buy-ins and management led-employee buyouts. Their main contribution focuses on how entrepreneurship perspectives illuminate the upside potential of these different types of buyouts.

Although not covered by Wright et al., it is clear that the ETA transactions are a good example of this. The entrepreneurship perspective is indeed relevant for ETA.

Although the overall academic research on ETA is limited, abundant anecdotal evidence and a few studies, including this one (see Chapter 5) confirm that many ETA managers do not pursue ETA to only seek for efficiency gains but also to realize entrepreneurial opportunities.

According to Hunt & Fund (2012) the dominant conceptions from entrepreneurship and leveraged buyouts have – in isolation – a limited capacity to illuminate the ETA phenomenon.

Although the strategic entrepreneurship view on buyouts advances the perspective on ETA, as it differentiates the traditional large scale LBO from the more growth oriented buyouts, its framework suffers, according to Hunt & Fund (p.36) from two shortcomings: ‘First, it is the recurrent confound of sample selection bias. In their retrospective analysis of management buyouts, these studies cannot demonstrate the presence ex ante of entrepreneurial intent. Secondly, another deficiency is that the model only offers limited explanatory power and practical applicability, specifically to the ETA phenomenon.’ Hunt & Fund point out that in an ETA transaction the acquirers fully intend to be active owner-managers from the beginning, long before even consummating the acquisition. Therefore the types of agency issues (principal-agent) and managerial intention issues (manager–entrepreneur) that might arise in management buyouts are rarely, if ever, evidenced in case of ETA as both are intentionally conflated in an ETA transaction.

However, through the compound lens of entrepreneurial finance (the nexus entrepreneurship-finance), ETA can be better understood in its own right.

Hunt & Fund argue that ETA transactions must be conceptualized as a separate value-generation vehicle in and of itself.

### **1.6.1.3. MBI (Management Buy-in) literature**

Another valid area of research useful to get a better understanding of the ETA manager, is the area of MBI's. An MBI team leader/manager is the distant cousin of the ETA manager. Although an MBI manager and ETA manager, were both not working for the target company before the transaction and both invest their own money in a traditional existing business, the main difference is that an MBI manager often retains only a small minority of the shares as he usually invests alongside a private equity company in a larger transaction. An ETA manager has often the majority or a large minority stake in a much smaller company and is usually not accompanied by a private equity investor.

Ken Robbie made the first thorough and systematic analysis of the MBI phenomenon in his PhD. thesis in 1993 (Robbie K. , 1993), and this after analysis of management buy-ins in the UK (Robbie, Wright, & Thompson, 1992). Robbie & Wright (1996) further build on their work to write the book “Management Buy-ins” and published another article on the same topic (Robbie & Wright, 1995). Initially, the authors perceived the MBI as a form of corporate restructuring (Watson, 1996).

Robbie & Wright (1996) summarize in the following table (Table 1.6) the managerial and ownership change typologies and expected impact on performance:

Table 1.6. Managerial and ownership change typologies (MBO v. MBI)

	NO MANAGEMENT CHANGE	MANAGEMENT CHANGE
NO OWNERSHIP CHANGE	<p><i>VOLUNTARY RESTRUCTURING</i></p> <ul style="list-style-type: none"> <li>* good management incentivized to improve performance</li> <li>* internal governance and pressures</li> <li>* relatively slow</li> </ul>	<p><i>MANAGERIAL SUCCESSION</i></p> <ul style="list-style-type: none"> <li>* replace poor managers</li> <li>* incoming management do not have insider knowledge</li> </ul>
OWNERSHIP CHANGE	<p><i>MBO</i></p> <ul style="list-style-type: none"> <li>* management new incentivised to improve performance</li> <li>* removal of inappropriate parental control</li> <li>* benefits of internal information</li> <li>* important role of financing institutions</li> <li>* management may be reactive and limited by set beliefs</li> </ul>	<p><i>MBI</i></p> <ul style="list-style-type: none"> <li>* external managers, incentivised to improve performance</li> <li>* replace inadequate internal managers</li> <li>* important role of financing institutions</li> <li>* incoming management do not have insider knowledge</li> </ul>

Source: Robbe & Wright (1996)

In the case of ETA, there is always an ownership change and a management change. The ETA transaction would therefore be put in the right left quadrant as it has some similar characteristics as an MBI.

Green & Berry (1991) in a detailed case study analysis of management buy-outs provide evidence of similarities and contrasts between buy-outs and buy-ins in these respects. In terms of similarities they note the importance of aligning the aims of owner-managers and institutional investors.

Here lays the main difference between an ETA transaction and an MBI. In the case of ETA, there are no institutional investors, as the ETA manager is the main investor and shareholder. He is the main owner-manager.

Robbie & Wright, as well as Green & Berry, see the MBI mainly in the context of a turnaround or a restructuring.

A typical ETA transaction, however, is not a turnaround nor a restructuring. In line with Hunt & Fund (2012), an ETA transaction is entrepreneurially motivated and rather takes place to solve a succession issue and often limits itself to a further professionalization or at most a strategic repositioning of an existing company.

Ennew et al. (1994) study the management buy-ins in the UK and examine the characteristics of the team leaders (i.e. the MBI managers) and influences post-MBI. MBI's have two main similarities with ETAs transactions: 1.) As the survey shows, management buy-ins, as ETAs transactions, are predominantly small or medium-sized 2.) MBIs and ETA transactions relate both to managers coming from the outside who personally invest in the company and fulfill an important managerial role in its management. Ennew et al. conclude that based on the analysis of the motivational dimensions of the buy-in team leaders suggest that it is possible to identify groups of entrepreneurial types among these individuals. This typology is undoubtedly relevant when developing a typology for ETA managers.

**1.6.1.4. Succession of a family business & firm continuation through private equity**

Private equity, classical management buyouts as well as ETA inspired transactions, can provide a real alternative for the many succession issues in family owned companies, mainly due to the fact that the postwar and thereafter the baby boom generation are reaching retirement age.

ETA transactions in particular are at the same time a way to allow aspiring people to realize their entrepreneurial dream. Clearly a win-win. Buying a company is as entrepreneurial as starting one. It provides people with an entrepreneurial challenge.

Therefore, as ETA is equally contributing to solving the succession issue, some research related to ETA can be found in the research on succession.

In many cases within-family succession is a desired, but not a feasible option, for different reasons such as lack of interest or lack of capabilities of the offsprings, a suitable successor outside the family must be found (Stavrou, 1999).

Many business owners therefore seek successors outside of their family or their business. Management buyouts and buy-ins (which includes ETA transactions) thus represent an important succession option for family firms (Scholes et al., 2009). Halter et al. (2013) use information economics to analyze the different (and most explicit) information asymmetries in the context of a family-external succession through an MBI. See also a more recent article describing the family-external succession process through three MBIs in family firms in the DACH region (Poeschl & Freiling, 2019).

Succession through MBO/MBI/ETA can enable the family firm to maintain its independent ownership and sustain the notion of “familiness” over time, albeit in a metamorphosed state (Howorth et al., 2007).

Moreover, such a transitory phase usually provides a professionalization process of a former private family firm. Howorth et al. (2015). Dekker et al. (2015) focus on introducing non-family managers as a route to professionalization and assert that professionalization does not happen overnight and needs to be conceptualized as a multi-faceted process. Non family involvement only seems to improve firm performance if there is sufficient decentralization of authority and an average or even low amount of formal financial control systems. In ETA, such professionalization often plays a large role as the ETA manager, being a seasoned experienced manager, often acquires a small family run company.

The following literature gives an overview of the research related to buyouts from a seller’s (i.e. exit) perspective.

Within the field of entrepreneurship several studies examined entrepreneurial exit, taking the perspective of an entrepreneur leaving the firm they founded. In fact, very often ETA transactions are purchases from entrepreneurs, often retiring baby-boomers who started the company (Wennberg & Detienne, 2014).

A recent overview of the existing literature has been given by Wennberg & Detienne (2014) where they analyze issues such as founder exit intentions, strategies for executing the exit, the process of exit and the importance of controlling for, or including performance measures. Detienne defines entrepreneurial exit as ‘the process by which the founders of privately held firms leave the firm they helped to create; thereby removing themselves, in varying degree, from the primary ownership and decision-making structure of the firm’ (Detienne, 2010, p. 203).

As such, entrepreneurial exit is operationalized as the exit of an individual (decision to leave self-employment) (Hessels, Grilo , & Thurik , 2011) (Van Praag, 2003) (Stam, Thurik, & Van der Zwan, 2010) (Evans & Leighton, 1989), the exit of firms from a particular market (organizational exit) (Balcaen, Manigart, & Buyze, 2012) (Mitchell, 1994), or as firm discontinuance, closure or bankruptcy (Gimeno, Folta, & Cooper, 1997).

Different types of exit strategies exist such as passing it on to family, liquidation, merger and acquisitions, sale to a third party, IPO and last but not least a management buyout or employee buyout. For example Birley & Westhead (1993) followed by examining over 10,000 businesses advertised for sale in the Financial Times. Five exit routes were identified, whereof 14% of all exits ended in a management buy-out.

Leroy et al. (2015) study the continuity of a firm when entrepreneurs exit (as opposed to liquidation). An entrepreneur's sales attitude are positively related whether entrepreneurs perceive firm continuation to be out of free will, their experience, the number of employees and whether the firm is a multigeneration family business.

The PhD thesis of Johannes Schmohl (2009) describes in his research the Entrepreneurial Exit Management process and the key success factors of the private equity buyout option in detail. His research looks at the topic of an ETA transaction from the other side. As opposed to an ETA transaction, where the entrepreneur is the acquirer, Schmohl analyzes the buyout, from the perspective where the seller is the entrepreneur.

Also in the family business literature, there is an emerging recognition that the sale of family businesses is an important alternative to secure family firm survival when internal family succession is not feasible. Wennberg et al. (2011) analyze the performance consequences of intra-family versus external ownership transfers (such as ETA). The firms transferred to external owners outperform those transferred within the family, but the survival is higher among intra-family transfers and this due to the long-term orientation of family firms passed on to the next generation and to the entrepreneurial willingness of acquirers to bear uncertainty. As there is an information asymmetry that outside buyers cannot know the immediate and long-term prospects of the company they want to acquire, even after the best due diligence, acquirers of closely held family firms are inherently bearers of uncertainty and, thus, entrepreneurial in much the same way as business founders (Sarasvathy S. , 2001). Certainly, ETA managers perfectly fit this picture as they very often purchase family owned businesses.

Scholes et al. (2007) extended the conceptual work of Howorth et al. (2004) and Robbie & Wright (1995) surrounding the succession of private family-owned firms through MBOs and MBIs. They analyzed whether information was shared equally between vendors (i.e. family firm owners) and purchasers (MBO and MBI management teams or the ETA manager). External management teams indeed need to address information asymmetry issues. As such, it is highly recommended for MBI teams to conduct thorough pre-purchase due diligence evaluations and secure independent advice. For an ETA transaction, which is a kind of MBI given that in both situations an external manager invests in the business and takes on a management role, these findings are undoubtedly relevant.

Given that the management buyout is more and more an important exit strategy for small business owners, Ahlers et al. (2016) have examined perceived bargaining power in buyout negotiations between private equity firms and current owners who sell their business. Specialized private equity firms, whether it is industry or size specialization, will have a competitive edge in the bidding competition, as they can use their knowledge, superior deal flow, access to information, their networks, reputation. An ETA manager can learn from this in order to attempt to build for him/herself similar competitive advantages.

Overall, the research on entrepreneurial exits and succession has certain some relevancy for the study of ETA as the vast majority of the ETA transactions originates through entrepreneurial exits and often triggered by family succession issues.

### **1.6.2. ETA & the Entrepreneurship literature**

Although entrepreneurship is often defined in terms of new venture creation (Gartner W. , 1988) (Parker & Gartner, 2004), ETA transactions occur for the purpose of implementing entrepreneurially motivated strategies and this within the parameters of a pre-existing business platform.

A pragmatic definition of entrepreneurship as defined by Benz (Benz, 2009) defines an entrepreneur as someone who is a self-employed business owner. An ETA manager resorts undoubtedly under this definition as the emphasis on the ownership aspect of entrepreneurship is also clearly present in ETA.

Hence, it is certainly relevant to analyze the research on entrepreneurship in order to get a better understanding of the ETA phenomenon. By understanding who and why people are entrepreneurs, our understanding of who and why people are potential or actual ETA managers will improve.

#### **1.6.2.1. ETA as a mode of Entrepreneurial entry**

There is ample academic literature on why some people chose to become an entrepreneur/independent. The decision to become an entrepreneur is an occupational choice. For example, Baron (2004) suggests that cognitive perspectives may provide important insights into key aspects of the entrepreneurial process: 1.) Why some people but not others choose to become entrepreneurs, 2.) Why some people may recognize opportunities for new products or services that can be profitably exploited? and 3.) Why some entrepreneurs are more successful than others? It is suggested that entrepreneurs have reduced perspectives of risk, overweigh small probabilities and have a greater susceptibility to certain cognitive biases such as optimism, affect infusion and illusion of control. The tendency towards entrepreneurship can be determined by different factors such as a belief to have sufficient skills, knowledge and ability to start a business (Koellinger, Minniti, & Schade, 2007), locus of control (i.e. the belief that events are contingent upon his own behavior) (Harper, 1998), overconfidence levels (Busenitz & Barney, 1997) (Cooper, Woo, & Dunkelberg, 1988), taste for variety and more varied labor experience (Åstebro & Thompson, 2011). These findings are certainly relevant when analyzing why some people want to become an ETA manager and why others not.

Although the determinants of entrepreneurial choice have been thoroughly analyzed in the academic research, little is known about the preferred mode of entry into entrepreneurship, such as taking over an existing business (i.e. the ETA way) or starting a new venture.

Research by Parker and Van Praag (Parker & Van Praag, 2012), based on a sample of data on entrepreneurs from the Netherlands, make a clear distinction on the entrepreneur's mode of entry: existing business takeover (i.e. ETA) or a new venture start from scratch.

As established firms (in case of ETA) are less risky than brand new firms (in case of a start-up) (Cooper & Dunkelberg, 1986), research has shown that on average start-ups have more variable growth and profit payoff rates<sup>3</sup>, more asymmetric information (due to lack of trackrecord), more difficult access to finance and lower survival rates than established firms do (Astebro & Bernhardt, 2003) (Van Praag, 2003) (Parker S. , 2009) (Parker & van Praag, 2006) (Xi et al., 2020).

Different scholars such as Cooper & Dunkelberg (1986), Parker et al (2012)., Rocha et al (2015), Bastié et al. (2013), Lofstrom et al. (2014), Block et al. (2013), Xi et al. (2020) have analyzed ETA as a way to enter entrepreneurship, as a path to ownership, next to its more known and widespread discussed cousin, the start-up.

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<sup>3</sup> These payoffs are defined as income entrepreneurs earned from their business in a particular year, where income is measured comprehensively, including wages and returns to capital for the unincorporated entrepreneurs and measuring the risk as the coefficient of variation of payoffs. The coefficient of variation of payoff among start-ups clearly exceeds that among ETA transactions. See (Parker & Van Praag, 2012)

### **1.6.2.2. Entrepreneurial Capital and ETA**

Other studies have looked at entrepreneurial capital. Financial capital, social capital, and human capital are argued to be the most important mechanisms to start a self-employed career and pursuing entrepreneurship such as start-up ventures (Kim, Aldrich, & Keister, 2006). Financial capital refers to the available amount of monetary wealth, often obtained through inheritance, savings, windfalls, borrowing, or crowd funding to overcome entry costs to start or take over a business. Social or cultural capital refers to “those tangible substances [that] count for most in the daily lives of people: namely goodwill, fellowship, sympathy, and social intercourse among the individuals and families who make up a social unit” (Hanifan, 1916, p. 130). Human capital is a factor encompassing the knowledge obtained through education and experience, and more recently also includes cognitive and non-cognitive skills that contribute to a person’s productive capacity (Becker G. S., 1964).

Although we could argue that the financial, social and human capital needed to enter into entrepreneurship either by a start-up or ETA will be different, it is certainly worthwhile to analyze these factors in the context of start-ups as they have not yet been analyzed for ETA.

Different scholars have analyzed this entrepreneurial capital in its different forms.

*Financial capital and entrepreneurial entry* (in the widest sense of the term) (Keister & Moller, 2000) (Uusitalo, 2001), (Hurst & Lusardi, 2004) (Holtz-Eakin et al., 1994) (Parker S., 2004) (Kihlstrom & Laffont, 1979) (Kim et al., 2006) (Blanchflower & Oswald, 1998) (Hamilton, 2000) (Moskowitz & Vissing-Jorgensen, 2002) (Atebro & Bernhardt, 2003)

*Human Capital and entrepreneurial entry.* (Kim et al., 2006) (Bates T., 1997), (Blanchflower, 2004) (Reynolds, Autio, & Hay, 2003) (Bruderl, Preisendorfer, & Ziegler, 1992) (Parker S., 2004) (Shane, 2003) (Boden & Nucci, 2000) (Kalleberg & Leicht, 1991) (Renzulli, Aldrich, & Moody, 2000) (Aldrich, Cater, Jones, & McEvoy, 1983).

*Cultural capital and entrepreneurial entry.* (Blau & Duncan, 1967) (Western, 1994) (Hout & Rosen, 2000) (Butler & Herring, 1991), race (Fairlie, 2004b) (Butler & Herring, 1991) (Hout & Rosen, 2000) (Kim, Aldrich, & Keister, 2006), gender (Kim et al., 2006) (Reynolds & White, 1997) (Blanchflower, 2004)), migrants (Vandor & Franke, 2016).

*Age.* (Levesque & Minniti, 2006) (Kim et al., 2006) (Reynolds, Camp, & Hay, 2002).

A more detailed overview of the literature in this area will be given in Chapter 3.

### **1.6.2.3. Self-employment and entrepreneurial income**

Recent theory suggests generalists are more likely than specialists to become self-employed (Hsieh, 2016). Comparing entrepreneurs/self-employed and employees, Lazear (2004) suggests that entrepreneurs should be generalists (‘jack-of-all-trade’) and multi-skilled, while those who work for others should be specialists. To the extent that entrepreneurs are innovators, for the most part they are business innovators. Most entrepreneurs are nontechnical people who form businesses in non-technical fields and not in the high-tech industries. The latter is even more true for ETA managers who almost always invest in a traditional established business and have to be a jack-of-all-trades to some extent in their newly acquired company.

Benz & Frey (2008) analyze the value of being independent and self-employed rather than being employed in an organization. Wellbeing is not only valued by financial outcomes. Being self-employed derives higher satisfaction from work than those employed in organizations, irrespective of income gained or hours worked.

The entrepreneurship literature comes to a similar conclusion. Being an entrepreneur seems to be rather rewarding because it entails substantial non-monetary benefits, like greater autonomy, broader skill utilization, and the possibility to pursue one's own ideas, rather than greater monetary benefits. Authors like Benz analyze entrepreneurship as 'a non-profit-seeking activity', as entrepreneurship is not particularly attractive in material terms (Benz, 2009). Benz confirms the first influential study on monetary returns to entrepreneurship made by Hamilton (Hamilton, 2000) who showed that after 10 years in business a median entrepreneur earns 35% less than what he or she could have obtained in a paid job of the same duration. However, the average earnings of self-employed are quite comparable to the average earnings of employees. More recent authors document that entrepreneurial returns can be characterized by a 'superstar-distribution' (i.e. a small number of individuals earns very high incomes but most individuals' incomes are below average). For example, Merz for Germany (Merz, 2004), Poutvaara & Tuomala (2004) for Finland. Moskowitz et al. (2002), studying the returns to private equity show that that entrepreneurs, who invest a large part of their total wealth in the firms that they run, could obtain higher risk-adjusted returns on the public equity market.

The literature often stresses that a researcher is unable to obtain good, reliable data on entrepreneurial incomes. Exactly determining income from independent business is known to be difficult due to lack of unequivocal accounting and reporting methods and even misreporting, as entrepreneurs are wary of revealing accurate income data to third parties (Astebro & Chen, 2014).

Åstebro & Chen doubt the above 'underpayment' of the entrepreneurs vis-à-vis the employees and correct the income underreported by entrepreneurs and reverse previous conclusions showing that the mean financial gain to entrepreneurship is positive and large. The correction of the earnings for underreporting is done based on a method that uses food consumption data based on household surveys (Hurst, Li, & Pugsley, 2014). The weak results on the effect of financial incentives in the choice for entrepreneurship so far have been presented as 'an entrepreneurial earnings puzzle' (Astebro & Chen, 2014) (Hyytinen, Ilmakunnas, & Toivanan, 2013).

Regardless of the adverse or beneficial monetary consequences, self-employment offers significant non pecuniary benefits, such as 'being your own boss', high independence and autonomy (Moskowitz & Vissing-Jorgensen, 2002). Moskowitz et al. also discuss alternative interpretations, such as a lower risk aversion of entrepreneurs (for example see (Wu & Knott, 2006), over-optimism and a preference for skewed outcome distributions (similar to lotteries).

Taylor (Taylor, 1996) provided a more nuanced view and concluded that individuals are attracted to self-employment because of the independence and the freedom from managerial constraints that it offers, as well as the higher expected earnings relative to paid employment. Taylor's findings clearly provide a strong support for the theory of a rational self-employment/paid employment choice, given the individual's characteristics and preferences, selecting into the state that maximizes their utility flow. Furthermore, self-employment appears to become a more attractive proposition when there is a safety net of paid employment available in case of failure and is not a response to high unemployment levels.

Other studies have focused on the role of opportunity cost in the choice for entrepreneurship in favor of wage employment, that is, the wages given up as an employee. Berkhout et al. (2016) argue that potential entrepreneurs face a great difficulty to predict their earnings from entrepreneurship. In fact, obtaining information on potential income from entrepreneurship is a formidable job, much more so than obtaining information on potential pay as an employee (Parker S. , 2009). This issue is less pronounced in the case of ETA, as there is a financial track record and a pre-agreed compensation package at entry. However, exactly



determining income from independent business is known to be difficult due to lack of unequivocal accounting and reporting methods and misreporting (Astebro & Chen, 2014). Taking a career perspective, Berkhout et al. find that individuals are more likely to choose for entrepreneurship if they give up a lower mean wage, a higher wage variance and a lower wage skew. Indeed, their research shows that entrepreneurial incomes are somewhat higher on average with a lower median level but with a much larger wage variance and higher skew for entrepreneurs than for employees. Poschke (2013) has developed a model for the occupational choice problem between starting a firm and remaining in employment. Starting a firm is optimal if it yields higher value than employment.

Ruback et al. (2016a), who have studied the phenomenon of ETA, performed by graduated MBA's at Harvard Business School, have found that most graduating MBA students agree that being the CEO of a small firm dominates traditional post-MBA careers like consulting, investment banking, private equity on non-pecuniary dimensions, such as career enjoyment, fulfillment, degree of flexibility and how much influence you have over what you do and when you do it. In fact, owners of small businesses can set their own hours, make their own management decisions, and take pride in the ownership of their work.

Ruback et al. (2016b) confirm that the financial prospects of buying and running a small business are also appealing. ETA gives the ETA manager the opportunity for a significant financial reward as the leverage effect by buying this small business partially (or even predominantly) with debt and in general at a relatively low price, often expressed as a multiple of cash-flow or earnings. Although the salary an ETA manager charges to the company (i.e. between 80\$-120\$k per annum in the case of search funds) is admittedly more modest than what a manager might earn in a senior position at a larger organization (Stanford Graduate School of Business, 2017), the yearly cash flows and the potential gain at exit of an ETA transaction can be substantial, in particular as the ETA manager has been able to profitably grow the company. Ruback et al. have tried to quantify these monetary rewards in their HBR article, making realistic assumptions on post-MBA ETA careers, typically in search funds. The relative compensation of a traditional MBA career (investment banking, consultancy,...) and an ETA career hinges on salaries in the next 10 years and the carry from deals with investors who provided money to acquire the business. As recent graduated MBA's have usual little or no money available to invest, they often find investors who are prepared to fund the transaction giving them in return a piece of the upside, the so-called carry. Typically an entrepreneur has a 20% carried interest in the acquired company, i.e. the CEO/entrepreneur keeps 20% of any cash distribution after the investors' investment is returned and they are paid a preferred dividend. The value of that carried interest depends on the performance of the business, its size its degree of leverage to finance the transaction and the eventual pricing (exit-multiple) of a subsequent sale.

Although Ruback et al, do not specify on what basis they have calculated the carry remuneration, the return statistics of the Stanford Business School study (Kelly & Heston, 2022) on search funds indicate an aggregate pretax internal rate of return (IRR) for all search funds since 1986 through the end of 2021 of 35,3% and an aggregate pretax return on investment (ROI) of 5.2x. with a hurdle rate of 20%, the amount of carried interest received by the search fund ETA managers will therefore be substantial, returning \$2.4 billion to search fund entrepreneurs over these years.

Equally Pandarvis (2005) stresses the financial rewards of ETA in his book with the telling title "Buying a business to secure your financial freedom".

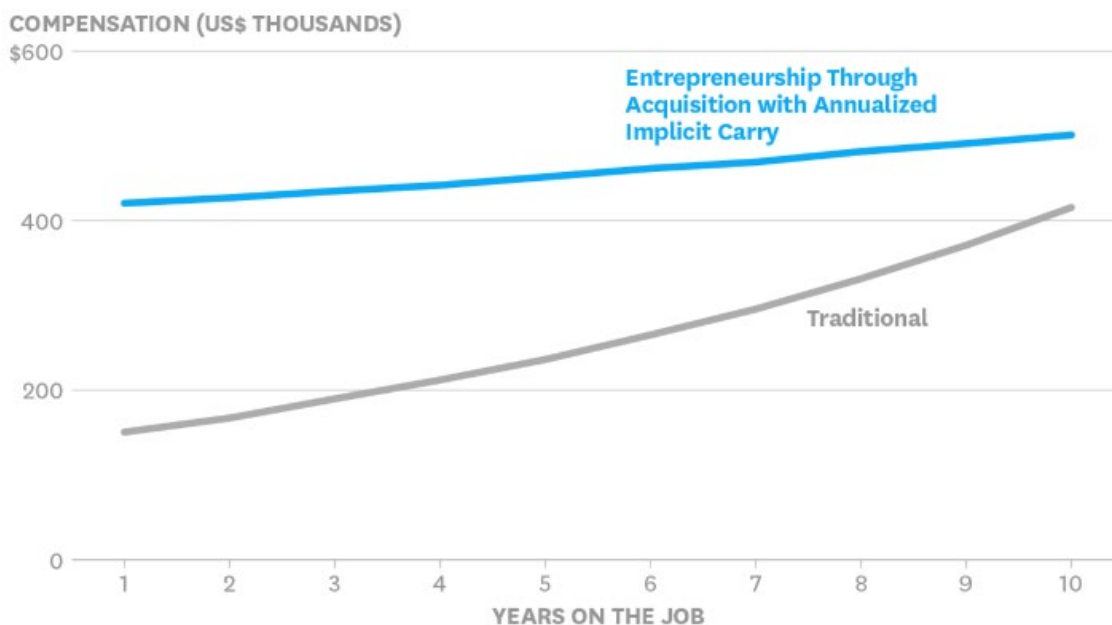
If one would therefore compare only the annual cash salary compensation between the post-MBA ETA manager and its counterpart following a traditional career, in most cases the ETA manager would receive less than the traditional career MBA, as the ETA manager's annual cash compensation is generally tied to the

performance of the company, in most cases slow-growing dull businesses, while the post-MBA salary surveys made at Harvard Business School showing salaries growing at a compound annual growth rate of 12% in a traditional post-MBA job.

However, the following graph (Figure 1.1) shows that - in a typical case, i.e. a typical post-MBA salary and a hypothetical search fund acquisition with \$1.5m of EBITDA purchased at 4x with 0% growth and sold at the same multiple 10 years later- the ETA path dominates the traditional post-MBA career path from a monetary perspective, in particular if one combines the annual cash salary compensation with an annualized implicit carry<sup>4</sup>, typically being 25% of the equity proceeds, partially acquired upfront, partially performance based acquired at exit) (Simon, 2021:10)).

Figure 1.1. Annualized total compensation in traditional career path v. ETA

### Estimated Annualized Total Compensation of Traditional Career Paths vs. Entrepreneurship Through Acquisition



SOURCE RICHARD S. RUBACK AND ROYCE YUDKOFF, ANALYSIS BASED ON TYPICAL POST-MBA SALARIES AND A HYPOTHETICAL SEARCH FUND ACQUISITION WITH \$1.5 MILLION OF EBITDA PURCHASED AT 4X WITH 0% GROWTH AND SOLD AT THE SAME MULTIPLE 10 YEARS LATER

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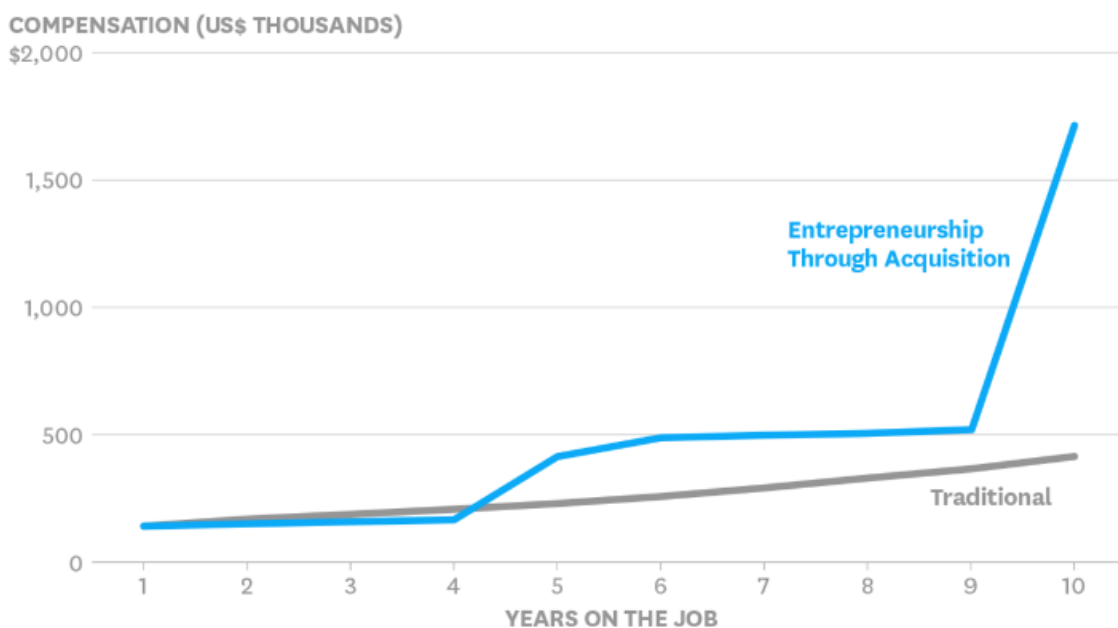
Source: Ruback & Yudkoff (2016a)

If we take in to accounting the timing of cash flows, whereby only at exit the carry gets paid, it is clear that the financial reward of ETA comes only after a riding the investment for a couple of years, which allows certain debt repayments and value enhancing improvements of the company. See Figure 1.2 for a graphic presentation of a typical case (see Figure 1.1.).

<sup>4</sup> Carry or carried or profits interests in a private equity fund (here in a search fund) typically giving the sponsor of the fund the right to up to 20% or even 30% of the profits (i.e. capital gains realized) (Weisbach, 2008)

Figure 1.2. Total cash compensation in traditional career path v. ETA

### Estimated Cash Compensation Including Carried Interest of Traditional Career Paths vs. Entrepreneurship Through Acquisition



SOURCE RICHARD S. RUBACK AND ROYCE YUDKOFF, ANALYSIS BASED ON TYPICAL POST-MBA SALARIES AND A HYPOTHETICAL SEARCH FUND ACQUISITION WITH \$1.5 MILLION OF EBITDA PURCHASED AT 4X WITH 0% GROWTH AND SOLD AT THE SAME MULTIPLE 10 YEARS LATER © HBR.ORG

Source: Ruback & Yudkoff (2016a)

By the above analysis, Ruback et al. do not want to show by this “simple” back-of-the envelope modelling that one path dominates another. They admit indeed that one could refine the modelling by for example using a different discount rate to calculate the present values of the two paths reflecting perceive risks, or by modeling the effect of tax advantages of the ETA model, price effects due to the growth of the business, the effect of pensions and bonus payments etc. They rather want to illustrate that the compensation is reasonably similar across the two paths. In fact, individual variations in experiences will dominate any systematic differences.

Ruback et al. (2016a and 2016b, 2017), as well as Hunt et al. (2012) mainly base themselves on post-MBA career ETA data, which are commonly taking place in the framework of a search fund.

This study focuses less on ETA as a post-MBA’s career path and more on seasoned and experienced ETA managers, who possess all or most of the necessary funds required to perform an ETA transaction. Therefore, among more seasoned ETA managers the carried part of the remuneration is less relevant. However, an ETA manager who finances an ETA transaction will still have the cash flows of the acquired company working for him/her on top of his/her annual salary. On the other hand, older and more experienced ETA managers will probably have to forfeit part of their salaries (and other compensation elements in their package) as senior managers, given that a small company, will not always be able to bear their compensation packages.

Although returns to entrepreneurship have a much higher cross sectional variance than wages (Poschke, 2013), Ruback et al. also argues that it is less risky to purchase an existing, enduringly profitable business through ETA vis-à-vis a start-up as the fundamental questions about the viability of the basic business model has already been answered and the products or services are already established. They also make the point

that working for a large firm is also risky, as opposed to buying a small company through ETA. A job in a large firm can be eliminated through a decision at the head office and this for different reasons. An ETA career is indeed an attractive third path, an exciting alternative to big corporations and risky start-ups.

Unfortunately, ETA is still hardly mentioned in the academic literature on entrepreneurship. Kuratko et al. (2015) have examined the various theoretical perspectives and frameworks of entrepreneurship. They offer an integrative perspective through a proposed “framework of frameworks”. They give an overview of the major themes that characterize recent research about entrepreneurs, mentioning eight different themes (venture financing, corporate entrepreneurship, social entrepreneurship, entrepreneurial cognition, women and minority entrepreneurs, global entrepreneurial movement, family businesses and entrepreneurial education). Not the slightest mentioning of ETA.

Scott Kunkel (2001), equally does not refer to ETA in its typology of entrepreneurial activities. His main classification in his first level of analysis is based on the context of entrepreneurial activities where he makes a clear distinction between corporate entrepreneurship and independent entrepreneurship. When he then treats independent entrepreneurship and new venture formation as synonymous, he excludes implicitly the ETA transactions.

One can therefore conclude that although ETA is undoubtedly an act of entrepreneurship and the research on entrepreneurship is highly relevant for the analysis of the ETA phenomenon, ETA genuinely suffers deprivation in the literature on entrepreneurship.

## **1.7. Outline of the thesis**

The dissertation is structured as follows:

### **Chapter 1: An introductory chapter.**

This chapter gives the necessary definitions, the economic relevance and an overview of the previous research on ETA, while situating ETA in the academic literature on private equity and entrepreneurship.

### **Chapter 2: Data collection**

This chapter explains in detail the data collection process, the survey and different forms of bias and validity.

### **Chapter 3: The Impact of Financial, Human and Cultural capital on becoming a (nascent) ETA manager.**

This chapter will analyze the influence of different forms of entrepreneurial capital and the likelihood of ETA entrepreneurial entry.

### **Chapter 4: The Investment criteria of a (nascent) ETA manager**

This chapter analyzes the investment criteria of an ETA manager, while comparing them between nascent and actual ETA managers, while comparing them with other types of investors.

### **Chapter 5: Nascent ETA Entrepreneurship and Founder Social Identities**

This chapter measures the social identities of the (nascent) ETA entrepreneurs and their impact on the nascent-active gap.

### **Chapter 6: Summary and conclusions**

This chapter rounds up the dissertation by pinpointing the main conclusions of the three main chapters and the implications for practitioners and policy-makers, as well as suggesting avenues for further research.

## Chapter 2. Data collection

### 2.1. Introduction

Without the existence of a population of (nascent) ETA entrepreneurs or ETA sourced companies that constitute a defined pool of entrepreneurially motivated acquisitions, it would be impossible to properly frame the defining characteristics of the ETA phenomenon.

According to Reynolds & White (1997), studying nascent entrepreneurs requires overcoming a major data collection hurdle: only about 4-6% of the adult population in the US enters the nascent entrepreneur pool each year and nascent entrepreneurs are anywhere found in a public database. The nascent ETA entrepreneurs probably are only a relatively small part of this group, while the search fund principals are even a smaller group, at most only hundred people per year<sup>5</sup>.

Indeed, the main limitation related to the study of the ETA is finding appropriate data (Hunt & Fund, 2012). Identifying enough nascent end actual ETA entrepreneurs to ensure statistical power and finding them early in the planning process further compounds the difficulty of data collection, in particular in light of the paucity of readily available data.

Nascent ETA entrepreneurs, in particular as they are nascent, are very difficult to track down by any statistical means. Even if they have acquired a company. In fact, there are no official data available to pinpoint the ETA transactions out of the larger data base of M&A activity or even MBO's or LBO's. Moreover, given that ETA transactions are often done below every radar screen due to their small size and due to their typical confidential nature (in particular around the price paid for the company or even around the mere fact that an owner sells his/her business), researchers do not easily obtain access to research subjects or useful ETA data.

In previous academic research different data sources have been used.

For example, Kim et al. (2006) used the PSED<sup>6</sup> (The Panel Study of Entrepreneurial Dynamics), a US-wide representative sample of nascent and non-entrepreneurs, obtained through a screening interview of 59,575 individuals, with detailed information about financial resources, work histories, and other individual background traits, in order to overcome difficulties encountered in previous empirical efforts. Unfortunately, these data do not distinguish the nascent "start-up" entrepreneurs from the nascent ETA entrepreneurs.

The following five research efforts did include ETA transactions as a mode of entry next to the start-up, using different databases.

Rocha et al. (2015) used Quadros de Pessoal (Portugal), a large longitudinal matched employer-employee administrative dataset from the Portuguese Ministry of Employment, tracking 157k individuals who left paid employment and became business owners during the period 1992-2007.

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<sup>5</sup> According to SearchFund.org (an online community for ETA entrepreneurs). There are currently 247 entrepreneurs actively seeking to acquire companies around the world through the search fund investment vehicle.

<sup>6</sup> More information on the study's background can be found in Reynolds et al. (2004).

Bastié et al. (2013) used the SINE database giving information on new enterprises, 160,000 in 1998, produced by the French National Institute of Statistical and Economic Studies, based on a four yearly compulsory survey that analyses the start-up and development conditions of enterprises.

Parker & van Praag (2012) used an older dataset (Parker & van Praag, 2006) dating from 1994 based on a survey of Dutch entrepreneurs (between 600-640 observations), gathered through a collaboration between the University of Amsterdam, RABO bank and the Dutch government.

Block et al. (2013) used a survey conducted through (26,168 randomly) telephone interviews in 36 countries (27 EU Member States, 5 other European countries, the US, China, Japan and South Korea) by the European Commission (2010), Flash Eurobarometer on Entrepreneurship, leading to a subset of 4,210 nascent (start-up as well as ETA) entrepreneurs.

Helleboogh (2010) used for his analysis of Belgian companies, the Bel-First database (Bureau Van Dijck), where, through a survey, respondents were asked whether the company was a start-up or a takeover.

Scholars exclusively focusing on ETA transactions, such as Hunt & Fund (2012) and Ruback & Yudkoff (2017), used in their analysis the available data (through the Center of Entrepreneurial Studies at Stanford Business school) on search fund companies and managers (i.e. post-MBA 25-30 year olds), as an effective example of ETA entrepreneurs (Yoder & Kelly, 2018) (Kelly & Heston, 2022).

We concur with Hunt & Fund (2012) that the analysis of search funds provides a meaningful basis to empirically confirm that buyouts occur for the purpose of implementing entrepreneurial strategies and allows them to develop an understanding on how ETA transactions contribute to small business growth and entrepreneurial capacity.

Although research points out that adults between 25 and 34 years old, i.e. the typical MBA age, are the most active in entrepreneurial activity (Reynolds et al., 2002), we think that search funds only represent the top of the ETA iceberg.

According to the latest Stanford study (Kelly & Heston, 2022), there are currently 107 entrepreneurs in the US & Canada actively seeking to acquire companies around the world through the search fund investment vehicle. In 2020, over 65 new search funds were formed. According to statistics updated as of 2017, kept by IESE business school (IESE, September 2018) 83 funds were raised outside the US, whereof 22 in Continental Europe (one in Belgium). On a world scale, these numbers remain infinitesimal.

It is clear that these few search fund related ETA transactions do not cover the vast number of cases where more seasoned and senior managers are performing an ETA transaction and purchase an existing small business to own and run it themselves. For example, only in Belgium, through the underlying database, we are already aware of more than sixty successfully executed ETA transactions in the last few years.

Search funds transactions are certainly a subsegment of the ETA phenomenon, but only remain a small and less typical fraction of the total ETA transactions contemplated or executed. Therefore, using search funds as an approximation of ETA, is neglecting the vast majority of the ETA transactions which are performed by experienced middle aged ETA managers, as opposed to the search fund post-MBA's.

Although, we do not possess any real comparative data on this, the mere fact that experienced middle aged managers often have the necessary funds and experience themselves to purchase a company and in light of the relatively small phenomenon of the search funds, we can assume that the vast majority of the ETA

transactions takes place outside the search fund world. In the research of Rocha et al. (2015), Bastié et al. (2013), Parker et al. (2012), their descriptive statistical findings on the average age of the people entering entrepreneurship through ETA seem to confirm this.

As a matter of fact, the difference between a seasoned and senior manager and a recent MBA graduate is so large that an attempt making a common typology of these two entirely different ETA entrepreneurs is for the purpose of this research not suitable. Due to their age difference, these ETA entrepreneurs have different backgrounds, experiences, networks, time allocation to search and last but not least different financial fire power.

This study wants therefore to focus exclusively on ETA cases involving more seasoned and senior managers.

This chapter discusses the data collection methodology utilized to test the research hypotheses developed in the following chapters. After delineating a sampling frame, a large-scale email survey is used to gather the data on (nascent) ETA entrepreneurs.

## **2.2. Sample of data: The Vlerick data**

My current involvement with the Platform of Entrepreneurial Buyouts<sup>7</sup> at Vlerick Business School<sup>8</sup> (as a co-founder and teacher from the “practitioner’s” perspective) and my previous involvement with the “Realizing Entrepreneurial Potential (REP)” elective at INSEAD, as well as my personal network established through 25 years of experience in the ETA world, could certainly partially help to overcome this paucity of information and data scarcity problem.

In order to be valid for a quantitative study, the sample size indeed should be large enough. Our data collection survey should therefore be sent to a relatively large population. Different datasets coming from different statistical populations were considered to analyse the ETA phenomenon:

- i. “Vlerick’s Entrepreneurial Buyout Academy” (held on Vlerick campuses, 6 years approximately 35-45 participants per year, say approximately 200 data points). For an example of the programme see Figure 2.1.
- ii. Vlerick Buy Your Own Company conference (held in various locations in Belgium, 6 years approximately 200-250 participants per year (but overlapping with the first category, say approximately 1000 data points of participants). For an example of the programme see Figure 2.2.
- iii. Vlerick MBA elective course on ETA transactions (held on Vlerick campuses, 5 years approximately 30 participants per year, say approximately 150 data points)
- iv. Vlerick ETA sessions at VKW Limburg<sup>9</sup> (held at VKW Limburg in Hasselt (Belgium), 2 years approximately 25 participants, say approximately 50 data points). This is a very similar programme as the Academy under i., only in a different geography (Province of Limburg).
- v. INSEAD “Realizing Entrepreneurial Potential” (MBA Elective) (held at INSEAD campus in Fontainebleau (France), 4 years approximately 120 data points per year, say 500 data points)
- vi. Private network (50 data points)

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<sup>7</sup> At Vlerick Business School we called ETA type of transactions Entrepreneurial Buyouts or EBO’s.

<sup>8</sup> Vlerick Business School is the business school of the University of Ghent and the University of Louvain, both located in Belgium.

<sup>9</sup> VKW is the abbreviation of Verbond van Katholieke Werkgevers, a Flemish employer’s organization in the province of Limburg. Vlerick Business School provides them equally with a seven evening session course on the same topic comparable with the Buyout Academy



However, given that this study wants to focus on ETA cases involving more seasoned and senior managers and less on the recent MBA graduates, it is important that we do not mix these different datasets of nascent ETA managers.

As Gartner (Gartner W. , 1985) already suggested that differences among entrepreneurs and among their ventures are as great as the variations between the entrepreneurs and non-entrepreneurs and between new firms and established firms, we can only concur with him.

In order to get our data as homogeneous as possible and still getting the sample size large enough and as representative as possible (Bryman & Bell, 2015), we have therefore decided to limit ourselves in our research to the participants in the editions 2013-2018 of the “Entrepreneurial Buy Out Academy” and the “Buy Your Own Company Conference”, as these groups consist entirely out of seasoned managers. Some of these overlap, as certain interested people did attend the Academy as well as the Conference.

The Vlerick’s MBA optional course and the INSEAD MBA elective usually do have a much younger population and were therefore not considered in the selection of our data.

The analysis of these data gives a convenience sample with sample size of potentially at least thousand data points (1,128 email addresses) and will provide us with sufficient data points, in order to allow a quantitative research method (Bryman & Bell, 2015).

These data have been further cleaned for non-eligible data such as overlaps and some of the Conference attendees which are not eligible as research subjects (i.e. people who are looking to acquire a company or have already acquired one) given that they are third party advisors, such as M&A brokers, advisors, private equity funds, banks, lawyers, government agencies, recruiters, press, trade associations, academics etc. involved in ETA related matters. The cleaning of the latter has been done by manually deleting email addresses of known third party advisers. After this data cleaning, 868 email addresses remained.

Although these data are certainly valid to further explain the ETA phenomenon, we realize that they are exclusively situated in a Belgian (even Flemish) context and that certain differences could exist analyzing such data between different countries given the specific business environment in each country.

## **2.3. Survey**

### **2.3.1. Questionnaire, questions and Qualtrics**

A cross sectional design (survey research) via a questionnaire seems the most appropriate method for our research of (nascent) ETA entrepreneurs. The questionnaire collects data on more than one case (in this case many more – see below) and at a single point in time in order to collect a body of quantitative and quantifiable data in connection with the variables mentioned here above which are then examined to detect patterns of association.

We have decided to use Qualtrics® software for our survey, given its widespread use in the academic world and its user friendliness. Qualtrics, a software platform currently owned by SAP AG, is a simple to use web-based survey tool to conduct survey research, evaluations and other data collection activities.

Considerable attention was paid to the survey design so that each question was relevant and objective (Crouch & Housden, 2003) and the overall questionnaire appeared well structured, logical, straightforward to complete. Please find the survey in Appendix 1.

A web-based self-completion survey, using Qualtrics® software, was sent to this remaining sample of 868, containing a cover letter, 46 questions (22 covering the “who” question). The questionnaire was timed to take around 20 minutes to fill out<sup>10</sup>. Such a questionnaire avoids interviewer effects (O’Muircheartaigh & Campanelli, 1998) and is convenient for respondents as they can answer the questions during a convenient time for them.

The questions are multiple choice, closed questions or Likert type of questions, avoiding probing effects (Marken & Kluch, 2017) and tiredness (Backor et al., 2007) (Davies, 2019). Completely open ended questions were avoided. The questions in the questionnaire are collecting mere data or facts obtained through fixed-choice answers (Bryman & Bell, 2015), are easy to analyse, and should not lead to much methodological debates of different interpretations.

As much as possible, academically validated questions were adopted, already used in earlier academic research. For example, previous academic research on the profile of MBI candidates or on the origin of the equity contribution (Robbie K. , 1993) (Robbie & Wright, 1995), as well as some of the above mentioned research on an entrepreneur’s mode of entry (e.g. Kim et al. (2006)), on industry sector experience (e.g. Parker & van Praag (2012)), on investment criteria (Malone, 1989; Tyebjee & Bruno, 1984), on social identity (Sieger et al., 2016) have been used in the formulation of the questions in our survey. Certain questions, however, are very specific for the ETA environment and the research on ETA transactions in particular and are therefore not found in the academic literature. Finally, the questionnaire has been double-checked and commented on by different other academics active in the field of entrepreneurship.

In case in this thesis, certain questions are based on validated scales or surveys in the existing academic research, we will discuss these in detail in the later chapters, each time when we discuss the specific questions and corresponding variables.

To ensure that our questionnaire had been designed which could elicit an acceptable response, two major external screening processes were undertaken: the seeking of comments from several experienced advisers and a limited testing (3 times) of a prototype questionnaire (Robbie K. , 1993). Before sending out the questionnaire, it has been proofread by three respondents who I know well as they were previous attendants of the Buyout Academy and who were able to give me the necessary feedback on the questions “user-friendliness” and the duration of the response time. The aim was to verify and confirm the normal response time of maximum 20 minutes.

### **2.3.2. Data cleaning**

After sending the questionnaire and subsequently two reminders to the population of 868, at the end 227 people responded, i.e. a response rate of 26%. After an additional filtering was done, a further 57 respondents were deleted. Firstly, the data were filtered on respondents who answered “yes” on Q1 (“Are or were you a candidate looking to acquire your own company?”), leading to the removal of 9 respondents, who equally confessed that they were third party advisers after all. After this first filtering, 218 respondents remained. Secondly, respondents who did not answer the question Q64 (“Did you end up acquiring your own company?”), i.e. people who often equally did not fill in many other or all other questions, were equally removed, leading to a further removal of an additional 48 respondents. The filtered data set therefore contains 170 respondents in total.

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<sup>10</sup> In case of Gompers et al. (2020) the median time to complete their questionnaire was 24 minutes.

After this filtering process, a comprehensive data cleaning was done.

i.) Data cleaning for numerical values:

Firstly, all columns were checked on impossible values or non-numerical values which were not numeric. For example, many respondents filled in words where they should have filled in values (e.g. "not many" or ">5" in questions where a value was asked) or some respondents filled in a year instead of number of years. The data were equally checked for outliers, but since most questions had fixed categories few problematic outliers were detected. All these values (+/- 120 values in total) were manually corrected with the most plausible value in line with what the respondent meant and in a very consistent way. After this correction, several columns were merged two-by-two, because questions were formulated slightly different for people who acquired a company and those not (e.g. "How many years in general management specifically" vs. "How many years in general management specifically before you acquired your company"). These columns were merged so that they can be used as an independent variable in the regression model using "Did you end up acquiring your own company?" as the dependent variable.

ii.) Data cleaning for categorical values:

Considering the categorical variables, for some variables dummy coding was used (only two categories). For other variables with too many subgroups, categories were logically merged together based on theory and on what is relevant for the research questions. Some of the groups contained no or very few observations, these were merged together with other groups. Also, labels were included for the subgroups. A logical reference group was indicated for each categorical variable.

The finally filtered data set contained 170 valid respondents, providing us with a limited number of observations in our convenience sample, resulting from an acceptable<sup>11</sup> 20% response rate: 120 nascent ETA entrepreneurs (still looking to acquire a company) and 50 ETA managers (who acquired their own company).

Confidentiality and anonymity of the survey was guaranteed, in particular as certain questions on the personal financial situation could be considered quite sensitive. All the reported results are based on the aggregation of many responses to exclude the possibility of inferring any specific respondent's answers. However, if the interviewees were prepared to provide their personal data, the results of the study will be shared with them and they were able to win a restaurant voucher through a lottery. Most of the respondents (158 on 93% on 170) did disclose their email address.

Finally, this is the first questionnaire in the existing research exclusively dedicated to experienced and seasoned (nascent) ETA entrepreneurs. All other questionnaires did include start-up entrepreneurs or search fund principals (who currently do not exist in Belgium yet<sup>12</sup>) and did not focus on seasoned (nascent) entrepreneurs and their characteristics.

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<sup>11</sup> For example, Westhead et al. (2005) reached 12.2%, Robbie (1993) 20.9%, Helleboogh (2010) 16,0%, Gompers et al. (2020) 21%.

<sup>12</sup> According to statistics updated as of 2017, kept by IESE business school (IESE, September 2018), there are no search funds in Belgium (yet).

## **2.4. Bias and validity**

### **2.4.1. Non-response bias**

This bias is calculated as the product of two components: non-response rate and the difference between the observed and non-respondent answers. While the response rate of 20% is satisfactory as illustrated above, we have taken the necessary measures to avoid a non-response difference by i.) the design of our survey (web-based, type of questions, time to fill out, confidentiality & anonymity), ii.) the fact that potential participants (three participants were used as guinea pigs) were involved in the design and the structuring of the questions, iii.) the existence of an (academic and often personal) relationship with the potential participants (which is actually the case here) , iv.) by sending different waves (in casu 3: 6/12/2018, 14/12/2018 and 2/1/2019) of reminders v.) and by offering incentives (Glen, 2020) (Hudson et al., 2004) (Turk et al., 2019). In fact, to encourage completion, some prizes (restaurant vouchers and free tickets for future editions of the conference and academy) were promised to the respondents who could benefit from a price draw if they participated in the survey, respondents who completed the survey and left their email data, were offered an early look at the results – after the survey was closed but before the results were released to the public.

In order to make an additional check for non-response bias, we made a statistical analysis between late respondents and early respondents, in order to analyse possible differences between respondents and non-respondents, assuming the late-respondents as a proxy for the non-respondents. As we have sent three waves of reminders to the respondents (see here above), while sending out the survey, we defined late respondents as the respondents who answered the survey after the second wave, i.e. from December 14<sup>th</sup> 2018 and later. We obtained 93 early respondents and 77 late respondents.

We then decided to check the following variables for statistical differences between the two groups: the dependent, independent and control variables used in Chapter 3 (for more detail on these variables – see Chapter 3 Section 3.4.2.).

See Appendix 2. for a more detailed analysis.

Except for the variable “amount to invest”, we did not observe any significant difference and therefore estimate the non-response bias to be very limited.

However, our response rate in particular regarding our question on the dependent variable (i.e. whether the respondent has acquired a company or whether he is still looking) could be influenced by a certain social desirability (Paulhus, 1991) whereby the respondent who has actually acquired a company will want to divulge that fact and subsequently fill in the the survey in order to proof that he has been succesfull. Therefore, the ratio of the respondents in our study 120 (still looking) versus 50 (already acquired), probably overstates the ones who were successful and should be disregarded as non-representative and will therefore not be used in any statistical analysis in this research. In any case, this ratio is not part of the research questions analyzed in this thesis.

### **2.4.2. Sample Selection bias**

Sample selection bias is a type of bias caused by choosing non-random data for statistical analysis. By surveying (nascent) ETA entrepreneurs attending a Vlerick Business School, belonging to the Univeristy of Leuven and Ghent, organized Conference or Academy, the database of respondents will vary from the databases most other researchers used as they generally use large official and more general data bases (e.g.

Helleboogh, 2010 used Bel-first official database). This sample selection bias could therefore exist in two ways: i.) the type of people and ii.) the type of transactions/companies.

There will be some “academic environmental” bias indeed, as people who have already obtained a university degree, probably are more likely to attend activities organized by a university. On the other hand, Vlerick Business School is deeply ingrained in the business world and well known to all business people and entrepreneurs in Belgium, whether they have an academic background or not. The individuals are representative in the population where the sample was taken from.

On the other hand, the type of company will also differ. Certain acts of ETA, in particular in relatively “unsophisticated” industries or sectors, such as the take-over of a restaurant or bar will hardly be covered by our data sample. Education is more needed in a start-up in a technology or knowledge-based industry, such as technology, finance, real estate and insurance than in a small business in construction or carpentry (Kim et al., 2006) as in the latter the entrepreneur draws on their acquired technical skills and on-the-job experience. For example, given the academic level of the respondents, the number of (nascent) ETA entrepreneurs aiming to take over a restaurant or a bar, one of the largest sources of take-overs of existing companies (Bastié et al., 2013), will be very low. While ETA entrepreneurs with a higher educational background, will rather be tempted by more technological or complex businesses. For example, Bastié et al. (2013) already saw the danger for the potential endogeneity of schooling in their analysis. In their study the choice level of schooling and that of mode of entry can indeed be determined by both common and unobservable factors. Lofstrom et al. (2014) equally concluded that the educational background predisposes individuals to make different industry choices.

Similar to the studies on search funds, where the entire population of the principals have a master’s degree, more in particular an MBA for a top business school (Morrissette & Hines, 2015) and the research on MBIs, which equally have a higher education (Robbie & Wright, 1995, p. 59), we analyse the type of respondents in our survey who do frequent regularly or occasionally a university environment.

### **2.4.3. Motivational bias**

The collected data are however subject to a certain *motivational bias*. As the participants in these courses have to pay fees to attend, in the case of the Buyout Conference around €250 and in the case of the Buyout Academy around €1,750, there is a certain motivational bias. The people surveyed are indeed people who are relatively motivated as they were prepared to pay these fees and spent the necessary time in a university-like environment. However, given the paucity of available data, these Vlerick activities remain a very efficient way to collect a unique database on potential or actual ETA managers.

### **2.4.4. Common method bias**

All variables used in this study came from the same measurement method, i.e. the same self-reported electronic survey as the single source of data. This could make our responses subject to common method bias (Podsakoff et al., 2003). However, all our data are based on demographic and factual data (age, education, management and work experience, prior entrepreneurial experience etc.) that are objective and verifiable, and not subject to any prediction, interpretation or evaluation. As argued by Podsakoff & Organ (1986), these kind of data are considerably less problematic. Further more, we tested the presence of this bias by using the popular (Fuller et al., 2016) – albeit recently questioned (Aguirre-Urreta & Hu, 2019) – post hoc Harman’s single factor test. The basic assumption of Harman’s test is that if a substantial amount of common method variance exist in the data, either a single factor will emerge or one general factor will

account for the majority of the covariance among the variables. Hence an explanatory factor analysis is performed<sup>13</sup> on all scale questionnaire items in our study. As the single factor accounts for 9,4%, which is lower than the threshold of 50% (total variance for one factor), common method bias is not a pervasive issue in our study.

#### **2.4.5. Small sample bias**

We realize that after all the data cleaning we only remain with 170 valid data points left for our research. A small size could indeed affect the reliability of our survey's result because it could lead to a higher variability, which may lead to bias. However, our total population still contained 868 potential ETA entrepreneurs and the response rate for those was an acceptable 20% (see 2.3.2. here above for further detail).

### **2.5. R Statistical Computing**

Once collected and analyzed the raw data from the survey, a set of hypotheses in the three following chapters has been developed and the statistical relations have been computed by the R software.

R is a programming language and free software environment for statistical computing and graphics supported by the R Foundation of Statistical Computing. The R language is widely used among statisticians and data miners for data analysis and currently the most popular programming language for studies of scholarly literature databases. R is used in the majority of newly published texts on statistics, as well as in most statistical journals published since 2005 (Hilbe, 2016, p. xi) (Noor, 2012) (Statanalytica, 2019) (Ghosh, 2019). R will overtake SPSS in yearly citations by 2020 (Lindelov, 2019).

I decided to choose R instead of SPSS (Statistical Package for the Social Sciences) (Field , 2015) as R is a more flexible package due to a wide range of modules that are available. In addition, the output of the models can be formatted directly and nice flexible graphs can be created.

However, some (basic) programming skills are needed, but many R courses are available and a statistical coach was advising and helping me in the use of R.

Bryman & Bell (2015) on business research methods and Hilbe (2015) were the two main academic books used for the statistical methodology of this thesis.

### **2.6. The participants - main characteristics**

Based on the Vlerick data collected through the qualtrics survey as explained here above, followed by the necessary data cleaning, the following main characteristics of the respondents, i.e. the nascent and actual ETA entrepreneurs, could be distinguished in Table 2.1. (for more detailed information see also table of descriptive statistics in Appendix 3):

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<sup>13</sup> This analysis was performed in SPSS

Table 2.1. Main characteristics of the respondents – nascent and actual ETA

	Min	Mean & SD	Max	Unknown
Age	27	44.63 ± 7.43	64	2/170
Number of years work experience	2	20.19 ± 7.27	40	2/170
Number of years working abroad	0	3.86 ± 6.06	32	3/170
Years of employment with current employer	0	5.79 ± 6.11	30	30/170
Years in Management (still looking)	1	9.82 ± 5.40	23	115/170
Years in Management (already acquired)	2	10.52 ± 5.73	24	141/170
Companies (co)founded	0	1.91 ± 1.34	6	112/170

	%	#
Education (highest level)	100%	168
Secondary school or less	1.79%	3
Bachelor degree	8.93%	15
Master degree	83.93%	141
PhD	5.36%	9
Education (type)	100%	168
Business/economics	55.95%	94
Sciences (including engineering)	32.74%	55
Other	11.32%	19
Industry experience	100%	168
Production	17.86%	30
Trade & distribution	8.33%	14
Retail (food & non-food)	10.71%	18
Finance	11.90%	20
Professional services	16.67%	28
Other	34.52%	58
Type of employer	100%	168
Self-employed (I acquired my own company)	22.02%	37
Self-employed (full time looking to acquire a company)	8.33%	14
Self-employed (full time, mainly other activities than looking to acquire)	31.55%	53
Self-employed (part time looking to acquire and part time other activities)	5.95%	10
Stock quoted company	10.71%	18
Large private company (>250 employees)	8.33%	14
Medium sized SME (>50 and <250 employees)	6.55%	11
Small SME (<50 employees)	4.17%	7
Government	0.60%	1
Other	1.79%	3
Start-up experience	100%	167
Yes	35.33%	59
No	64.67%	108
Future founding of venture	100%	167
Yes	64.67%	108
No	35.33%	59
Parents background	100%	167
Blue collar employees on payroll	8.98%	15
White collar employees on payroll	46.11%	77
Business owners	27.54%	46
Professional services (e.g. doctors, lawyers...)	13.77%	23
Other (government, teachers...)	3.59%	6

Looking at our data sample of nascent and actual ETA entrepreneurs, we can observe that our group is predominantly male with an average age of approximately 45 years and an on average work experience of more than 20 years whereof 10 years on average in a management position. Although their industry experience varies a lot from entrepreneur to entrepreneur, the three most frequent industry backgrounds are a production, professional services and finance background. Furthermore, almost one third of the respondents have a diverse background in consulting (“other”) and hence are involved in different industries and/or services. Most of these entrepreneurs do work for themselves and are self-employed. Such a self-employed status does provide these individuals with a good starting position (flexibility) to make - if an opportunity pops up - to make the step into ETA entrepreneurship. Almost half of them have parents which are/were business owners or involved in professional services. Almost half of them had a general management position in a large group before becoming a (nascent) ETA entrepreneur. The majority of the ETA entrepreneurs in our sample have some work experience abroad and more than one third have been previously already active in entrepreneurial activities. Almost all of the ETA entrepreneurs possess a university degree, mainly in business/economics or sciences (incl. engineering) and they have between €100k and €600k to invest in an ETA transaction, which represents almost always more than 20% of their networth.

As said earlier, this research is the first analysis of seasoned managers who are interested in (nascent) or already acquired a company for themselves through an ETA transaction.





## **Chapter 3. The Impact of Financial, Human and Cultural Capital on becoming a (nascent) ETA manager**

### **3.1. Introduction**

#### **3.1.1. General Introduction**

The purpose of the thesis is to analyze the phenomenon of “Entrepreneurship through Acquisition” or ETA. An ETA transaction as opposed to a “normal” buyout is defined here as a smaller and more entrepreneurial version of the classical leveraged management buy-in (for more definitions see Chapter 1.1).

In general, an ETA transaction, is driven by a strong entrepreneurial motivation, given that risk capital (i.e. the overwhelming part of the funds and assets of the ETA candidate) is used to make an acquisition for which transformational strategies will be implemented that expand and enhance the acquired business system (Hunt & Fund, 2012). This type of entrepreneurship, as opposed to start-up entrepreneurship is often called “Entrepreneurship Through Acquisition” or “ETA”.

In this chapter we will therefore focus on the ETA as a way to enter entrepreneurship (“Entrepreneurial Entry”), as a path to entrepreneurial ownership, next to its more known and widespread discussed alternative, the start-up. We will therefore build further on the existing literature on entrepreneurial entry and nascent entrepreneurship.

For the first time in the academic research, our research is primarily focused on the (nascent) ETA managers, being senior seasoned managers instead of post-MBA early-thirties ETA managers, typically present in the historically predominant model of a search fund.

We want to understand who is a “nascent” ETA entrepreneur, i.e. an ETA entrepreneur who is engaged in the acquisition process of a company but has not succeeded yet, and who of these nascent ETA entrepreneurs will most likely acquire a company (an ETA manager).

Access to business start-ups or ETA transactions may not be available to all people due to resource constraints. Several scholars examined the relative importance of three main forms of resources (“capital”) in pursuing start-up ventures (Kim et al., 2006) and/or business takeover (i.e. ETA transactions) ((Parker & van Praag (2006), Parker & Van Praag (2012), Bastié et al. (2013), Block et al. (2013), Rocha et al. (2015)). These researchers have in general build their research on the Resource based Theory and for specific resources on the Human Capital Theory, Social Capital Theory and on the Liquidity Constraints Theory.

In the academic research, the main limitation related to the study of ETA transactions, is finding appropriate data (Hunt & Fund, 2012). In fact, there are no official data available to pinpoint the ETA transactions out of the larger database of M&A activity or even MBOs or LBOs. Moreover, (nascent) ETA entrepreneurs, in particular as they are still nascent, are extremely difficult to track down by any statistical means. As explained in Chapter 2 describing the data collection, we use a relatively unique database from, predominantly middle-aged and experienced, attendants at Vlerick Business School conferences and courses on ETA (sample size of N=170) in Belgium in order to examine the role of financial resources (e.g. household income and wealth),

human capital (e.g. education, prior work and entrepreneurial experience) and cultural capital (influence from family/friends/network) on the decision to become an ETA entrepreneur.

To fully understand the impact of these three forms of capital on people's pursuit of ETA entrepreneurship and ETA entrepreneurial entry, we studied both the people at the earliest stage of the process, when they are still trying to pull their ideas and resources together, the so-called nascent entrepreneurs, as well as the people who succeeded already in acquiring their own company, the so-called ETA managers. And this while focusing on the middle aged and seasoned ETA manager.

Summarized, in this chapter the research question is twofold: we "who" is the (nascent) ETA entrepreneur is and what distinguishes a nascent ETA entrepreneur (who is still looking to acquire) from an ETA manager (who acquired a company)?

### **3.1.2. Structure of this chapter**

This chapter has the following structure. Section 3.2 situates ETA in the academic literature of (nascent) entrepreneurial entry and Section 3.3 summarizes the different theoretical backgrounds and earlier findings reported in the literature on financial, human and cultural capital, including the theoretical foundations of these resources and the development of the research hypotheses. Section 3.4 describes the data, the variables and the research methodology. Section 3.5 outlines the empirical strategy and presents the research findings, as well as the logic of our statistical analysis. Finally, Section 3.6 concludes with a comparison with previous findings, indicating certain limitations of this research and several implications for the practice, as well as some suggestions for further research.

### **3.1.3. Contribution to academic research**

Our results in this Chapter take into account some of the shortcomings of previous research and thus contrast with previous findings in several ways.

Previous findings on attempts at transitions into entrepreneurship, have always been predominantly focused on start-up entrepreneurship or at least not be exclusively focused on ETA entrepreneurship. In fact, as start-ups and ETA transactions are fundamentally different modes of entry, the research in this chapter will therefore further investigate these relationships exclusively applied to the context of ETA transactions, entailing a different and ETA-specific research mindset.

As opposed to previous research on entrepreneurial entry, this research focuses therefore exclusively on the (nascent) ETA entrepreneurs and ETA as the sole mode of entry. We analyzed and defined for the first time nascent entrepreneurship in the context of ETA. Hence, this chapter contributes to the existing literature by exclusively looking at nascent entrepreneurship and entrepreneurial entry through the ETA lens, a perspective that has been hardly touched upon in the academic literature. Certain research questions and hypotheses in this chapter have therefore been tailor made to the ETA world.

Furthermore, as opposed to most of the other research on ETA, we focus in this chapter for the first time mainly on the middle-aged senior (nascent) ETA entrepreneur, who has had a long successful career with many years of managerial experience and wants to acquire a company for him/herself mainly funded with his/her own money (self-funded search). This type of entrepreneur has in the context of ETA always been overshadowed in the literature by the search fund ETA entrepreneur, mostly a thirty year old recent MBA graduate. Given the paucity of ETA data, the Vlerick data of nascent ETA entrepreneurs overcomes most of the data limitations faced by earlier studies, using a relatively unique database to investigate these

experienced (nascent) ETA entrepreneurs, by far the largest but neglected and under-researched category in the ETA space.

Consistent with the existing research, we analysed the impact of human, financial and cultural capital in the context of ETA. However, we refined this analysis by adding some measurement variables specifically tailor made to the ETA environment, often inspired by the research on MBI's. Some of these variables have not been investigated before in the context of entrepreneurship, as they are only relevant in an ETA context and provide us with new insights in this alternative form of entrepreneurship and hence in the study of entrepreneurship in general. This study certainly contributes to the existing academic knowledge of nascent entrepreneurship and entrepreneurial entry, in particular as it highlights the ETA mode of entry, as opposed to most academic research where start-up entrepreneurs are in the middle of the spotlight.

As explained in the first chapter, research on the ETA phenomenon is almost non-existing. This thesis and this chapter therefore make an attempt to contribute to the academic knowledge of ETA.

## **3.2. (Nascent) Entrepreneurial Entry: Theoretical background and literature review**

### **3.2.1. Theoretical background**

In developing a theoretical foundation for this chapter, we have drawn primarily from the Resource-Based Theory. This theory is very relevant within entrepreneurship research (Alvarez & Busenitz, 2001) and examines performance differences of organizations based on their resources (Miles, 2012).

Applying this theory on managers and individuals, Resource-based Theory posits that a firm can achieve sustainable competitive advantage by controlling resources that are valuable, rare, imperfectly imitable and non-substitutable (Barney, 1991) (Wernerfelt, 1984). The resource based view is a model that sees resources as a key to superior firm performance.

Alvarez & Busenitz (2001) apply this theory on entrepreneurship, including the cognitive ability of individual entrepreneurs. Entrepreneurs have individual-specific resources that facilitate the recognition of new opportunities and the assembling of resources for the venture.

Barney et al. (Barney et al., 2001) make the link between the resource-based view and MBOs and VC financing, concluding that there is a need for research that examines the extent to which VC firms possess effective specialist skills with respect to the selection of business opportunities and the best entrepreneurs to exploit those opportunities.

Xi et al. (2020) apply a resource-based perspective on the two entry modes of entrepreneurship (business takeover (i.e. ETA acquisition) and venture start-up), comparing firm survival patterns and determinants associated with the two entry modes, indicating that the business takeovers have a higher survival rate than venture start-ups.

In this chapter, we will analyze different resources, such as human resources, capital resources in order to analyze the human, financial and social capital of an ETA entrepreneur and their influence on the entry mode into an ETA.

Regarding the different resources as such, we will further illustrate in Section 3 of this Chapter that these are equally grounded in different theories: Human Capital (Human Capital Theory), Financial Capital (Liquidity Constraint Theory) and Social Capital (Social Capital Theory).

In this chapter, we will explore whether financial, human and cultural capital have an impact on entrepreneurial entry through the ETA route and analyze which individuals are more likely to attempt transitions into ETA entrepreneurship.

### **3.2.2. Academic literature of (nascent) entrepreneurial entry**

To understand the impact of the three forms of capital on people's pursuit of ETA entrepreneurship, we need, on the one hand, to study people at the earliest stage of the process, when they are still trying to pull their ideas and resources together, the so-called nascent entrepreneurs (Reynolds & White, 1997).

On the other hand, we also need to study the people who succeeded in an ETA, the ETA managers, as their characteristics are relevant to understand who finally has the best chances to actually enter into ETA entrepreneurship. By studying both groups, we also include the people who were/are initially attracted to ETA entrepreneurship but subsequently failed or have not succeeded yet.

The research on nascent entrepreneurship and the mode of entry into entrepreneurship is therefore very relevant.

#### **3.2.2.1. Nascent entrepreneurship**

Nascent entrepreneurship research seeks, inter alia, to discover the individual and environmental characteristics of those individuals who are attracted to becoming an entrepreneur and who subsequently fail or succeed in this role.

Similar to the concept of entrepreneurship where we can find a wide range of approaches and different definitions, the concept of nascent entrepreneurship is not consensual yet. The definition used in the Panel Study of Entrepreneurial Dynamics (PSED) (Reynolds et al., 2000, p. 170) (Shaver et al., 2001) and in the Global Entrepreneurship Monitor (Reynolds, et al., 2005) (Reynolds et al., 2002) states the following: *"Nascent entrepreneurs are people who are engaged in creating new ventures with the expectation of being owners or part owners of a new firm (Baporikar, 2015) and have been active in trying to start the new firm in the past twelve months and whose start-up did not yet have a positive monthly cash flow that covers expenses and the owner-manager salaries for more than three months"*. This definition is widely recognized and repeated by several scholars (Kim et al., 2006, p.6) (Johnson et al., 2006, p.1) (Rocha et al., 2015, p.64) (Wagner, 2007, p.16). In fact, these are people still in the process of organizing and assembling the resources they need for a new business (Reynolds & White, 1997).

Rocha et al. (2015) have a more strict definition of nascent business owners as "all those individuals who leave paid employment and become business owners of new or existing businesses for the first time". Those who only have the intention of becoming a business owner, but do not make the transition, are not considered to be nascent business owners. Their definition, apart from the aspect of being an owner of a new business, coincides with our definition of an ETA manager, i.e. someone who actually executes an ETA.

The creation of a new venture is a process. Following Reynolds and White (1997, p. 6) and Reynolds et al. (2000, p. 158), this process can be considered to have four stages: conception, gestation, infancy and adolescence and this with three transitions. The first transition begins when one or more persons start to commit time and resources to founding a new firm. If they do so on their own and if the new venture can be considered an independent start-up, they are called nascent entrepreneurs (Wagner, 2007).

Indeed, an extensive review of the research on nascent entrepreneurship made by Davidsson & Gordon (2010) shows that nascent entrepreneurship is almost exclusively seen (yet) in the context of the creation of a new firm and the emergence of new business ventures. Davidsson states that although the label “nascent entrepreneur” is commonly used, it should be noted that it is really the venture that is nascent (Davidsson, 2015).

However, in the case of ETA transactions, it is clear that acquiring a company via ETA, per definition, implies acquiring an existing company, as opposed to a start-up.

Therefore, following the same reasoning as the scholars defining nascent entrepreneurship, we equally define the concept of a “nascent ETA entrepreneur”. Nascent ETA entrepreneurs would then be *“people who are engaged in acquiring existing and established companies with the expectation of being owners or part owners of this existing firm and thereafter manage it themselves and have been active in trying to acquire the existing firm in the past twelve months”*.

The last part of the definition of nascent entrepreneurship as defined here above, where a lack of positive cash flow in the case of a start-up is mentioned, is not applicable to ETA transactions. On the contrary, ETA transactions as opposed to start-ups do usually<sup>14</sup> have positive cash flows which are able to cover the running expenses and the salary of the owner-manager. Moreover, these cash flows even help the ETA entrepreneur to acquire the company, as banks will provide him/her financing based on those same existing cash flows.

Research on nascent entrepreneurship has grown rapidly. GEM- or PSED-type data has been the basis for well over 200 journal articles and Google Scholar counts nearly 6,000 works published in the 2009-2013 period, which use the term nascent entrepreneurship or nascent entrepreneur.

Most, if not all, of this research could be applied on the currently non-existing subsegment of nascent ETA entrepreneurship. A vast part of the research performed on nascent entrepreneurship could be indeed the basis for a similar research effort on nascent ETA entrepreneurship.

### **3.2.2.2. Entrepreneurial entry**

A part of the literature on nascent entrepreneurship, covers the topic of entrepreneurial entry.

Although the determinants of entrepreneurial choice have been thoroughly analyzed in the academic research, little is known about the preferred mode of entry into entrepreneurship, such as starting a new venture or taking over an existing business (i.e. the ETA way) (Parker & van Praag, 2012). There is definitely still a gap in the entrepreneurial entry literature in the small and medium size enterprise context and almost unexisting in the acquisitive entries (i.e. ETA transactions) domain (Helleboogh, 2010).

However, given the similarities between entry into entrepreneurship either by a start-up or an ETA transaction, it is certainly worthwhile to use the relevant academic literature in the context of start-ups as the basis to further comprehend the ETA entry mode.

Numerous individual characteristics such as gender, age, education as determinants of the decision to become an entrepreneur, have been extensively studied in the literature, for example Berglann et al. (2011),

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<sup>14</sup> A loss making company which needs a turnaround and could be acquired for a symbolic amount, requiring no debt financing, is a very rare and much more risky phenomenon. It therefore does not fall in the scope of our study as most ETA entrepreneurs have limited financial resources and always try to leverage their equity. Furthermore, given that they invest a considerable part of their net worth (see later), they are in general not tempted by such risky ventures.

who mentions occupational qualifications, family resources, gender and work environments as key determinants to become an entrepreneur. They define an entrepreneur as a person who takes an active part in managing a company in which he/she also invests capital and thus bears the significant part of the economic risks involved. A definition which certainly encompasses our concept of an ETA manager.

Helleboogh (2010) distinguishes besides a “de novo entry”, i.e. the start of a new venture from scratch, an “acquisitive entry”, i.e. a take-over of an established business, as an alternative way to become an entrepreneur.

Block et al. (2013) made a large cross-country study (the European Commission’s Flash Eurobarometer Survey on Entrepreneurship, no. 283) (European Commission, 2010) to explore individual-level and country-level determinants of the nascent entrepreneur’s preferred mode of entry. At the individual level, a person’s human capital, risk attitude and inventiveness influence the preference for starting a new venture versus taking over an existing business (i.e. an ETA transaction).

Rocha et al. (2015) have analyzed, based on Portuguese data, both entry and exit, identifying and characterizing different profiles of individuals leaving paid employment to become business owners of new (start-ups) or existing businesses (ETA transactions) for the first time (the so-called nascent business owners) and distinguishing exits by dissolution from exits by ownership transfers. In their research ETA managers are explicitly defined and covered. Overall, these ETA managers come from micro and small firms, are predominantly male and have a higher educational background and slightly older than start-up entrepreneurs.

Bastié et al. (2013) use a French database to investigate the determinants of takeovers (a synonym in their research for an ETA transaction) versus startups as a mode of entry for an entrepreneur. They focus on the effect of social capital (networks of relationships in which personal and organizational contacts are closely embedded) and financial capital, confirming their effect on the mode of entry.

Also Parker et al. (2012) use a Dutch database to analyze the entrepreneur’s mode of entry, making a distinction between business takeovers (i.e. ETA transactions) and new venture startups and focusing on human capital.

Xi et al. (2020) analyze firm survival patterns and determinants associated with the two entry modes (business takeover v. venture start-up), based on two large French datasets. They found that business takeover have a higher survival rate than new venture start-ups. However, these differences in survival probability reduce over the entrepreneurship life cycle and when controlling for different entrepreneur and firm characteristics.

According Block et al., in Belgium 27% choose an ETA transaction as the preferred mode of entry while 56% preferred the start-up mode (the remainder did not choose). These numbers were more or less in line with the results provided by the other countries. Bastié et al. (2013) found in a study of the French market, a relatively higher percentage of start-ups (87.7%) versus 12.3% takeovers. Rocha et al. (2015) equally found in their database of nascent business owners twice as many start-up entrepreneurs than acquisition entrepreneurs. Parker et al. (2012) found in their descriptive statistics of Dutch data an 83% start-up v. 17% takeover ratio.

Lofstrom et al. (2014) analyze why some individuals are more likely to become owners of small businesses (i.e. an ETA manager) than others and why certain individuals are drawn towards some industries and away

from others. The wealth and educational background characteristics that potential entrepreneurs, such as ETA candidates, possess predispose them to make distinctly different industry choices.

The research performed by Kim et al. (2005) examines the role of financial capital (household income and wealth), human capital (educational background and previous work and entrepreneurial experience) and cultural capital (influence from family and friends), and their independent and combined effects (Klyver & Schenkel, 2013) on the decision to become a start-up entrepreneur. As their research is exclusively focused on start-up entrepreneurs, a similar research effort could perfectly be applied in the context of an ETA entrepreneur.

In fact, as start-ups and ETA transactions are fundamentally different modes of entry, the research in this chapter will therefore further investigate these relationships exclusively applied to the context of ETA transactions, entailing a different and ETA-specific research mindset.

### **3.3. Financial, Human, Cultural Capital and entrepreneurial entry via ETA**

To understand the impact of the three forms of capital on people's pursuit of ETA entrepreneurship, we need to study the nascent ETA entrepreneurs (who are still looking to acquire a company), as well as the ETA managers (who already acquired a company), as the characteristics of the latter are relevant to understand who finally has the best chances to actually enter into ETA entrepreneurship.

In this section, we review the research and underlying theories on the relationship between financial, human and cultural capital and (nascent) ETA entrepreneurship and develop a series of hypotheses.

#### **3.3.1. Human Capital and entrepreneurial entry**

Theoretical models of entrepreneurial attempts should include the role and impact of human capital (Astebro & Bernhardt, 2005). Education and work experience are the most common dimensions of human capital and they have been associated with successful transitions into entrepreneurship and these characteristics also apply to nascent entrepreneurs (Kim et al., 2006).

Human Capital Theory (Schultz, 1959) (Becker, 1964) (Mincer, 1974) posits that the behavior of entrepreneurs is shaped by their human capital profiles. Human Capital is defined as the stock of skills, knowledge, experience and capabilities which are useful in a multitude of productive uses (Becker, 1964).

According to Human Capital Theory, expenditure on training and education is costly, and should be considered an investment since it is undertaken with a view to increasing personal incomes. Such knowledge provides individuals with increases in their cognitive abilities, leading to more productive and efficient potential activity.

Links between entrepreneurs' human capital profiles and outcomes relating to firm entry and performance have been identified (Bates T. , 1990) (Gimeno et al., 1997) (Davidsson & Honig, 2003) (Ucbasaran et al., 2008) (Unger et al., 2011).

A long tradition of research links human capital with the decision to participate in entrepreneurship, whether via the start-up route or via a business takeover (i.e. an ETA transaction) (Parker & Van Praag, 2012).

This section combines a Resource-based View and Human Capital Theory to elucidate the relationship between human capital and (nascent) ETA entrepreneurship.



The following different types of human capital can be distinguished:

- 3.3.1.1. Education
- 3.3.1.2. Previous work experience
- 3.3.1.3. Previous managerial background
- 3.3.1.4. Previous entrepreneurial experience

#### **3.3.1.1. Education**

Although the association between education and entrepreneurship is not necessarily straightforward (Bates T. , 1997), formal education can affect the likelihood of entrepreneurial entry through i.) the acquisition of skills ii.) credentialing (giving someone “the seal of expertise and skills”) iii.) sorting people by ambition, motivation, intelligence and assertiveness (Kim et al., 2006).

Formal education equally improves a person’s ability to search (general search skills) and process large amounts of information (analytical skills), leading to a greater ability to identify potential business opportunities and an understanding of markets and the entrepreneurial process (foresight imagination). It equally provides specific skills and knowledge needed to run businesses in particular sectors (Parker & Van Praag, 2012) or strategic abilities, to help them to differentiate from existing incumbents to secure valuable competitive advantages and to master complex technical problems and to extend existing best practices in the form of new innovations (Lofstrom et al., 2014).

Advanced education indeed often facilitates entrepreneurial entry by providing needed skills for successful business operation (Shane, 2003) or improved identification (Davidsson & Honig, 2003) or recognition of opportunities (Arenius & DeClercq, 2005) (Ucbasaran et al., 2008). In some rich countries postgraduate training, providing the students with more business oriented and technical skills, has been found to have some positive effects (Blanchflower, 2004) (Reynolds et al., 2003).

However, Kim et al. (2006) saw a strong curvilinear correlation between advanced formal educational and entrepreneurial entry. In their US study, college graduates were twice as likely to be nascent entrepreneurs as people with high school degrees or less, but post college education made no additional contribution to being a nascent entrepreneur. Both too little and too much education discourages attempted entrepreneurship.

Poschke (Poschke, 2013), on the other hand, shows in their extended study (multi-country, multi-period) and literature overview on entrepreneurship rates by education category, a relationship between entrepreneurship and ability & schooling that is U-shaped: Entrepreneurship rates are highest for people with high or low levels of education (the latter often coming from the bottom of the ability distribution), and lower for those with intermediate levels of education. This U shape was already confirmed by Livanos (2009) and Hurst et al. (2004) who made a comparative analysis on the self-employed, as did Berglann et al. (2011) showing that people with (only) secondary school education have the highest entrepreneurship rates, while scientists with a PhD the lowest. However, Berglann et al. also showed that ETA entrepreneurs tend to have a higher and more business-oriented education than self-employed entrepreneurs.

Some studies suggest that highly educated individuals are more likely to establish new firms (Bates T. , 1990) (Hopp & Sonderegger, 2019), whilst other studies detect an inverse relationship between educational attainment and firm formation (Storey, 1994). For example, Gimeno et al. (1997) showed that greater

education discourages entry as it increases one's options in salaried employment, thereby increasing the opportunity costs of entrepreneurship.

It also depends from industry to industry. Education is more needed in a start-up in a technology or knowledge-based industry, such as technology, finance, real estate and insurance than in a small business in construction or carpentry (Kim et al., 2006) as in the latter the entrepreneur draws on their acquired technical skills and on-the-job experience. Lofstrom et al. (2014) analyzed the effects of an educational background on entrepreneurial entry while distinguishing between high and low (strategic and structural) entry barrier industries. College education positively predict the entry into high barrier industries, which elevate the expected earnings of a firm ownership.

In sum, advanced educational credentials both encourage and discourage entrepreneurial entry. Net effects are therefore unclear (Van Der Sluis et al., 2008). Van der Sluis et al. (2008) made a meta-analytical review of (around hundred) empirical studies worldwide on the impact of formal schooling on entrepreneurship selection and performance. They concluded that the effect on education on entry is neither positive nor negative, while the effect on performance is significantly and positively associated with formal schooling. Indeed, Millan et al. (2014) observed that high qualifications have a positive effect and statistically significant effects on survival rates of entrepreneurial companies.

Even if the knowledge and skills gained in the formal education are not directly relevant to entrepreneurship, educational achievements may be an indicator of someone's ambition, achievement motivation and endurance (Kim et al., 2006). In their research on start-up entrepreneurs almost 70% has some college background.

As most of the academic research on the relationship between education and entrepreneurship, referred to here above, is almost entirely focused on start-ups (e.g. Kim et al., 2006), it is important to investigate the research on the mode of entry, i.e. making a distinction between start-ups and ETA transactions.

Kolvereid & Bullvåg (1993) found that habitual entrepreneurs are more likely to have a higher education compared to novice entrepreneurs. Applying this research on entrepreneurial entry, Helleboogh (2010) found that novice entrepreneurs with a higher level of education are more likely to invest in start-ups than in ETA transactions. A similar conclusion could not be made for habitual entrepreneurs.

Parker et al. (2012) argued that new venture creation mode is associated with higher levels of schooling whereas managerial experience, new venture startup capital requirements and industry level risk promote the takeover mode.

Rocha et al. (2015) found among nascent business owners (i.e. ETA managers) a larger share of individuals with higher educational attainment, a higher education, often associated with "entrepreneurial talent" and the ability to identify business opportunities (see also (Calvo & Wellisz, 1980).

Indeed formal education as a credential can also provide access to certain social networks (e.g. alumni network) or serve as a positive signal for nascent entrepreneurs when evaluated by resource providers (e.g. banks or venture capitalists) (Parker & van Praag, 2006). This can be important in an ETA context where many potential deals have to be sourced and analyzed before acquiring a company and where a bank has a large impact on the financing of a potential transaction.

Kim et al. (2006) concluded that the acquisition of skills and credentials may create valuable opportunities for individuals to work for others, rather than pursuing a new business venture.

In our view, such ambiguity about education's possible value to entrepreneurial entry is less valid for ETA transactions, where an educational background could provide an ETA manager with the necessary basic knowledge and skill set required nowadays to acquire a company (i.e. legal, accounting and other due diligence related technical issues) and to run a company in all its different areas of management (production, service, HR, marketing, finance, legal, fiscal...etc.) and last but not least provide an ETA manager with a basic understanding of valuation.

Most (nascent) ETA entrepreneurs are therefore expected to have a formal education as the current complex world requires a wide set of knowledge and skills which cannot be learned on-the-job.

The literature on the entrepreneurial mode of entry confirms that individuals who take over an existing firm all have a relatively high degree of education (on average 15 years of formal education, Parker & Van Praag, 2012).

Similar to the studies on search funds, where the entire population of the principals possesses a master's degree, more in particular an MBA for a top business school (Morrisette & Hines, 2015) (Kelly et al, 2016), (Yoder et al., 2018) (Kelly & Heston, 2022) and the research on MBIs, which equally have a higher education (Robbie & Wright, 1995, p. 59), our data will most likely show a similar high academic education outcome, in particular as described in Chapter 2, we collected our data from respondents in our survey who do frequent regularly or at least occasionally a business school university environment.

Lazear (2004) found that those who end up being entrepreneurs study a more varied curriculum when they were in the (Stanford) MBA program than those who end up working for others. These results were confirmed by Wagner (2003). Entrepreneurs are in general jacks-of-all-trades (Lazear, 2012), generalists and not technical specialists who base their companies on innovation, the so-called balanced skills concept. This implies that individuals who go on to become entrepreneurs should have a more generalized human-capital strategy. Recent research van Hsieh et al. (2017) adds that risk aversion encourages individuals to invest in a balanced skill profiles, making them more likely to become entrepreneurs.

Due to the composition of our research sample, the majority of the respondents has studied business/economics (56% of total) at university level, typically considered a generalist study area.

Given this strong academic bias and the likelihood that almost our entire population possesses a higher formal education, we therefore decided not to formulate a hypothesis regarding educational level and the likelihood on ETA entrepreneurial entry.

### **3.3.1.2. Previous work experience**

Previous research has shown that previous work experience, may be a very important component of human capital for nascent entrepreneurs (Bruderl et al., 1992) (Parker S. , 2004) (Hopp & Sonderegger, 2019). Without sufficient work experience, individuals may have inhibitions and hesitations to make their first steps toward becoming an entrepreneur.

Work experience can indeed assist in the integration and accumulation of new knowledge. Further it can enable individuals to adapt to new situations (Davidsson & Honig, 2003) and become more productive (Parker & van Praag, 2006). Experience embodies knowhow needed to exploit opportunities, such as selling, negotiating, leading, planning, decision-making, problem solving, organizing and communicating (Shane, 2003, p. 75).

Work experience is also believed to promote entrepreneurship, by enabling individuals to understand business opportunities and how enterprises function in practice (Parker & Van Praag, 2012) (Parker S. , 2004). Sørensen et al. (2007) agree that work experiences in the prior firm shape both the entrepreneur's competence and commitment to the entrepreneurial role. Prior labor market experience may equally motivate entrepreneurial entry (Lazear, 2004) (Kim et al., 2006). Lazear's study reveals that entrepreneurs, defined as the incorporated self-employed, are found primarily in non-technical occupations and not in high tech industries. The bulk of the entrepreneurs are found primarily in construction, retail trade and professional services.

In fact, knowledge of the industry helps in case the work experience occurs within the new venture's industry in order to identify potential opportunities and other industry-related opportunities (Shane, 2003) (Klepper & Sleeper, 2005). Work experience in which a new venture is active, has therefore a direct effect on successful new venture creation (Hopp & Sonderegger, 2019).

Furthermore, due to work experience, individuals gain access to various social networks for market information, access to capital, hiring employees, establishing reputations and develop supplier and customer relationships (Kim et al., 2006).

Regarding entrepreneurial entry, prior work experience on the entry mode of choice does not significantly influences the choice of entry mode (Parker & van Praag, 2006). On the contrary, labor market experience to some extent positively influences the preference for an ETA transaction versus starting from scratch (Block et al., 2013). Rocha et al. (2015) admit that the current research still lacks knowledge on individuals past experience in the labor market and the mode of entrepreneurial entry. By allowing the absorption of specific knowledge, experiences and the accumulation of contacts and networks, an individual's career history may also shape entrepreneurial entry. In addition, previous employment in a larger firm may discourage the transition into business ownership, but, on the other hand, can also provide the ETA manager with some reputation and legitimacy.

In line with Block et al. (2013), we are equally convinced that work experience provides a (nascent) ETA entrepreneur with the necessary knowledge and experience to run his/her company once acquired and helps the ETA entrepreneur to earn the necessary equity, necessary to acquire his/her own company.

Although most of the research on human capital, in the form of previous work experience, tend to be exclusively focused on start-ups (Shane (2003), Kim et al. (2006), Hopp & Sonderegger (2019), their causal relationship is expected to be valid as well in an ETA environment and will be tested in our research.

Hence, we therefore formulate the following hypothesis:

H1: There is a positive relationship between number of years work experience and ETA entrepreneurial entry

### **3.3.1.3. Previous managerial background**

Another important dimension of (formal) human capital is managerial experience (Cooper & Dunkelberg, 1986). Prior managerial experience may equally motivate entrepreneurial entry (Lazear, 2004) (Kim et al., 2006).

Individuals may be influenced to pursue entrepreneurship through multiple forms of work experience such as managerial experience (Parker S. , 2004). Previous managerial experience provides skills to coordinate and administer diverse activities in the early phases of a start-up (Boden & Nucci, 2000).

Rocha et al. (2015) found that people engaged in management positions in their previous job seem to be more likely to become business owners than those in other occupations. This makes sense as people having a general management background have a better general overview and knowledge of the different skills required to manage a company and therefore feel more self-confident to acquire a company and run it thereafter.

While ETA transactions typically employ already people and new ventures not, managerial experience is therefore more likely to be more productive in ETA transactions (Parker & Van Praag, 2012). Bastié et al. (2013) confirmed this by showing that takeover entrepreneurs have more managerial experience than start-up entrepreneurs. Despite of Helleboogh's (2010) inconclusive relationship in this regard, Parker & van Praag (2012) confirmed that greater (general) managerial experience (slightly) enhances the probability of becoming an entrepreneur by takeover (ETA) relative to new venture start-up.

According to Kim et al. (2006), there is indeed a positive curvilinear relationship between entrepreneurial (start-up) entry and managerial work experience and to a lesser extent general (full-time) work experience. They found among their data sample on average 8 years of managerial experience, out of a total work experience of 18,7 years. They saw a positive correlation between managerial experience and being a nascent (start-up) entrepreneur, albeit at a decreasing rate and peaking at approximately 19 years of managerial experience.

Lazear (2005) already confirmed that an entrepreneur has to be a "Jack-of-all-Trades", i.e. having managerial experience, although according to Parker & van Praag (2012) more in a start-up than in an ETA transaction.

Accordingly in line with the current research, we formulate the following hypothesis:

H2: There is a positive relationship between managerial work experience and ETA entrepreneurial entry

#### **3.3.1.4. Previous entrepreneurial experience**

Previous entrepreneurial experience, such as prior start-up experience, business ownership (start-up or not, majority or minority,...) or current self-employment is a specific aspect of human capital (Westhead et al., 2009) (Dencker et al., 2009) (Gimeno et al., 1997) (Chandler & Hanks, 1998) and considered as a surrogate measure of entrepreneurship-specific capital (Ucbasaran et al., 2008).

This human capital, which includes, broader social and business networks (Shane & Khurana, 2003) and relevant business planning (Dencker et al., 2009), managerial experience (Kalleberg & Leicht, 1991), as well as enhanced reputation and better understanding of financial institutions' requirements (Wright et al., 2007) (Parker & van Praag, 2006) can be leveraged to identify and pursue business opportunities.

Entrepreneurial experience through repeated business ownership refers to the concept of habitual (serial or portfolio) entrepreneurship (Wright et al. (1998), Westhead et al. (2005b), Hyytinen & Ilmakunnas (2007), Westhead et al. (2009)) and equally contributes to the development of the entrepreneurial (create, identify and exploit opportunities) managerial and technical skills applicable to entrepreneurial activity (Chandler & Hanks, 1998) (Shaw & Sorensen, 2019). An experienced entrepreneur may be able to identify what is required to earn profits in a market more clearly than novice entrepreneurs (Starr & Bygrave, 1991). Unlike novice or portfolio entrepreneurs, serial entrepreneurs are repeat business starters who in the past have sold or closed down a business which they at least partly ran and owned and who currently run another, possibly new business which they at least partly own (Wright et al., 1998) (Westhead et al, 2005b) (Hyytinen & Ilmakunnas, 2007). Westhead et al. (2009) concluded that habitual entrepreneurs were not found to report lower levels

of information search intensity than novice entrepreneurs but identified more business opportunities. They also concluded that those experienced entrepreneurs who own business simultaneously have more diverse experiences and more resources than inexperienced entrepreneurs. Experienced entrepreneurs may have the ability to identify more opportunities and leverage the resources to pursue opportunities. For example due to networks (Renzulli et al., 2000) or as they are serial entrepreneurs (Aldrich et al., 1983).

Kim et al. (2006) concluded that persons already in business (business owners or self-employed) or with previous start-up experience, will be more likely than others - about 2.5-2.6 times - to be nascent entrepreneurs and start another business, depending on the hours they spend working for others. Working for others, especially on a full-time basis, would interfere with current owner's ability to allocate time to starting a new venture.

However, people with previous start-up experience were actually about 50% less likely to attempt another start-up compared with people without no start-up experience and this due to the high mortality rate of start-ups and the accompanying discouraging effects. On the other hand, prior start-up experience, in particular if it was a successful venture, may also enhance confidence in their ability to identify promising opportunities (Shane, 2003), increasing therefore the likelihood of entrepreneurial entry. As the authors here above mainly focused on start-ups, we would like to analyze the influence of the type of current employer on ETA entrepreneurship. All of this is less applicable here as ETA transactions, as opposed to start-ups, require substantial capital and have a much lower mortality rate.

In their analysis of ETA manager, Rocha et al. (2015) equally encountered (a small number of) so-called portfolio business owners, i.e. individuals who currently have a minority of a majority ownership stakes in two or more independent businesses that are either new and/or purchased. They can leverage resources from the business they own and are strongly associated with a heuristic mode of information processing. Hopp & Heidegger (2019) saw that two out of three nascent (start-up) entrepreneurs either owned a new venture previously or helped someone to start a business. Helleboogh (2010) concluded that novice entrepreneurs in comparison with habitual entrepreneurs are more inclined to make an acquisitive entry (ETA) than a de novo entry (start-up) as it reduces the perceived risks.

The effect of previous entrepreneurial experiences of the nascent ETA entrepreneurs or ETA managers, i.e. defined here in two ways as i.) previous entrepreneurial experience due to previous start-up experience or a previous shareholding in a business (whether minority or majority) and defined as ii.) previous entrepreneurial experience by being self-employed, and their impact on their chances to find and acquire their own company, has not yet been explicitly investigated in the literature.

Previous entrepreneurial experience of acquiring a majority of a company's shareholding is in fact having experience with a previous ETA transaction.

Hence, we would therefore formulate the following two hypotheses:

H3: Individuals with prior entrepreneurial experience in businesses will have a higher likelihood of ETA entrepreneurial entry than people without such experience.

H4: Individuals who are self-employed have a higher likelihood of ETA entrepreneurial entry than individuals who are not self-employed.

### 3.3.2. Financial Capital and entrepreneurial entry

Financial capital refers to the available amount of monetary wealth, often obtained through regular income, inheritance, savings, windfalls, borrowing, or crowd funding to overcome entry costs to start or take over a business.

The theoretical foundation of this section is founded in the Liquidity Constraint Theory of entrepreneurship, as developed by Evans & Jovanovic (1989) and confirmed by many other scholars (Blanchflower & Oswald (1998), Xu (1998), Cressy (1999), Hurst & Lusardi (2004), Stuart & Sorenson (2003)). The theory states that founding a new venture is more common among individuals with greater access to financial capital because financial capital makes it easier to acquire the resources needed to start ventures. In other words, wealthier individuals are more likely to enter into entrepreneurship because they can risk their own capital.

Studies have shown that financial capital indeed matters in the decision to start a firm and increases the likelihood of becoming an entrepreneur ((Evans & Leighton (1989), Dunn & Holtz-Eakin (2000), Reynolds & White (1997), Blanchflower & Oswald (1998), Bates T. (1997), Evans & Jovanovic (1989) for the US, (Laferrere & McEntee, 1995) for France, i.e. people with greater family wealth are more likely to become self-employed. Equally personal wealth also play an important role in the decision to become self-employed, e.g. (Holtz-Eakin et al., 1994) for the US, (Blanchflower & Oswald, 1998) for the UK and (Lindh & Ohlsson, 1996) for Sweden.

The Theory of Liquidity Constraints (Evans & Jovanovic, 1989) links the possible benefits nascent entrepreneurs enjoy from wealth as a start-up often requires substantial start-up capital, possibly provided by the banks. As start-ups are per definition small and perceived risky, obtaining financing, without giving any personal wealth as collateral, can be difficult. An ETA transaction on the other hand often requires even more initial capital as the company with all its assets needs to be purchased upfront, while on the other hand the banks, given the existing track record, are more likely prepared to lend more money for the purchase. An ETA transaction therefore usually entails an acceptable (by the bank) mix between bank financing and personal financing (or own equity contribution). The latter will have to be provided by the acquirer. Therefore, every ETA transaction will require a significant personal equity investment by the ETA manager.

Both theory (Evans & Jovanovic, 1989) (Parker S., 2009) and some empirical studies (Bates T. , 1997) (Parker & van Praag, 2006) suggest that those most likely to enter into small-firm ownership have higher personal net worth than non-entrants.

Kim et al. (2006), who only researched start-ups, distinguished financial resources along two (moderate correlated) dimensions: household wealth and household income. Both have little or no association with the likelihood of entrepreneurial entry, which is consistent with other scholars (Hurst & Lusardi (2004), Aldrich et al. (1998), Uusitalo (2001)). However, both forms of resources affect attempts to transitions into entrepreneurship (Keister & Moller, 2000).

We are therefore equally going to view financial resources along these two dimensions in this research: 1.) household wealth and 2.) household income.

We conceptualize financial resources at household level as the decision to purchase a company may involve jointly owned resources (such as a home) to raise capital. Other household members can provide income while a nascent entrepreneur works on his/her ETA transaction.

Specifically to the ETA situation, whereby a (nascent) ETA entrepreneur needs a substantial amount of own funds in order to purchase the company of his/her dreams, we are also going to analyze an additional relevant related topic regarding financial capital, not really covered as such by previous research: where does the wealth (i.e. the own funds) comes from and does this has an impact on the likelihood to acquire a company or not.

### **3.3.2.1. Household wealth**

Although nascent entrepreneurs could benefit from wealth according to the theory of liquidity constraints (Evans & Jovanovic, 1989) (Evans & Leighton, 1989) and obtaining bank loans for such small businesses are not always easy (Jurik, 1998), most start-ups do not require large amounts of financial capital in their start-up phase and therefore the association of household wealth with the likelihood of entrepreneurial entry is rather low to non-existing. Aldrich et al. (1998), Kim et al. (2006) and Uusitalo (2001) (based on a study for Finland), Hurst & Lusardi (2004) all confirm this.

Hurst et al. (2004) found that the propensity to become a business owner is a nonlinear function of wealth. The relationship between wealth and entry into entrepreneurship is essentially flat over the majority of the wealth distribution, with the exception after the 95<sup>th</sup> percentile where a positive relationship can be found. Subsequent research found a strong positive relationship between wealth and entrepreneurial entry (Disney & Hathergood (2009), Fairlie & Krashinsky (2012)). Evidence suggesting that borrowing constraints may indeed restrict entry.

Holtz-Eakin et al. (1994), however, suggest that an individuals' own wealth exerts a smaller influence than parents' wealth on transitions to self-employment. Even exogenous windfalls such as inheritances, gifts and lottery winnings, increase the probability of being self-employed or start a business (Blanchflower & Oswald, 1998). Family members serve as a source of funding, especially if capital needs are modest (Parker S. , 2004). In general, entrepreneurship propensity is higher the larger the wealth of the parents and the spouse (Berglann et al.,2011).

Wealthier people have a greater preference for becoming entrepreneurs than the less wealthy, attracted by the non-pecuniary benefits of entrepreneurship, such as flexible work hours and greater personal autonomy (Hurst & Lusardi, 2004). On the other hand, at very high wealth levels, people have other career options and may be more inclined to fund other nascent entrepreneurs rather than be directly involved in pursuing their own entrepreneurial pursuit (Kim et al., 2006).

Lofstrom et al. (2014) analyzed the effects of personal wealth on entrepreneurial entry while distinguishing between high and low (strategic and structural) entry barrier industries. Wealth, which alleviates borrowing constraints, positively predict the entry into high barrier industries, but did not significantly impact the likelihood of entry in low barrier industries. Kim et al. (2006) also saw that nascent entrepreneurs sought more third-party financing, due to larger funding needs, in the case of more capital intensive industries such as transportation, communications, utilities and wholesale. On the other hand, Hurst & Lusardi (2004) did not find evidence that wealth matters more for businesses requiring higher initial capital.

Financial capital equally affects the mode of entry through its financing. Bank loans, where financial capital is a "condition sine qua non" are more often associated with takeovers (such as ETA transactions) than with start-ups. Block et al. (2013) equally conclude that a higher availability of venture capital and an easier access to bank loans should facilitate the financing of business takeovers, which often require extensive financing. Takeovers (or ETA transactions) are considered less risky than start-ups due to their track records, their less opaque reporting, their more accurate and predictable business plans, redlining (exclusion of entire



categories from the credit market) and last but not least better survival rates (Stiglitz & Weiss (1981), Bastié et al. (2013), Cournot & Mulic (2004), the latter for the French market). More recent research of Xi et al. (Xi, Block, Lasch, Robert, & Thurik, 2020) analyze the survival of new venture start-ups and business takeovers, clearly find that the latter have a higher survival rate. Low initial wealth, on the other hand, is more associated with startups (than with takeovers) (Bastié et al., 2013).

Astebro & Bernhardt (2005), saw a negative correlation between the survival of new small business and bank loans, while having a bank loan was a *ceteris paribus* positive predictor of the survival of start-up companies. Unfortunately, their analysis did not include ETA transactions, who always need a bank loan. Obtaining a bank loan in case of an ETA transaction is definitely a positive sign given that it proves that the bank has approved the business case.

Therefore, financial capital certainly matters in taking over an existing a company through an ETA transaction as taking over an existing business is associated with a higher capital requirement and a higher firm value than starting a new venture, given that they are already at a later stage and all the existing assets need to be taken over.

In the research of Parker & van Praag (2012), the entrepreneurs invest on average 36k/56k, requiring a capital of 46k/71k. Unfortunately, these statistics are a mix of the start-up (83% of sample) and ETA entry investments (7% of sample). They provide separate statistics on investments made (by an entrepreneur coming out a business owning family) to acquire their family firm, were 60k/93k and requiring a capital of 87k/135k respectively<sup>15</sup>.

In the research of Kim et al. (Kim, Aldrich, & Keister, 2006) nascent entrepreneurs started their start-up ventures with very little financial capital, i.e. 75% contributed less than \$10,000 in their ventures. Impossible to perform an ETA transaction with such small amounts. The banks would not play along.

The financing of the takeover of a company, usually entails an acceptable (by the bank) mix between bank financing and personal financing (or equity). Given the larger capitals (on average 60% more) needed to perform an ETA transaction (European Commission, 2006) versus the limited amounts of capital needed for a start-up (majority of business owners started their firms with less than \$25,000<sup>16</sup> and the average value of a start-up entrepreneur's total assets was (only) \$68k<sup>17</sup>), the financial resources and the possible use of external capital will affect attempts to transition into ETA entrepreneurship versus start-up entrepreneurship fundamentally differently.

Consequently, for a given level of wealth, takeovers are generally more dependent on external finance than are startups. Access to debt depends on solvency, i.e. how much equity will be contributed by the ETA manager versus the debt provided by the banks. In the case of an ETA transaction, relatively large amounts of initial capital are needed as every bank or private equity provider requires a substantial (personal) equity contribution in order to provide acquisition finance based on the universal principle of "put the money where your mouth is" or at least as a collateral for bank financing (such as a second mortgage on a house). Therefore, when there is little financial equity contribution by the ETA manager, credit constraints are more limiting and

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<sup>15</sup> These numbers were translated from Dutch guilders 1994 to euro's in 2019, in order to be able to compare.

<sup>16</sup> US Small Business Administration (SBA) Office of Advocacy, latest census, 2007 (data.census.gov), United States Census Bureau.

<sup>17</sup> SEED data (Washington Self-employment and Enterprise Development Demonstration) (Montgomery, Johnson, & Faisal, 2005)

the availability of bank loans is reduced. If the availability of bank loans is limited, the solution is to choose a less costly project and this is more likely to be a start-up (Bastie et al., 2013).

Many aspiring business owners use therefore financial bootstrapping methods to decrease external capital needs in their start-up (Harrison et al., 2004) or in their ETA transaction and hence minimizing their own equity contribution: a reliance on internal funding (e.g. through a second mortgage on a house), a low cost acquisition of financial resources (e.g. through an earnout or vendor loan structure) and low cost acquisition of other start-up/ETA resources (e.g. a low salary for the ETA manager).

An ETA manager whose wealth is not sufficiently high faces a choice: either to make an ETA transaction of a smaller size, invest in a small start-up or do nothing. All this shows that finance matters to entrepreneurship, in particular to ETA transactions.

Given the need for initial capital to purchase an existing company and obtain bank financing, we can therefore expect that ETA entrepreneurs will always need some basic household wealth and will have to invest a substantial part of their own net worth.

We therefore formulate the following hypothesis:

H5: Financial capital, i.e. the amount the (nascent) ETA entrepreneur is prepared to invest, has a positive association with the likelihood of ETA entrepreneurial entry.

### **3.3.2.2. Household income**

Individuals may weigh their participation in a start-up venture in terms of the opportunity costs of reducing their present income from employment (Blanchflower & Oswald, 1998) or in terms of additional income from a start-up relative to present income, while considering the prospects for future income from current employment. Consequently, individuals at higher income levels may perceive future income streams from their present occupation more favorably than an uncertain, and most likely lower, outcome from an entrepreneurial venture (Hamilton, 2000) (Moskowitz & Vissing-Jorgensen, 2002). Kim et al. (2006) did not find a positive association between household income and entrepreneurial entry, consistent with Parker (2012).

Although people in high paying occupations can invest more in the entrepreneurial process, some of these individuals find entrepreneurship less appealing. Sørensen (2000) reasoned that some highly paid employees benefit from rents generated from firm-specific skills, which allowed them to accumulate wealth. The loss of present and future income from their current employment outweighs the prospective gains from an (uncertain) entrepreneurial venture. Being appreciated by previous employers, may indeed create the golden cage, increasing the opportunity cost of leaving paid employment, thus reducing the propensity of entering entrepreneurship by acquiring a company (Sorensen & Phillips, 2011). Supporting this perception, findings by Hamilton (Hamilton, 2000) and Moskowitz et al. (2002) showed that earnings from self-employment lagged behind those from wage and salary employment.

In case of an ETA transaction, however, this phenomenon should be less strong as an ETA manager always get often paid a market salary for running a company. The salary level of the entrepreneurs in the research here above omits the ETA phenomenon. It therefore attributes more weight to the relatively low salary levels of the small self-employed entrepreneurs. The salary level of ETA manager, on the other hand, is more a standard salary for a CEO running a small SME.

Ruback et al. (2016) confirm indeed that the financial prospects (and therefore opportunity cost) of buying and running a small business are also appealing. ETA transactions give the ETA manager the opportunity for a significant financial reward given the leverage effect by buying this small business partially (or even predominantly) with debt and in general given the relatively low acquisition price, often expressed as a multiple of cash-flow or earnings. Although the salary an ETA manager charges to the company is admittedly more modest than what a manager might earn in a senior position at a larger organization, the yearly cash flows and the potential gain at exit of an ETA transaction can be substantial, in particular as the ETA manager has been able to profitably grow the company. Ruback et al. have tried to quantify these monetary rewards in their HBR article, showing that a career in ETA is at the end more financially rewarding than a more traditional career path (See Chapter 1).

Equally Pendarvis (2005) stresses the financial rewards of an ETA transaction in his book with the telling title "Buying a business to secure your financial freedom".

These potential financial rewards of ETA entrepreneurship reduce the opportunity cost and allow the (nascent) ETA entrepreneur to forego a current relatively high salary (i.e. household income), in particular for the large firms employees (Sørensen & Philips, 2011), in order to pursuing an ETA entrepreneurial opportunity.

Financial or economic capital can be seen in terms of the (private) equity people will have in their business and the borrowings they will make (Reynolds & White, 1997).

Given that the average (nascent) ETA entrepreneur being investigated here is a seasoned manager, having had a successful career and hence most likely accumulated some personal savings, he/she will want to and will be required to (by the bank) to invest a considerable part of these savings in the acquisition of his/her company as his/her main source of funds. Another source of money could be inherited money or a remortgage of a house. In line with Kim et al. (2004), these sources are expected to have a relatively small impact on the ETA funding.

We therefore formulate the following hypothesis:

H6: Individuals who made their money (financial capital) through their previous employment career, have a higher likelihood to acquire their own company.

### **3.3.3. Cultural Capital and entrepreneurial entry**

This section is theoretically founded in the Social Capital Theory, which main idea is that people gain both tangible and intangible resources at the individual, group and organizational level through social interactions and connections with others (Bourdieu, 1986) (Coleman, 1988) (Lin, 2001). Social capital refers to "those tangible substances [that] count for most in the daily lives of people: namely goodwill, fellowship, sympathy, and social intercourse among the individuals and families who make up a social unit" (Hanifan, 1916, p. 130). Although Bourdieu (1986, p.249) includes in his definition of social capital, the network with others in their family, Portes (1998, p.12), on the other hand describes social capital as "network-mediated benefits beyond the immediate family". Social capital is represented by the relationships among the family members that enhance the transmission of other structural resources like, for example, the parent's education (Caro et al.,

2014). Cultural capital<sup>18</sup> can be equally seen to span both the personal and social dimensions (Firkin, 2001). Cultural capital, in its embodied form consists of permanent dispositions acquired and inherited through family socializations (access to cultural practices, production of legitimate signals and value attached to education (Bourdieu, 1986) (Firkin, 2001). In sum, both forms of capital are intertwined and used here interchangeable. Parker & van Praag (2012) use the term “informal human capital” instead.

The cultural capital of a nascent entrepreneur is undoubtedly conveyed through familiarity with a parents’ business. Belonging to a family business is indeed a source of social capital (Bulboz, 2001) and networks based on family and relatives, have been shown to enable the transfer of entrepreneurial values.

Numerous studies have shown that children of self-employed/business owning families are more likely to become self-employed/business owners themselves (Blau & Duncan, 1967) (Western, 1994) (Fairlie R. , 1999) (Hout & Rosen, 2000) (Butler & Herring, 1991) (Dunn & Holtz-Eakin, 2000) (Sorensen J. , 2007) (Robinson, 2009) (Laferrere & McEntee, 1995), either because they acquired the necessary entrepreneurial skills in the family business or because they come to attach greater value to the non-pecuniary benefits of self-employment (Sorensen & Phillips, 2011). These children are exposed to an entrepreneurial environment, ranging from practical matters of running and owning business operations, to develop and have access to social networks and resource providers (Fairlie & Robb, 2007), to coping with the risks associated with entrepreneurship. Informal trainings, family mentors and pre-market experiences, as well as parental role modeling of entrepreneurial values (Cooper & Dunkelberg, 1986), such as autonomy and perseverance provide a valuable cultural resource for future entrepreneurs. Butler & Herring (1991) and Hout & Rosen (2000) both found a positive association between father’s self-employment and son’s self-employment. Zellweger et al. (2011) found that amongst students from family business backgrounds, those with a high self-efficacy were most likely to intend to found their own firms, followed by succession in the family enterprise, with employment the least likely choice.

Other academic research concluded in a different way: People with entrepreneurial parents were no more likely than the children of wage and salary workers to be nascent entrepreneurs. For example, Kim et al. (2006) found no association as the prospects for working long hours and enduring economic uncertainty may dissuade children. However, they did not make a difference between parents who ran a successful business venture versus those for whom the enterprise was a miserable failure.

Other studies in entrepreneurship, founded in a more sociological approach, have been analyzing the entrepreneurial attitude and likelihood to become a nascent entrepreneur by comparing races and gender and cross-cultural experience. On race, different non-conclusive results came up (Fairlie, 2004) (Butler & Herring, 1991) (Hout & Rosen, 2000) (Kim et al., 2006). On gender, all studies show that women are less likely than men to be a nascent entrepreneur (for example, (Kim et al., 2006) (Reynolds & White, 1997) (Blanchflower, 2004) and even an ETA entrepreneur (Ruback & Yudkoff, 2016). Vandor & Franke (2016) argue that internationally mobile individuals such as migrants and expatriates exhibit a higher level of entrepreneurial activity than people without cross-cultural experience.

Regarding the influence of cultural/social capital, in particular the impact of the parents, on the entrepreneurial mode of entry (ETA versus start-up), entrepreneurs with high social capital have greater knowledge of the business transfer market (useful for ETA transactions) and perhaps a better knowledge of

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<sup>18</sup> The terms Social Capital and Cultural Capital are sometimes alternated and used as synonyms, in particular as it concerns the family relations. For a clear definition of the different forms of capital: Patrick Firkin (2001).

the opportunities for start-ups (Ucbasaran et al., 2008). Block et al. (2013) found that the entrepreneurial background of the father seems to be more important in explaining the preferred mode of entry (ETA or start-up) than the entrepreneurial background of the mother. Parker et al. (2012) made a distinction whether an individual entrepreneur comes from a business owning family or not. The latter tends to invest the most in formal education, providing him/her rather with the skills and knowledge to start up a new venture, as he/she lacks the informal human social capital conveyed through familiarity with a (parent's) business (e.g. parental role modeling of entrepreneurial values, such as autonomy and perseverance, family mentors, social networks, informal training, pre-market experiences etc.) than to takeover an existing business. On the other hand, entrepreneurs with business families are generally more likely to take over existing firms, not necessarily their own family business. They concluded that informal cultural capital obtained in a family firm will cause that individuals from business owning families who do not take over the family firm will be more likely than individuals from non-business owning families to take over an outside firm than to start-up a new venture, even after controlling for the entrepreneur's education level. Bastié et al. (2013) came to another conclusion and found that entrepreneurs with social capital (network of relationships in which personal and organizational contacts are closely embedded e.g. with a family business or/and with entrepreneurs among close relations, as well as strong relationships with customers and/or suppliers or entrepreneurs in their family) are less likely to take over existing businesses than are other entrepreneurs and are more likely to start up their own venture. Helleboogh (2010) came to a similar conclusion for habitual entrepreneurs.

In line with the majority of the existing research on the impact of social/cultural capital on entrepreneurial entry and on the mode of entrepreneurial entry and for the first time in an exclusively ETA context and not in comparison with start-ups, we therefore propose the following hypothesis:

H7: Individuals with parents who were/are business owner/self-employed are more likely to acquire their own company.

### **3.4. Data and methods**

#### **3.4.1. The data and recoding**

Due to the lack of availability of data on (nascent) ETA entrepreneurs, scholars exclusively focusing on ETA transactions, such as Hunt & Fund (2012) and Ruback et al. (2017), used in their analysis the available data (through the Center of Entrepreneurial Studies at Stanford Business School) on search fund companies and managers (i.e. post-MBA 25-30 year olds), as an effective example of ETA entrepreneurs. Search funds could only represent the top of the ETA iceberg as they do not cover the vast number of cases where more seasoned and senior managers are performing an ETA transaction and purchase an existing small business to own and run it themselves.

In particular in light of the present financial, human and cultural capital, the difference between a seasoned and senior manager and a recent MBA graduate is so large that an attempt making a common typology of these two entirely different ETA entrepreneurs is for the purpose of this research not suitable. Due to their age difference, these ETA entrepreneurs have totally different backgrounds and experiences: i.) different work and managerial experiences (human capital), ii.) a different family situation and private and professional networks (social capital), and iii.) last but not least an incomparable financial fire power (financial capital).

This study wants therefore to focus – for the first time - exclusively on ETA cases involving more seasoned and senior managers, using the Vlerick data base (as explained in detail in Chapter 2 on Data Collection) and a Qualtrics online survey (see Appendix 1 and 2) and leading to 170 valid data points.

### **3.4.2. Variables**

#### **3.4.2.1. Dependent variable**

The dependent variable (outcome variable) (on y-axis) is what changes as a result of the changes to the independent variables.

The main goal of this chapter is to analyze the impact of the different types of human, financial and cultural capital variables on whether the nascent ETA entrepreneur is successful or not. In other words, the dependent variable here is categorical or dichotomous, i.e. *whether an individual has acquired a company or not* (“Did you end up acquiring your company?”). Of the 170 filtered data, nascent and actual ETA entrepreneurs, 120 answered “not yet” and 50 answered “yes” on this question.

#### **3.4.2.2. Independent variables**

The independent variables (predictor or experimental variable) are the variables that are changing on their own or being manipulated in an experiment (age, studies, work experience...).

##### **3.4.2.2.1. Human Capital**

We include in our analysis 3 subcategories of human capital (work experience, managerial experience and entrepreneurial experience) measured by three main variables: previous work experience, level and type of managerial experience, previous entrepreneurial experience. Although this classification is partially based on Kim et al. (2006), we analyze these subcategories in more detail by asking additional questions further refining the human capital background.

##### **3.4.2.2.1.1. Previous work experience**

Previous work experience is measured in the descriptive statistics (see for results Appendix 3) by six indicators. We used full time work experience in years, as well as numbers of years working abroad (i.e. outside of Belgium). Based on Parker et al.’s (2012) industry classification (capital intensive, agribusiness/agriculture, production, building, trade & distribution, retail/food, retail/non-food, repair/transport, finance, real estate, professional services, other), we asked the respondents equally after their type of main industry sector experience (3). We equally asked the respondents after their type of current employer (full-time or part-time self-employed, stock quoted company, large private company, medium or small sized SME, government or other) (4), as well as after the number of years with that current employer (5). Finally, we asked the respondents after the size of their current company, expressed in number of employees (different sizes ranging from one employee to more than thousand employees) (6).

In the inferential statistics (i.e. our model), we retained only two variables: work experience and type of current employer. We therefore recoded the results of the survey on work experience by measuring the work experience variable in three ways: as an integer variable (in years), as a logarithm of the variable (to get rid of the outliers) and as a dummy variable, based on a value higher or lower than the median value. Finally we measure the type of current employer by making the binary distinction between self-employed and not-self-employed, using self-employed as a dummy variable (yes = 1, no = 0).

#### 3.4.2.2.1.2. Level and type of managerial experience

Level and type of managerial experience is measured in the descriptive statistics (see for results Appendix 3) by two parameters. 1.) One qualitative measure, where we ask for the managerial background of the respondents at their last job (i.e. general management, sales & marketing, production, finance & administration, self-employed and other), based on the typology of managerial background by Robbie (Robbie K. , 1993, pp. 6 Appendix, question 14h), as an MBI candidate and a (nascent) ETA entrepreneur have a lot of similar characteristics and a similar profile. 2.) One quantitative and objective measure, where we ask for the respondents' level of (P&L) responsibility in their current job, expressed in sales (measured by six different responsibility levels expressed in millions of euro sales) and this in order to get a better understanding of the responsibility level of the (nascent) ETA entrepreneur at his/her current or previous job (2).

In the inferential statistics, we measure managerial experience by two parameters (level and type) as follows: the level of managerial experience as an ordinal variable, using the six different levels of P&L responsibility and the type of management experience by using general management experience as a dummy variable (yes=1, no=0).

#### 3.4.2.2.1.3. Previous entrepreneurial experience

Previous entrepreneurial experience is measured in the descriptive statistics (for results see Appendix 3) according to three measures: previous start-up experience (1), anticipation of (co)founding a venture/start-up in the future (2), previous acquisition of a majority (3a) or a minority (3b) of a company and the subsequent sale of this majority (3c) or minority (3d) shareholding.

In our inferential statistical analysis, we recoded these answers by first considering these demonstrations of previous entrepreneurial experience as three dummy sub-variables: start-up experience yes/no, minority shareholding yes/no, majority shareholding yes/no. At the end, based on these three dummy sub-variables, we evaluate entrepreneurial experience in general equally as a dummy variable (1= if one of the three dummy sub-variables has 1, if all three sub-variables are 0 = 0).

#### 3.4.2.2.2. Financial Capital

We include 2 variables measuring financial capital: targeted invested amount prepared to invest (household wealth), origin of the finance (household income).

##### 3.4.2.2.2.1. Amount to invest

First, given the own capital required for an ETA transaction by every (nascent) ETA entrepreneur, it is important to understand his/her financial commitment, defined here as the willingness to personally invest an absolute amount. In the descriptive statistics (for results see Appendix 3), we have measured the financial resources based on the amount of money the (nascent) ETA entrepreneur would invest or invested in the business he or she wants to acquire ("amount to invest"), and this expressed in thousands of euros.

In the inferential statistics, in order to avoid overfitting of the model, we wanted to limit the number of variables and recoded eight variables into four<sup>19</sup>. The variable “amount to invest” is treated in our model as an ordinal variable (1-4).

#### 3.4.2.2.2. *Origin of finance*

Secondly, we have asked the (nascent) ETA entrepreneur after the origin of his/her equity contribution (“origin of finance”) needed to finance his/her personal investment, based on the slightly adapted classification used by Robbie (Robbie K. , 1993, pp. 7 Appendix, question 14I). The personal contribution coming from personal savings, a golden handshake, a re-mortgage of the house, a sale of assets, financing from the partner, loans from friends & family, inherited money or other. For the results of our descriptive statistics, see Appendix 3.

In the inferential statistics, we have treated the variable “origin of finance” as an integer variable, calculated by adding the scores on the four “own generated money” sub-variables, i.e. personal savings, golden handshake from previous employer, re-mortgage of house and sale of other personal financial assets. The lower the overall score, the more self-earned money as source of finance and this as opposed to not self-earned money from partner, friends, family and inheritance. For example, Q35 (19) gives 7 sources of financing whereof 4 “own generated”. A score of 4 (i.e. the minimum possible) means that that such a respondent filled in “extremely important” (awarding 1) to each of the four “own generated” sources. The maximum would be 20, whereby a respondent would have filled in four times 5 (“not at all important”) to the “own generated sources”.

Moreover, we equally consider this “origin of finance” variable in our model as a dummy variable (higher or lower than the median).

#### 3.4.2.2.3. *Cultural Capital*

To test for the effects on cultural capital, we included in our descriptive statistics (for the results see Appendix 3) a question on the parent’s background (blue collar employees on payroll (1), white collar employees on payroll (2), business owners (3), professional services (e.g. doctors, lawyers, ...) (4) and other (government, teachers etc.) (5).

In our inferential statistics, we recoded these five variables regarding the parent’s background into a dummy variable (1= business owners, 0= no business owners).

#### 3.4.2.2.4. *Age*

Age has certainly a strong influence on all the other parameters as age is strongly correlated to a career, work experience and financial capital. Indeed, as the numbers of years of work experience, as well as years of managerial experience could be directly correlated with age, we assume at this stage that age is an approximation of years of (managerial/work) experience (Kim et al., 2006) and include it as an independent variable. Age could therefore equally be a possible moderator, as it could be a third variable that affects the correlation between the dependent variable (“did you acquire a company or not”) and an independent variable such as “previous work experience”.

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<sup>19</sup> We recoded 8 variables of investment amount “<100k” (n=6), “>100k and <200k” (n=47), “>200k and <400k” (n=54), “>400k and <600k” (n=27), “>600k and <800k” (n=10), “>800k and <1,000k” (n=10), “>1,000k and <1,200k” (n=2), “>1,200k” (n=8) into 4 variables: “<200k” (n=53), “>200k and <600k” (n=81), “>600 and <1,000k” (n=20), “>1,000k” (n=10).



Research on nascent entrepreneurship and entrepreneurial entry show an average age of mid- thirties to early forties (Parker et al. (2012) (33-34 years), Rocha et al. (2015) (36-37 years), Kim et al. (2006) (42-43 years), Bastié et al. (2013) (35-37 years), Lofstrom et al. (2014) (40-42 years)), albeit much higher than in Hunt & Fund (2012) or Morissette & Hines (2015), who used search fund principals, who are most post-MBA 25-34 year olds, in their research.

In previous research using age as a proxy for accumulated human capital, age exhibited a curvilinear effect, peaking at a certain level, beyond which its effect decreased (Bates T. , 1997). Kim et al. (2006) concluded that age is negatively associated with being a nascent entrepreneur, as aging employees face an intersection of conflicting forces if they are in managerial positions. Other academic research on start-ups shows an inverse U-shaped relationship between age and the decision to become an entrepreneur (Bonte et al., 2009) (Evans & Leighton, 1989) (Levesque & Minniti, 2006). As workers become older, they are more (less) likely to become intrapreneurs/entrepreneurs (Rocha et al., 2015).

Levesque & Minniti (2006) link an individual's age, risk propensity and wealth as triggers for (start-up) entrepreneurship. It is concluded that younger individuals are more likely to start a new firm than older individuals because age reduces the relative return to entrepreneurship. Over a life span, the individual's incentives to starting a new firm declines as the subjective discount rate attached to future earnings from a new firm increases and income from waged labor is likely to increase over time as the individual gains experience and seniority, further reducing the individuals incentives to allocate time to starting a new firm (the so-called "golden cage" phenomenon (van der Schaaf, 2009)). Younger people are thus more active in new firm creation than older ones (Reynolds et al., 2002).

ETA managers will have a different profile as a substantial initial investment is needed to purchase a company. Such available capital, unless due to an inheritance, is generally not present with younger people. Age positively therefore influences the preference for an ETA transaction versus starting from scratch (Block et al., 2013) and the peak entrepreneurship age is 51 for men and 44 for women (Berglann et al., 2011).

Although certain literature (e.g. Bates, 1997) (Kim et al., 2006), considers age as a control variable, we decided to include age here as an independent variable in the model, represented in our model as an integer variable, raw age (as a linear model term),  $age^2$  (as a curvilinear model term) and as a dummy variable (1= 50 years or older, 0= younger than 50). Raw age is transformed by taking the natural logarithm, based on the theory that the likelihood of individuals buying a company increases up to a certain age and plateaus thereafter. Both (Evans & Leighton, 1989) and (Kim et al., 2006) did the same.

We therefore would like to add another hypothesis based on "age" as a moderator or interaction term in the relationship between the (dichotomous) dependent variable, i.e. *whether an individual has acquired a company or not* ("Did you end up acquiring your company?") and one or more independent variables such as "work experience", "entrepreneurial experience" etc. We therefore formulate the hypothesis:

H8: Age moderates the relationship between one or more independent variables and positively moderates the likelihood for the ETA entrepreneur to acquire his/her own company.

#### **3.4.2.3. Control variables**

We included three control variables in our models, which themselves are not of a primary interest to the research perimeter and are kept constant and unchanged throughout our analysis: the respondent's education level and type, as well as gender. We do not include these variables in our hypothesis. In Section

3.1.1 we describe the education variable in more detail and the reason why we do not formulate a hypothesis regarding this human capital variable.

#### *3.4.2.3.1. Education level*

*Education level* is in our descriptive statistics a categorical value indicating the highest level of education completed, ranging from secondary school or less, bachelor degree, master degree or PhD. In order to limit the number of categories, we recoded the two variables “no secondary school” (n=1) and “secondary school” (n=2) into the same variable “secondary school or less”, remaining with four categories. In our inferential statistics, we include education level as an ordinal variable.

#### *3.4.2.3.2. Type of education.*

In our descriptive statistics, we also asked for the type of main education (i.e. business/economics, sciences (including engineering), law, languages, social sciences or other. In order to limit the number of categories, we recoded the variables so that in the inferential statistics, type of education is considered a dummy variable (business/economics =1 or not = 0).

#### *3.4.2.3.3. Gender*

In particular in the US, academic research has been made on the relationship between gender and entrepreneurship. For example, Kim et al. (2006), who treated gender as a control variable, found that women were less likely than men to be a nascent entrepreneur, as men were 1.8 times as likely as women to pursue a new venture in their sample. Reynolds et al. found that women were 60% less likely than men to be nascent entrepreneurs (Reynolds & White, 1997). Another study from Reynolds et al. (2002) shows that adult men in the United States are twice as likely as women to be in the process of starting a new business (Blanchflower, 2004). Even an equal opportunity gender champion as Norway, has an entrepreneurial rate for men almost three times higher than for women (Berglann et al., 2011). Ruback et al. (2016) confirm that also in the case of ETA transactions, few women decide to become entrepreneurs through acquisition.

Block et al. (Block, Thurik, van der Zwan, & Walter, 2013) did conclude that women and men do not differ in their preference for taking over a business (ETA) versus starting a venture.

Although academic research unanimously (for example see also (Parker S., 2009), (Livanos, 2009)) concludes that there are more male nascent entrepreneurs than female, the results found in the context of an ETA seem to confirm this (e.g. Rocha et al. (2015) 65% male). In particular the search fund ETA entrepreneur population is almost entirely male (Yoder & Kelly (2018) 95%+ male, Morrissette & Hines (2015) 100% male). Our study seems to show a similar strong male dominant pattern (93% male), to that extent that due to lack of sufficient gender data, the statistical value of including the gender equation in the analysis is close to nihil.

To study this relationship a stratified sampling should be done to include more woman in the sample. Although, the literature has shown that very few women are indeed nascent ETA entrepreneurs.

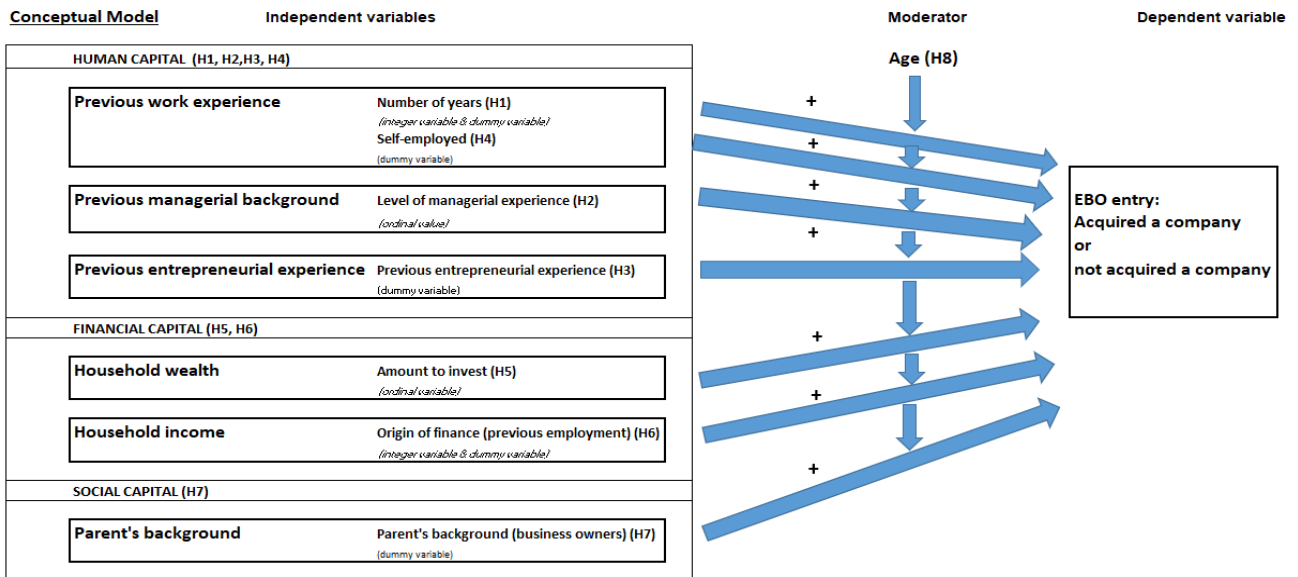
We therefore do not include gender as a (control) variable in our model.

#### **3.4.2.4. Schematic overview of conceptual model**

The table (figure 3.1) here below gives a schematic overview of the conceptual model, i.e. the potential relationships between the dependent and independent variables. It includes two control variables (education level, education type), one potential moderating variable (age). The first column describes the different

elements in the survey, while the second column translates these survey items in the independent variables used in the theory and literature.

Figure 3.1. Conceptual model: Schematic overview of variables



Source: Hans Vanoorbeek

### 3.4.3. Methods

Once the data from the survey were collected, cleaned and analyzed, the hypotheses developed in the previous section and the corresponding statistical relations have been computed by the R software<sup>20</sup>.

The descriptive statistical analysis answers the question ‘who are the individuals in general interested in buying a company?’ and provides a clear view of the characteristics of the (nascent) ETA entrepreneurs and ETA managers.

A standard logistic regression model (Hilbe, 2016) was fitted to answer the research question which independent variables are associated with higher odds of acquiring a company. As mentioned in the previous section, the dependent variable is “whether you did end up acquiring a company or not” with two (binary or dichotomous)<sup>21</sup> categories: “not yet” (coded as 0) and “yes” (coded as 1).

Possible independent variables which have a relationship with the dependent variable “whether you did end up acquiring a company or not” were selected based on literature and personal experience (see section 3.4.2.2). However, these “human, financial and social capital variables” as used in the Survey (see Appendix 2) and mentioned in Figure 1 (first column), are rather diverse and numerous. Many of these variables actually contain several subcategories (multicategorical variables) and have each many terms. Considering the limiting sample size, which is after a thorough cleaning 170 data points, fitting the total model including all these variables would suffer from too many model terms and lead to a heavily overfitted model. An overfitted regression model cannot be generalized and the results are generally ‘too optimistic’ (Frost, 2020).

<sup>20</sup> R is used in the majority of newly published texts on statistics, as well as in most statistical journals published since 2005 (Hilbe, 2016, p. xi). See Chapter 2 on Data collection, Section 2.5.

<sup>21</sup> As opposed to a linear regression which is used when the dependent variable is continuous and the nature of the regression line is linear.

To avoid the inclusion of too many model terms in this study, one should preferably limit the research model to five model terms (including interaction terms and non-linearity terms). This concept is based on the “1:10 rule of thumb” for logistic regressions, i.e. ten events per variable (Harrell, 2015).

Overfitting should mainly be avoided when the goal is to compute predicted values for individual (future) persons, which is not the goal of this study. Here the goal is hypothesis testing, in which avoiding confounding is more important than fitting a slightly overfitted model (Harrell, 2015). Therefore, slightly more than 5 model terms should not be problematic. Some categories were therefore grouped together to have less model terms (e.g. variables industry experience, type of employer, parents background, size of last company, level of managerial background investment) by recoding certain variables into less categories and simplifying the model, using dummy and ordinal variables where appropriate. Also some of the variables contained too few numbers in one or more of the subgroups (e.g. gender: very few women). When there are few numbers in some combination of outcome and predictor variable, sparse data bias might occur. When regrouping is not relevant and the variable is not expected to have a large influence on the dependent variable, this variable is not included in the final model.

In general, a logistic regression has fewer assumptions than a linear regression (normality tests, equality of variances, ...) that need verification after the final model was fitted. Since all observational units are different persons not clustered in groups, we do not expect correlated error terms (i.e. a relation among the respondents).

Also the data was checked for outliers, but since most questions had fixed categories few problematic outliers were detected. Clearly wrong answers (mistakes, such as year instead of number of years) were corrected or removed.

For a full description of the independent variables and an overview of the recoding of the variables, see previous section 3.4.2.

Using these variables, we first ran a univariable logistic regression for each of the variables at a time. In order to get a better view on the relationship between each of the variables, we developed a distribution and correlation analysis of the independent variables. Based on the  $p$ -values of the univariable results and this correlation analysis, a full multivariable logistic regression model was fitted, including eight independent variables. Manual backward selection based on  $p$ -values is used to further improve model fit, comparing different models by different tests such as the likelihood ratio test, AIC (Akaike information criterion), C-statistic, Nagelkerke  $R^2$ , Hosmer & Lemeshow test. After fitting the main effects multivariable logistic regression model, interaction terms were included one-by-one and models with and without interaction terms were compared by the different tests again, leading to a final model. This final model was further improved by centering an independent variable.

The different steps in the determination of the final model are explained in more detail in the next Section 3.5. Results.

### 3.5. Results

#### 3.5.1. Descriptive statistics

In Appendix 3, the complete table with descriptive statistics (before recoding) for the Vlerick data 2013-2018, i.e. the direct answers to the survey questions, is given. This descriptive statistical analysis answers the question “who are the individuals in general interested in buying a company?” and provides a clear view of the characteristics of the (nascent) ETA entrepreneurs and ETA managers.

The descriptive statistics, after recoding and reparameterization of the variables (see Section 3.4.2. Variables) used in the initial logistic regression model, appear in TABLE 3.1 here below.

For binary (dummy) variables the frequencies (and percentages between brackets) are given. For ordinal and integer variables, the mean (and standard deviation), the median, including interquartile ranges<sup>22</sup>, as well the minimum and maximum values are shown. The number of missing values is also indicated in the table.

*Table 3.1. Descriptive statistics for the Vlerick data 2013-2018 on the impact of human, financial and cultural capital on (nascent) ETA entrepreneurship*

	<b>Descriptives recoded variables (N = 170)</b>
<b>Acquired a company?</b>	
Not yet	120 (71)
Yes	50 (29)
<b>work experience</b>	
minimum	2.00
median (IQR)	20.00 (14.75, 25.00)
mean (sd)	20.19 ± 7.27
maximum	40.00
Unknown/Missing	2 (1.18%)
<b>work experience binary</b>	
0	73 (43)
1	95 (57)
Unknown/Missing	2 (1.18%)
<b>level managerial experience</b>	
minimum	1.00
median (IQR)	4.00 (2.00, 5.00)
mean (sd)	3.65 ± 1.76
maximum	6.00
Unknown/Missing	6 (3.53%)
<b>general management experience</b>	
0	83 (50)
1	84 (50)
Unknown/Missing	3 (1.76%)
<b>entrepreneurial experience</b>	
0	78 (47)
1	89 (53)
Unknown/Missing	3 (1.76%)

<sup>22</sup> Interquartile range (IQR) is a measure of statistical dispersion and commonly used robust measure of scale, being equal to the difference between 75<sup>th</sup> and 25<sup>th</sup> percentiles or between upper and lower quartiles.

<b>Descriptives recoded variables (N = 170)</b>	
<b>self employed</b>	
0	54 (32)
1	114 (68)
Unknown/Missing	2 (1.18%)
<b>amount to invest</b>	
minimum	1.00
median (IQR)	2.00 (1.00, 2.00)
mean (sd)	1.92 ± 0.83
maximum	4.00
Unknown/Missing	6 (3.53%)
<b>origin of finance</b>	
minimum	4.00
median (IQR)	9.00 (8.00, 10.00)
mean (sd)	8.98 ± 2.14
maximum	18.00
Unknown/Missing	5 (2.94%)
<b>origin of finance binary</b>	
0	79 (48)
1	86 (52)
Unknown/Missing	5 (2.94%)
<b>parents background</b>	
0	121 (72)
1	46 (28)
Unknown/Missing	3 (1.76%)
<b>education level</b>	
minimum	1.00
median (IQR)	3.00 (3.00, 3.00)
mean (sd)	2.93 ± 0.46
maximum	4.00
Unknown/Missing	2 (1.18%)
<b>education type</b>	
0	74 (44)
1	94 (56)
Unknown/Missing	2 (1.18%)
<b>age</b>	
minimum	27.00
median (IQR)	45.00 (38.00, 51.00)
mean (sd)	44.63 ± 7.43
maximum	64.00
Unknown/Missing	2 (1.18%)
<b>age binary</b>	
0	113 (67)
1	55 (33)
Unknown/Missing	2 (1.18%)

### 3.5.2. Univariable logistic regression

The table below TABLE 3.2 shows the results of the univariable regression model, showing the relationship between one dichotomous dependent variable (“Acquired a company or not? Not yet/yes”) and one independent variable at the time.

Table 3.2. Univariable logistic regression for the Vlerick data 2013-2018 on the impact of human, financial and cultural capital on (nascent) ETA entrepreneurship

Acquired a company or not?		Not yet	Yes	OR (univariable)
work.experience	Mean (SD)	19.7 (7.1)	21.4 (7.7)	1.03 (0.99-1.08, $p=0.177$ )
LN.work.experience	Mean (SD)	2.9 (0.4)	3.0 (0.4)	1.58 (0.73-3.72, $p=0.268$ )
work.experience.binary	0	56 (76.7)	17 (23.3)	-
	1	62 (65.3)	33 (34.7)	1.75 (0.89-3.54, $p=0.110$ )
level.managerial.experience	Mean (SD)	3.6 (1.7)	3.8 (1.8)	1.07 (0.89-1.30, $p=0.476$ )
general.management.experience	0	63 (75.9)	20 (24.1)	-
	1	55 (65.5)	29 (34.5)	1.66 (0.85-3.29, $p=0.141$ )
entrepreneurial.experience	0	56 (71.8)	22 (28.2)	-
	1	62 (69.7)	27 (30.3)	1.11 (0.57-2.18, $p=0.763$ )
self.employed	0	47 (87.0)	7 (13.0)	-
	1	71 (62.3)	43 (37.7)	<b>4.07 (1.78-10.57, <math>p=0.002</math>)</b>
amount.to.invest	Mean (SD)	1.8 (0.8)	2.1 (0.9)	<b>1.57 (1.05-2.38, <math>p=0.028</math>)</b>
origin.of.finance	Mean (SD)	8.9 (2.1)	9.2 (2.3)	1.07 (0.92-1.25, $p=0.385$ )
origin.of.finance.binary	0	58 (73.4)	21 (26.6)	-
	1	59 (68.6)	27 (31.4)	1.26 (0.64-2.50, $p=0.497$ )
parents.background	0	89 (73.6)	32 (26.4)	-
	1	29 (63.0)	17 (37.0)	1.63 (0.78-3.35, $p=0.185$ )
education.level	Mean (SD)	2.9 (0.4)	2.9 (0.6)	0.83 (0.41-1.72, $p=0.599$ )
education.type	0	53 (71.6)	21 (28.4)	-
	1	65 (69.1)	29 (30.9)	1.13 (0.58-2.21, $p=0.728$ )
age	Mean (SD)	44.0 (7.3)	46.1 (7.7)	1.04 (0.99-1.09, $p=0.101$ )
age <sup>2*</sup>	Mean (SD)	1990.1 (643.3)	2180.8 (698.0)	1.00 (1.00-1.00, $p=0.090$ )
age.binary (>50)**	0	85 (75.2)	28 (24.8)	-
	1	33 (60.0)	22 (40.0)	<b>2.02 (1.01-4.04, <math>p=0.045</math>)</b>

\*We also considered age<sup>2</sup> given the relation is not linear, rather curvilinear

\*\*The age variable was recoded and split in three categories: 50+, 40-49 and <40 years. A significant univariable relationship was detected: respondents of 50 years and older showed higher odds of acquiring a company compared to respondents between 40 and 49 years. From 50 years onwards, a significant relationship became apparent.

Based on the OR's (odds ratio's) of the univariable regression<sup>23</sup>, significant relationships are observed for three variables: "self-employed", "amount to invest" and "age.binary (>50)", having an OR of respectively 4.07, 1.57 and 2.02 (i.e. the odds of acquiring a company having these characteristics are x higher than the odds of acquiring a company not having these characteristics). The conclusions of significance are based on  $p$ -values<sup>24</sup> < 0.05 (see bold  $p$ -values).

<sup>23</sup> An odds ratio (OR) in a logistic regression is a measure of the strength of association with an exposure (constant effect of a predictor X) and the likelihood that one outcome will occur. OR > 1 means greater odds of association with the exposure and outcome. OR = 1 means there is no association between exposure and outcome. OR < 1 means there is a lower odds of association between the exposure and outcome.

<sup>24</sup> When you perform a hypothesis test in statistics, a  $p$ -value helps you determine the significance of your results. The  $p$ -value is a number between 0 and 1 and interpreted in the following way: A small  $p$ -value (typically  $\leq 0.05$ ) indicates strong evidence against the null hypothesis (no effect), so you reject the null hypothesis (a hypothesis that proposes that no statistical significance exists in a set of given observations e.g. no variation exists between variables or that a single variable is no different than its mean, in other words the idea that a theory being tested is false).

Univariable preselection of variables based on  $p$ -values is a common used method, as univariable models may help to check whether important relationships are present and comparing the effect sizes between univariable and multivariable models may reveal confounding, mediation, moderation, sparse data bias or suppression (Heinze & Dunkler, 2017). Therefore, both univariable and multivariable models are fitted.

Although Harrell et al. (2015) clearly state that univariable preselection is not always recommended since it is not a solution against overfitting (degrees of freedom are lost anyway), it should at least be performed in a conservative way by using high  $p$ -values. However, together with a correlation table (see here below in 3.5.3.) the results of the univariable model are used here to detect which one of similar variables can be included in the full multivariable model.

### 3.5.3. Distribution and correlation between independent variables

The distribution and Spearman<sup>25</sup> correlations of the most important independent variables (dummy, ordinal or continuous variables) is visualized in the figure below FIGURE 3.2. Spearman correlations are chosen instead of Pearson correlations because many variables are ordinal with only a few categories or binary.

One of the advantages of the R computing software is that such an overview table is quite easily generated and provides us with a true visualization of the relationships, allowing for a better comprehension of the relations under investigation. The table reads as follows:

- On the diagonal, the distribution of each independent variable is shown.
- Above the diagonal the Spearman correlation coefficient is shown, with larger font size when the coefficient is higher. Asterisks represent the  $p$ -values of the Spearman correlation coefficient (\*\* $<0.001$ , \*\*  $<0.01$ , \* $<0.05$ ).
- Below the diagonal, a scatter plot visualizes the bivariate relationship between 2 variables.

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<sup>25</sup> Spearman correlation is the non-parametric version of the (linear) Pearson product-moment correlation. The Pearson coefficient can evaluate only a linear relationship (a change in one variable is associated with a proportional change (constant rate) in the other variable) between the two variables whereas the Spearman Coefficient works with a monotonic (variables tend to change together, but not necessarily at a constant rate) relationship.



Figure 3.2. Correlation and distribution between the independent variables

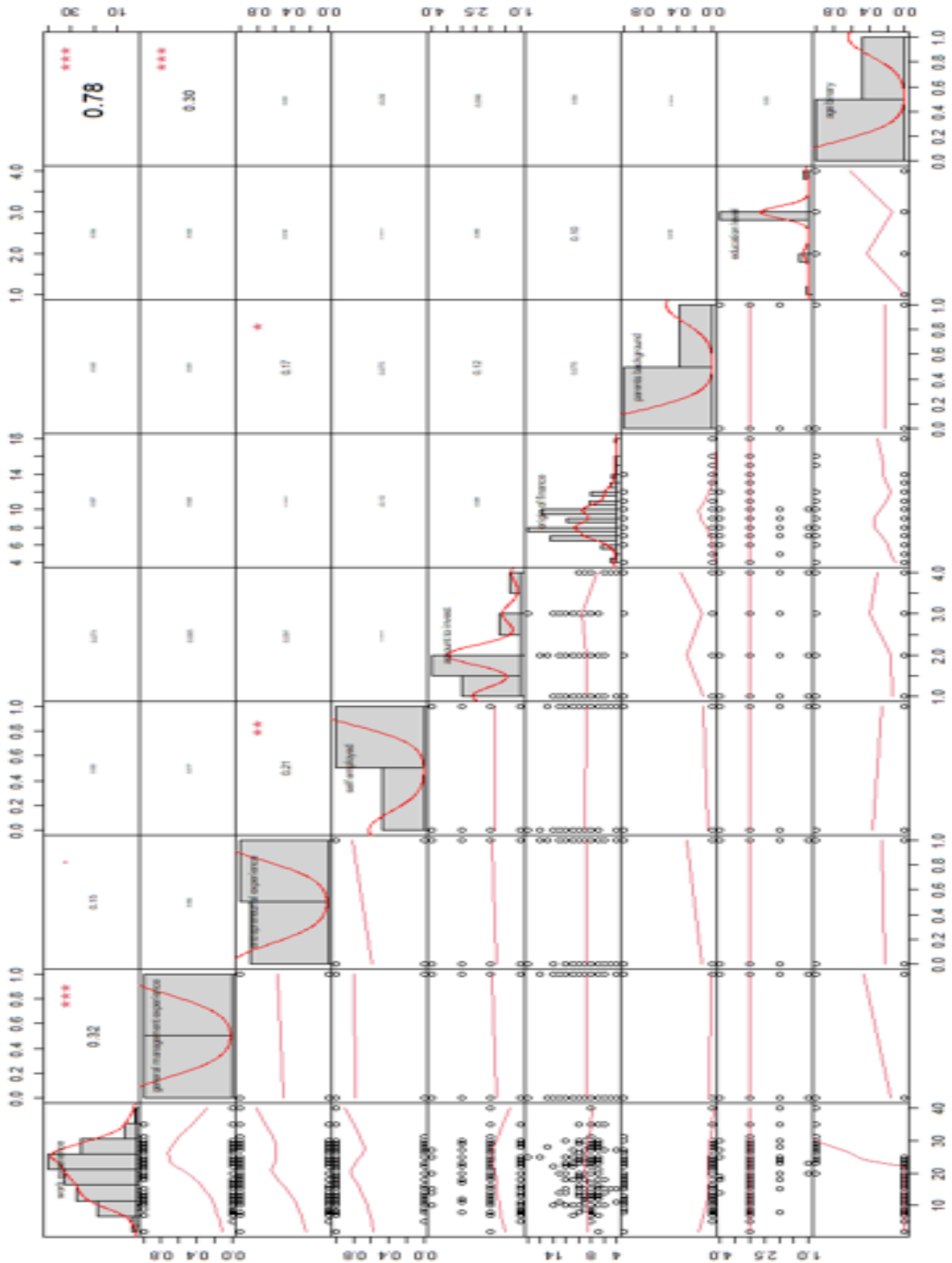


TABLE 3.3. provides in another format an additional overview of the pairwise Spearman correlation coefficients of the independent variables<sup>1</sup>, whereby -1 and +1 indicates a perfectly negative/positive correlation and 0 indicates the absence of any correlation. Asterisks represent the  $p$ -values of the Spearman correlation coefficient (\*\* $< 0.001$ , \*\*  $< 0.01$ , \*  $< 0.05$ ).

Table 3.3. Spearman correlation coefficients for the independent variables analyzing the impact of human, financial and cultural capital on (nascent) ETA entrepreneurship

	work experience	general management experience	entrepreneurial experience	self employed	amount to invest	origin of finance	parents background	education level	age binary
work experience	<u>1.00</u>	0.31***	0.14*	0.02	0.07	0.03	-0.05	-0.02	<b>0.79***</b>
general management experience	0.31	<u>1.00</u>	0.04	0.01	0.08	0.05	-0.04	-0.03	0.30***
entrepreneurial experience	0.14	0.04	<u>1.00</u>	0.21**	0.09	0.00	0.17	0.03	0.02
self employed	0.02	0.01	0.21	<u>1.00</u>	0.00	-0.10	0.07	0.01	-0.08
amount to invest	0.07	0.08	0.09	0.00	<u>1.00</u>	0.03	0.12	-0.09	0.10
origin of finance	0.03	0.05	0.00	-0.10	0.03	<u>1.00</u>	0.08	0.10	-0.02
parents background	-0.05	-0.04	0.17*	0.07	0.12	0.08	<u>1.00</u>	0.04	-0.02
education level	-0.02	-0.03	0.03	0.01	-0.09	0.10	0.04	<u>1.00</u>	0.05
age binary	<b>0.79</b>	0.30	0.02	-0.08	0.10	-0.02	-0.02	0.05	<u>1.00</u>

<sup>1</sup> The numbers are slightly different coefficients than in the visualized table given that another function and rounding was used.

With the exception of the relation between “work experience” and “age”, the correlation table indicates that the correlation coefficients between all the variables are rather small, showing a weak or no correlation. However, the very high correlation between age as a dummy variable (50 years) and work experience, showing a spearman correlation coefficient of 0.79, could indicate a possible multicollinearity problem. It is important to check multicollinearity when specific associations between some independent variables and the dependent variables are interpreted. Multicollinearity should be avoided when testing hypotheses as it could undermine the statistical significance of an independent variable. Multicollinearity between independent variables may lead to inflated standard errors, and important relationships may be missed because *p*-values are too large.

Multicollinearity can be tested easily between continuous variables (or dichotomous variables) using Pearson or the above used Spearman correlations and calculating variance inflation factors (VIF). In this study, most independent variables are categorical with more than two groups and testing multicollinearity through a VIF test is not so straightforward.

In order to obtain further confirmation of this multicollinearity problem, we performed two additional analyses made in R (not included here), where we analyzed two variants of this relationship by measuring, firstly, the correlation between age (this time as an integer variable) and work experience, leading to an even stronger (Pearson) correlation coefficient of 0,95 and, secondly, measuring the correlation between age binary and work experience binary, leading equally to a relatively high (Spearman) correlation coefficient of 0,61.

### 3.5.4. Multivariable logistic regression

#### 3.5.4.1. Extended model

Based on the results of the univariable logistic regression (see 3.5.2.) and the correlation table (see 3.5.3.), an extended model was fitted in TABLE 3.4, having eight independent variables. The human capital variables in this model are all independent variables selected using literature (mentioned in Section 3.4.2.), for which a direct and causal relationship with the odds of acquiring a company seems reasonable.

However, some of these variables can be confounders for the relationship between other independent variables and the dependent variable, causing a spurious association. As the correlation between “age” and

“years of work experience” is very strong, which intuitively makes sense (age is an approximation of years of work experience) and in previous research confirmed (Wassim, 2009) (Kim et al., 2006), in order to avoid multicollinearity, we do not include both variables in the multivariable model. We therefore only include “age” as a binary variable (1: >=50 versus 0: <50 years) as an independent variable in the model, given its clear relationship in the univariable and multivariable models and its support as a variable by other scholars (see 3.4.2.2.1), while excluding the “work experience” variable in the model.

Also following the univariable regression results (*p*-values), the binary variable “general management experience” is included instead of “level of managerial experience”, the independent variable “origin of finance” is included as an integer variable instead of a dummy variable and “education level” is included instead of “education type”.

In a further attempt to further improve the model fit and experiment with alternative variables, we refitted the model using “work experience” as a binary variable instead of “age” as a binary variable as mentioned above. The resulting model fit did not improve and was therefore not kept in our analysis.

*Table 3.4. Multivariable logistic regression for the Vlerick data 2013-2018 on the impact of human, financial and cultural capital on (nascent) ETA entrepreneurship: Extended model*

Acquired a company or not?		Not yet	Yes	OR (multivariable)
general.management.experience	0	63 (75.9)	20 (24.1)	-
	1	55 (65.5)	29 (34.5)	1.49 (0.69-3.29, <i>p</i> =0.312)
entrepreneurial.experience	0	56 (71.8)	22 (28.2)	-
	1	62 (69.7)	27 (30.3)	0.71 (0.32-1.53, <i>p</i> =0.385)
self.employed	0	47 (87.0)	7 (13.0)	-
	1	71 (62.3)	43 (37.7)	<b>7.16 (2.66-22.98, <i>p</i>&lt;0.001)</b>
amount.to.invest	Mean (SD)	1.8 (0.8)	2.1 (0.9)	1.50 (0.97-2.37, <i>p</i> =0.072)
origin.of.finance	Mean (SD)	8.9 (2.1)	9.2 (2.3)	1.18 (0.99-1.42, <i>p</i> =0.070)
parents.background	0	89 (73.6)	32 (26.4)	-
	1	29 (63.0)	17 (37.0)	1.62 (0.71-3.68, <i>p</i> =0.247)
education.level	Mean (SD)	2.9 (0.4)	2.9 (0.6)	0.67 (0.30-1.49, <i>p</i> =0.316)
age.binary	0	85 (75.2)	28 (24.8)	-
	1	33 (60.0)	22 (40.0)	2.42 (1.05-5.69, <i>p</i> =0.038)

**Model specifications:**

Number in dataframe = 170, Number in model = 164, Missing = 6

AIC<sup>26</sup> = 186.5

C-statistic<sup>27</sup> = 0.762

H&L<sup>28</sup> = 5.51 (*p*=0.702) (= >0.05)

Nagelkerke R<sup>2</sup> <sup>29</sup>= 0.29

<sup>26</sup> AIC (Akaike information criterion), the most well-known and well used mean for model selection founded on information theory and an estimator of the relative quality of statistical models for a given set of data (Hilbe, 2016). The AIC function is  $2k^{26} - 2(\log\text{-likelihood})$ . AIC deals with the trade-off between the goodness of fit of the model and the simplicity of the model. Although the absolute value of the AIC number has no meaning as such, a decrease in the AIC across models indicated improvements in model fit. Therefore, the preferred model is the one with the minimum AIC value.

<sup>27</sup> The concordance C-statistic (this is the “area under the receiver operating characteristic curve (ROC)”) indicates good discrimination of the models (Zach, 2019). The minimum value of C is 0.0 and the maximum is 1.0. C-values of 0.7 to 0.8 to show acceptable discrimination, values of 0.8 to 0.9 to indicate excellent discrimination, and values of  $\geq 0.9$  to show outstanding discrimination. In our models, we reach C-levels which are within the range of acceptance.

<sup>28</sup> The Hosmer & Lemeshow goodness-of-fit test indicates a good fit for logistic regression models as it determine if the differences between observed and expected proportions are significant, indicating model lack of fit. A *p*-value greater than 0.05 indicate a well-fitted model (Hilbe, 2016), which is the case in our analysis. For more info on the Hosmer-Lemeshow in R see (Bartlett, 2014)

<sup>29</sup> Nagelkerke R<sup>2</sup> is an adapted Cox & Snell test, giving power of explanation of the model, evaluating the goodness of fit of the logistic model, the higher r-squared indicates a better fit for the model.

### 3.5.4.2. Model after backward selection

In order to improve the model fit, manual backward selection<sup>30</sup> based on  $p$ -values is applied. Independent variables are removed on-by-one starting with the highest  $p$ -value in the multivariable model. The smaller model is then compared with the previous model by a likelihood ratio test<sup>31</sup>: in case the smaller model is not significantly different from the more complex model, it can be decided to keep the more parsimonious model<sup>32</sup>. Different models were also compared using AIC, C-statistic and Nagelkerke  $R^2$ , as well as Hosmer & Lemeshow test results.

Variables were removed in the following order:

- 1) Entrepreneurial experience
- 2) Education level (this variable is a control variable in theory, however in the sample of this study most respondents are highly educated and variability of the variable is therefore low. Hence, the variable is removed from the model, see 3.4.2.3.)
- 3) Parents background
- 4) General management experience

Based on the backward stepwise variable selection protocol as mentioned here above, a (smaller) more parsimonious main effects model is obtained as shown in TABLE 3.5.

*Table 3.5. Multivariable logistic regression for the Vlerick data 2013-2018 on the impact of human, financial and cultural capital on (nascent) ETA entrepreneurship: main effects model after backward selection*

Acquired a company or not?		Not yet	Yes	OR (multivariable)
self.employed	0	47 (87.0)	7 (13.0)	-
	1	71 (62.3)	43 (37.7)	<b>6.46 (2.52-19.58, <math>p&lt;0.001</math>)</b>
amount.to.invest	Mean (SD)	1.8 (0.8)	2.1 (0.9)	<b>1.57 (1.02-2.44, <math>p=0.043</math>)</b>
origin.of.finance	Mean (SD)	8.9 (2.1)	9.2 (2.3)	1.16 (0.98-1.39, $p=0.091$ )
age.binary	0	85 (75.2)	28 (24.8)	-
	1	33 (60.0)	22 (40.0)	<b>2.48 (1.15-5.46, <math>p=0.022</math>)</b>

**Model specifications:**

Number in dataframe = 170, Number in model = 164, Missing = 6

AIC = 182.2,

C-statistic = 0.744

H&L = 2.56 ( $p=0.959$ )

Nagelkerke  $R^2$  = 0.26

As a robustness check, a similar forward selection<sup>33</sup> is used to test if the same final main effects model was obtained, which was the case.

<sup>30</sup> Backward stepwise selection (or backward elimination) is a variable selection method which: begins with a model that contains all variables under consideration (called the Full Model) until a pre-specified stopping rule is reached or until no variable is left in the model.

<sup>31</sup> A test to check goodness of fit of two competing statistical models base on the ratio of their likelihoods, whereby the initial model is the null model and the predictive model is the alternative model.

<sup>32</sup> Parsimonious models are simple models with great explanatory predictive power. They explain data with a minimum number of parameters, or predictor variables.

<sup>33</sup> Forward selection begins with an empty model. Predictors are added one at a time beginning with the predictor with the highest correlation with the dependent variable. Once in the equation, the variable remains there.

### **3.5.4.3. Model including interactions**

After fitting the main effects, it is important to check for interactions<sup>34</sup> between independent variables. When the association between an independent variable and the dependent variable is different for different levels of a third variable, a moderating effect is present (e.g. when the relationship between managerial background and the odds of acquiring a company differs for older people compared to younger people). In this study we follow the standard protocol that after fitting a final model including all important main effects, interactions between the final main effects are tested, keeping in mind the limiting sample size.

After fitting the improved main effects model, interaction terms were included one-by-one in the model. Different models with and without interaction terms were compared by a likelihood ratio test: in case the model having an interaction term is significantly different from the model without the interaction term, it was decided to keep the interaction in the model. In case the model having an interaction term is not significantly different from the model without the interaction term, the interaction term is further disregarded. Different models were equally compared using AIC, C-statistic and Nagelkerke  $R^2$ , as well as Hosmer & Lemeshow test results.

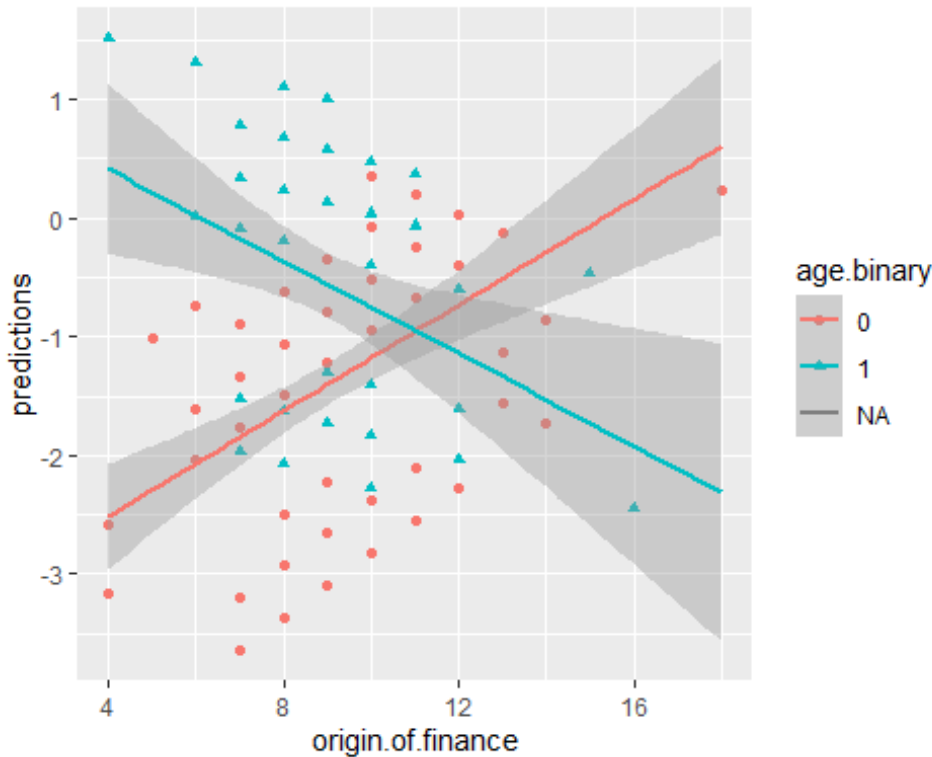
After testing these different combinations of variables and interaction terms, one interaction term appeared to further improve the model: “age” and “origin of finance”. This interaction makes also theoretically sense: older respondents may have a different relationship between “origin of finance” and the odds of acquiring a company than younger respondents.

The interaction term between “age” and “origin of finance” was visualized for interpretation showing outcome predictions in log odds versus origin of finance by age group. FIGURE 3.4 clearly shows that the relationship between origin of finance (i.e. self-made money) and the odds to acquire company are different for different age groups. It seems that a higher total score on origin of finance (i.e. self-made money) is associated with higher odds of acquiring a company, especially for respondents younger than 50 (red color). For respondents older than 50 (blue color) it seems that there is an opposite relationship.

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<sup>34</sup> Interactions i.e. whether the effect on one variable on an outcome depends on the value of another (that is, when effects of the two causes are not additive).

Figure 3.3. Interaction term illustrated



The final model, as shown in TABLE 3.6., is similar to the improved model but includes a weak significant interaction between age (binary) and “origin of finance” (showing a borderline  $p$ -value of 0.057) and showing very strong odds for the variables “self-employed” and “age.binary”.

Table 3.6. Multivariable logistic regression for the Vlerick data 2013-2018 on the impact of human, financial and cultural capital on (nascent) ETA entrepreneurship: Model including interactions

Acquired a company or not?		Not yet	Yes	OR (multivariable)
self-employed	0	47 (87.0)	7 (13.0)	-
	1	71 (62.3)	43 (37.7)	<b>6.51 (2.53-19.77, <math>p&lt;0.001</math>)</b>
amount.to.invest	Mean (SD)	1.8 (0.8)	2.1 (0.9)	1.54 (0.99-2.44, $p=0.056$ )
origin.of.finance	Mean (SD)	8.9 (2.1)	9.2 (2.3)	<b>1.31 (1.06-1.65, <math>p=0.013</math>)</b>
age.binary	0	85 (75.2)	28 (24.8)	-
	1	33 (60.0)	22 (40.0)	<b>73.80 (2.37-3268.82, <math>p=0.018</math>)</b>
origin.of.finance:age.binary1	Interaction	-	-	0.69 (0.46-1.00, $p=0.057$ )

**Model specifications:**

Number in dataframe = 170, Number in model = 164, Missing = 6

AIC = 180.2

C-statistic = 0.754

H&L = 5.91 ( $p=0.658$ )

Nagelkerke  $R^2= 0.29$

The goodness-of-fit statistics, measuring discrepancy between observed values and the values expected under the model in question, reveal here a good fit of the final models. For example, the concordance C-statistic indicates a good discrimination of the models (Zach, 2019). The minimum value of C is 0.0 and the maximum is 1.0. C-values of 0.7 to 0.8 to show acceptable discrimination, values of 0.8 to 0.9 to indicate excellent discrimination, and values of  $\geq 0.9$  to show outstanding discrimination. In our models, we reach C-levels (0.754) which are well within the range of acceptance. The Hosmer & Lemeshow goodness-of-fit test equally indicates a good fit for logistic regression models as it determines if the differences between

observed and expected proportions are significant, indicating model lack of fit. A  $p$ -value greater than 0.05 indicate a well-fitted model (Hilbe, 2016), which is the case in our analysis ( $p=0.658$ ).

In the table here above, it is clear that the confidence interval of age.binary (i.e. 2.37-3268.82) in the table is very large, due to the large standard error caused by the existence of a structural multicollinearity between the main terms (age and origin of finance) and interaction terms. Therefore, we decided to center (i.e. subtracting the mean value from every value of the variable) the “origin of finance” variable in order to refit the model and ideally further improve it by reducing the correlation between the variables and their interaction terms. The model specifications remain identical after the centering. See TABLE 3.7. for the final model with centered variable.

*Table 3.7. Multivariable logistic regression for the Vlerick data 2013-2018 on the impact of human, financial and cultural capital on (nascent) ETA entrepreneurship: Model including interaction and centered variable*

<b>Acquired a company or not?</b>	<b>OR (multivariable without interaction)</b>	<b>OR (multivariable with interaction)</b>
self.employed	<b>6.46 (2.52-19.58, p&lt;0.001)</b>	<b>6.51 (2.53-19.77, p&lt;0.001)</b>
amount.to.invest	<b>1.57 (1.02-2.44, p=0.043)</b>	1.54 (0.99-2.44, p=0.056)
origin.of.finance (ct)	1.16 (0.98-1.39, p=0.091)	<b>1.31 (1.06-1.65, p=0.013)</b>
age.binary	<b>2.48 (1.15-5.46, p=0.022)</b>	<b>2.54 (1.16-5.66, p=0.021)</b>
origin.of.finance:age.binary		0.69 (0.46-1.00, p=0.057)

**Model specifications:**

Number in dataframe = 170, Number in model = 164, Missing = 6

AIC = 180.2

C-statistic = 0.754

H&L = 5.91 ( $p=0.658$ )

Nagelkerke  $R^2= 0.29$

It remains worthwhile to mention that the interaction between age (binary) and “origin of finance” only shows a weak significant relationship (showing a borderline  $p$ -value of 0.057).

**3.5.5. Conclusions regarding Hypotheses**

The following statistical significant relationships can be concluded from the models:

- Current self-employment is associated with higher odds of acquiring a company.
- The higher the amount to invest the higher the odds of acquiring a company.
- Respondents of 50 years or older have higher odds of acquiring a company than respondents younger than 50.

When we translate these findings into the acceptance or rejection of the formulated hypotheses (see Section 3.3.1.):

***H1: There is a positive relationship between number of years work experience and ETA entrepreneurial entry (Section 3.3.1.2.)***

Not confirmed by the logistic regression models, however, age as a binary variable ( $\geq 50$  years or not) has a positive relationship with ETA entrepreneurial entry.

According to the descriptive statistics, the nascent ETA entrepreneurs are on average 45 years old and have on average 20 years of work experience under their belt, with a median of respectively equally 45 and 20

years. Compared to other academic (mainly search fund related) research on the nascent ETA managers, the average age in our survey is relatively high. Our descriptive statistics equally shows the raw age for the two groups, indicating a slightly higher median age for the people acquiring a company, however, the difference is small.

***H2: There is a positive relationship between managerial work experience and ETA entrepreneurial entry (Section 3.3.1.3.)***

Not confirmed by the logistic regression models

***H3: Individuals with prior start-up experience or (previous or actual) shareholdings in businesses will have a higher likelihood of ETA entrepreneurial entry than people without such experience (Section 3.3.1.4.)***

Not confirmed by the logistic regression models.

Our analysis of the data shows in the descriptive statistics that around one third of the (nascent) ETA entrepreneurs has some previous start-up experience and almost two thirds could envisage to (co)found a venture/start-up sometime in the future. Almost one third of them has been a minority or majority shareholder in another venture. Similar numbers were found in the literature. For example, in Bastié et al. (2013) around one fifth of the takeover entrepreneurs had previously already started a company.

***H4: Individuals who are self-employed have a higher likelihood of ETA entrepreneurial entry than individuals who are not self-employed (Section 3.3.1.4.)***

Confirmed by the logistic regression models.

Also Kim et al. (Kim, Aldrich, & Keister, 2006) also concluded in their research that individuals who were self-employed were much more likely to be nascent entrepreneurs, depending on the hours they spent working for others. Working for others, especially on a full-time basis, would interfere with current owner's ability to allocate time to starting a new venture. In our survey, more than two thirds (67,85%) are self-employed in one form or another, and therefore have more liberty to allocate some time to spend on looking, analyzing an ETA target.

***H5: Financial capital, i.e. the amount the (nascent) ETA entrepreneur is prepared to invest, has a positive association with the likelihood of ETA entrepreneurial entry (Section 3.3.2.1.)***

Confirmed by the logistic regression models

The descriptive statistics in our survey (see Appendix 3), which indicates that ETA entrepreneurs who acquired a company invested more than the ones who are still looking are prepared to invest. Respectively, 23% and 35% does not want to invest more than €200k and 29%/34% between €200k and 400k. Approximately 48%/30% want to invest more than 400k in the business they want to acquire. However, most likely, it is not a matter of "wanting to invest", but rather "are not able to invest" due to lack of available funds. One can conclude from these figures that the people who ended up acquiring a business were prepare to invest more substantial amounts, or rather had more funds available, than the ones who are still looking.



***H6: Individuals who made their money (financial capital) through their previous employment career, have a higher likelihood to acquire their own company (Section 3.3.2.2.)***

Confirmed by the logistic regression models, but the relationship seems more significant for respondents younger than 50 years (see also H8 with “Age” as a moderator).

Current research has been focusing on start-ups, not on ETA transactions. Our descriptive statistics, clearly show that the most important source of funds of the ETA managers are the personal savings due to previous employment careers. As the surveyed nascent ETA entrepreneurs are on average forty-six years old, they have already had a long career where they were able to save some money. The second source of funds does come from the partner. Inherited money or a remortgage of a house has a relatively small impact. This is in line with Kim et al. (2004). Through another separate linear regression model (not shown here), we equally analyzed the relation between the origin of the equity contribution and the amount of money one is prepared to invest: individuals scoring higher on ‘Inherited money’ are willing to commit less money. The other factors do not seem statistically conclusive, although money derived from personal savings, a remortgage of the house or partner financing is equally invested more prudently, as these factors show lower *p*-values.

***H7: Individuals with parents who were/are business owner/self-employed are more likely to acquire their own company (Section 3.3.3.)***

Not confirmed by the logistic regression models

The descriptive statistical analysis shows that almost 30% of the parents have a rather “self-employed” background, i.e. 27.54% of the parents are business owners and 13.77% have a professional services background. A possible explanation, applicable for ETAs (as opposed to start-ups), is the age at entry. According to our data in the descriptive statistics, the average age of a (nascent) ETA entrepreneur is 46 years. At that stage, the individuals have already experienced a long independent career and are therefore less influenced by their parent’s background. Moreover, our data show that most of the ETA entrepreneurs are coming from large or even very large organizations.

***H8: Age moderates the relationship between one or more independent variables and positively moderates the likelihood for the ETA entrepreneur to acquire his/her own company (Section 3.4.2.2.4.)***

Confirmed by the logistic regression models.

The relationship between origin of finance (i.e. self-made money) and the odds to acquire company is different for different age groups. Indeed, after testing different combinations of variables and interaction terms, one interaction term appeared to further improve the model: “age” and “origin of finance”. This interaction makes also sense: older respondents may have a different relationship between “origin of finance” and the odds of acquiring a company than younger respondents. A higher total score on origin of finance (i.e. self-made money) is associated with higher odds of acquiring a company, especially for respondents younger than 50. For respondents older than 50 it seems that there is an opposite relationship.

**3.5.6. Robustness check**

In order to test the robustness of our model, we have performed different actions.

Firstly, as explained in 3.5.2., our final multivariable model was guided by the *p*-values of the univariable model, which helped to determine the right variables for the final model. Indeed, in the inferential statistics,

we measured the work experience variable, both as an integer variable (in years), as a logarithm of the variable (to get rid of the outliers) and as a dummy variable, based on a value higher or lower than the median value. No significant relationships were detected for all variables.

Also, the variable origin of finance was included in the model as integer variable and as dummy variable (higher or lower than the median).

Age was included in the model as raw age, as LN (age), as age + age<sup>2</sup> (curvilinear) as dummy (1= 50 years or older, 0= younger than 50), as the age variable was also split in three categories: 50+, 40-49 and <40 years. A significant univariable relationship was detected: respondents of 50 years and older showed higher odds of acquiring a company compared to respondents between 40 and 49 years. From 50 years onwards, a significant relationship became apparent.

Secondly, after improving the model by the manual backward selection (see Section 3.5.4.2.), we executed a similar forward selection guided by the same hypotheses, as an additional robustness check, in order to test if the same final main effects model was obtained, which was the case.

Thirdly, we compared the many different variations of the model by the different goodness-of-fit statistics such as AIC, C-statistic, H&L and Nagelkerke (as explained in 3.5.4.3.) in order to find the optimal model.

Finally, we decided to use an additional linear regression as a robustness check of the logistic regression performed here above. In a recently published paper by R. Gomila (Gomila, 2020) it was suggested that a linear regression based on OLS<sup>35</sup> estimation can be used to assess treatment effects on binary outcomes. Gomila states that, drawing on econometric theory and established statistical findings, that linear regression is generally the best strategy to estimate causal effects of treatments on binary outcomes, as linear coefficients are directly interpretable in terms of probabilities and, when interaction terms are included - which is the case here - linear regression is safer. Although OLS estimation for binary outcomes is not commonly used in the study field here represented (business/economics), the full logistic regression model shown above is re-estimated using OLS linear regression. The model contains 8 variables and is slightly overfitted according to the 'one in ten rule' for logistic regression (only 50 events), but is not overfitted when using linear regression (170 observations).

The linear regression model, as shown in TABLE 3.8, gives similar results (similar significant p-values for the same independent variables - see bold) as the logistic regression model, indicating *that* the achieved results of the logistic regression are confirmed to be robust. Therefore, the methodology using logistic regression (see Section 3.5.2. to 3.5.4.) will be kept.

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<sup>35</sup> OLS (Ordinary Least Squares) regression is a statistical method of analysis that estimates the relationship between one or more independent variables and a dependent variable. The method estimates the relationship by minimizing the sum of the squares of the difference between the observed and predicted values of the dependent variable configured as a straight line.

Table 3.8. Multivariable linear regression for the Vlerick data 2013-2018 on the impact of human, financial and cultural capital on (nascent) ETA entrepreneurship: Linear regression

Acquired a company or not?		Coefficient (multivariable)
general.management.experience	0	-
	1	0.07 (-0.07 to 0.21, $p=0.350$ )
entrepreneurial.experience	0	-
	1	-0.05 (-0.19 to 0.09, $p=0.454$ )
self.employed	0	-
	1	<b>0.29 (0.15 to 0.44, <math>p&lt;0.001</math>)</b>
amount.to.invest	[1.0,4.0]	<b>0.08 (-0.01 to 0.16, <math>p=0.070</math>)</b>
origin.of.finance	[4.0,18.0]	0.02 (-0.01 to 0.06, $p=0.124$ )
parents.background	0	-
	1	0.10 (-0.06 to 0.25, $p=0.219$ )
education.level	[1.0,4.0]	-0.06 (-0.21 to 0.09, $p=0.412$ )
age.binary	0	-
	1	<b>0.15 (0.00 to 0.30, <math>p=0.048</math>)</b>

**Model specifications:**

Number in dataframe = 170, Number in model = 164, Missing = 6

Log-likelihood = -89.3

AIC = 198.6

R-squared = 0.16, Adjusted R-squared = 0.12

### 3.5.7. Factor analysis

As we have many variables in our model, in order to explore whether the amount of variables could be reduced, an exploratory factor analysis (EFA) was performed (using the R-package 'psych') in order to see whether there is a more general pattern underlying the independent variables (not represented in the thesis). Factor analysis indeed can help to answer the question whether different scales can be distinguished and whether these scales correspond to the 3 categories derived from the literature: Human Capital, Financial Capital and Social Capital.

The results of factor analysis do not show a clear distinction between the 3 categories of Capital (as suggested by the academic literature).

Moreover, additional analyses including all original variables and a variable number of factors (e.g. 4-7 factors) did equally not result in a satisfactory outcome.

We therefore can conclude that our analysis using logistic regression with all variables separately included in the model is the preferred research method for this chapter.

### 3.5.8. Additional analysis

We equally performed a regression (data not in thesis) on two additional variables on the likelihood of acquiring a company (Q64): i.) Whether they attended the conference or the academy (Q66) (for more information see Chapter 2 on data collection) and ii.) How much time the nascent ETA entrepreneurs spent (expressed in FTE days) on looking at possible acquisition targets the year before they were looking or acquiring their own company (as stated in Q67 and Q74).

We could have included these variables as control variables in the full model. However, if these variables have no relation with the dependent variable, it seems preferable not to include them as the full model has

already many variables. Therefore an univariable regression was done to first check if there is a significant relation between acquiring a company or not and the possible additional control variables.

- i. Regarding the attendance of the conference or the academy, we did not find any significant relationship between acquiring a company and attending the conference or academy. We therefore did not include this variable as a control variable in the extended model.
- ii. Regarding the time spent, there is a significant relationship between acquiring a company and FTE days spent. The odds ratio is larger than 1 (i.e. almost 2), so the odds of acquiring a company is higher the larger FTE days spent, as could be expected. FTE days spent was therefore included in an additional extended model as a control variable (model not represented here in thesis). The results did not change much, albeit that the the  $p$ -value of age.binary further increased. The variable "Self-employed" still remains an important factor, independent of FTE days spent. This could be possibly explained given that the flexibility in working hours and a particular experience in business as a selfemployed most likely improves the chances to acquire a company.

### **3.6. Discussion**

We examined whether the lack of human, financial and cultural capital resources poses a barrier to entrepreneurial ETA entry and who is more likely to attempt a transition into ETA entrepreneurship.

#### **3.6.1. Comparison with previous findings**

Our results take into account some of the shortcomings of previous research and thus contrast with previous findings in several ways.

Previous findings on attempts at transitions into entrepreneurship, have always been predominantly focused on start-up entrepreneurship or at least not be exclusively focused on ETA entrepreneurship. As opposed to previous research on entrepreneurial entry, this research focuses exclusively on the (nascent) ETA entrepreneurs or ETA managers.

As opposed to most of the other research on ETA, we focus here mainly on the experienced senior (nascent) ETA entrepreneur, who has had a long successful career with many years of managerial experience and wants to acquire a company for him/herself mainly funded with his/her own money (self-funded search). We therefore do not cover in this research the recent MBA graduates, who are also increasingly getting involved in ETA, mostly through a search fund vehicle and who do not have this work experience and own funds. Given the paucity of ETA data, the Vlerick data of nascent ETA entrepreneurs are therefore quite unique to investigate these experienced (nascent) ETA entrepreneurs, by far the largest category in the ETA space.

The research also shows that nascent entrepreneurs have very similar characteristics whatever their mode of entry (see (Parker & Van Praag, 2012) and (Rocha et al., 2015)). Nascent entrepreneurs who enter entrepreneurship through a start-up or through the acquisition of a company ETA-style have indeed a lot in common.

However, Block et al. (2013) see two main differences between start-ups and ETA transactions: 1. starting a business can be considered riskier and more uncertain than an ETA transaction because the ETA business has already survived the early start-up phase in which the level of uncertainty and probability of failure are the highest 2. It can be considered more rewarding in terms of nonfinancial aspects of entrepreneurship.

Although we partially agree with these two differences, we would further fine-tune these based on the findings of our research: 1. Regarding the risk between ETA transactions and start-ups. We have showed in our analysis that (nascent) ETA entrepreneurs are prepared to invest or invest substantial amounts of their own money, which represent significant percentages of their net worth and which have been mainly accumulated through savings during an almost life-long career and decades of hard work. Start-up entrepreneurs, often much younger, do not make such a (per definition risky) financial commitment. 2. Regarding the non-financial aspects of entrepreneurship, we would argue, with other scholars covering the ETA phenomenon, that ETA entrepreneurship is as entrepreneurial, rewarding and fulfilling as start-up entrepreneurship. The latter is simply well known and maybe less appealing to the imagination.

Answering the first research question, we analyzed and defined for the first time nascent entrepreneurship in the context of ETA and focused for the first time in our research on ETA as the sole mode of entry.

Consistent with the existing research (a.o. Kim et al. (2006), Block et al. (2013), Rocha et al. (2015), Parker & Van Praag (2021),...), we analysed the impact of human capital along the typical subcategories, such as education, previous work experience, previous managerial background and previous entrepreneurial experience. In addition, tailored to the ETA environment and often inspired by the research on MBI's, we refine the human capital background by adding different ETA specific indicators such as industry experience, current employer, size of current company, managerial background, P&L responsibility and a more detailed classification of previous entrepreneurial experience (start-up, founder/co-founder, majority or minority shareholder).

While analyzing the impact of financial capital alongside the typical measurements such as household income and household wealth, as performed in the existing research (a.o. Kim et al. (2006), Parker & Van Praag (2012), Bastié et al. (2013), ...), we equally measured in the case of an ETA transaction, the amount of money the (nascent) entrepreneur would invest or invested in the business, expressed in thousands of euros. We also included the origin of this equity contribution. Given the own capital required for an ETA transaction by every (nascent) ETA entrepreneur, it is important to understand the financial commitment and the risk attitude of an ETA manager, both defined here as the willingness to personally invest an absolute amount and this amount expressed as a percentage of an ETA manager's net worth.

Finally, analysing the social/cultural capital, our conclusions deviate from the majority of the existing research and agreed with Kim et al. (2006). We did not see an association between individuals with parents who were/are business owner/self-employed and the likeliness to acquire their own company. Given the average age of the (nascent) ETA entrepreneur and their long independent career, the influence of the parent's background has clearly faded away.

Although the well-researched start-up and the research deprived ETA area are undoubtedly two equal externalizations of entrepreneurship, the inherent fundamental differences are causing sometimes different outcomes to the same research questions.

Regarding the second research question, looking for the differences between nascent ETA entrepreneurs (who is still looking) and an ETA manager (who already acquired), the main characteristics to increase the odds of acquiring a company are: current self-employment, the higher the amount to invest and respondents of 50 years or older have higher odds of acquiring a company than respondents younger than 50. Such an analysis had never been made in previous research.

### 3.6.2. Limitations and suggestions for further research

#### 3.6.2.1. Research bias

Research on nascent entrepreneurship, which is often too exclusively focused on new venture creation, often suffers from two biases (Johnson et al., 2006).

**Survival bias.** Given that studies on start-ups are based on samples of established firms (e.g. though data that appear in public records), these studies could be prone to a survival bias, as they could miss many (about half, (Aldrich H., 1999)) interesting cases that do not succeed in completing the process of market entry. An analysis on ETA transactions will be less prone to a survival bias, as the failure rate will be considerably lower, given that the vast part of the ETA transactions are performed on long-established businesses with proven track records (Pendarvis, 2005, page vii). The chances of failure of an established company versus a start-up are therefore considerably lower (Cooper & Dunkelberg, 1986). Research has shown that on average start-ups have more variable growth and profit payoff rates<sup>36</sup>, more asymmetric information (due to lack of track record), more difficult access to finance and lower survival rates than established firms do (Astebro & Bernhardt, 2003) (Van Praag, 2003) (Parker S. , 2009) (Parker & van Praag, 2006). Finally, Hunt & Fund (2012) have demonstrated that on average, ETA-sourced companies display less survival risk than seed/early stage companies when comparing ETA-sourced companies from inception with angel and venture capital-based firms from inception. In our view, survival bias does not play a significant role here.

**Hindsight bias.** On the other hand, surveys which asks entrepreneurs who do succeed in starting up can suffer from “hindsight” bias. Hindsight bias refers to incorrect reporting of information to survey interviewers caused by memory loss and the re-interpretation of facts as a consequence of events that occurred after start-up rather than before it (Roese & Vohs, 2012). This type of bias can also be expected in the case of ETA transactions and there is no reason why this bias would be lower than in the case of a start-up. Future research on ETA transactions, using for example verbal protocols or conjoint analysis, could help to overcome this bias.

**Motivational and academic environment bias.** (see Section 2.4.2. for a more detailed description). As only motivated people who were prepared to pay a fee for attending the Vlerick conference or the academy and these activities took place in an academic environment, the database of respondents will vary from the databases most other researchers used as they generally use large official and more general data bases (e.g. Helleboogh (2010) used Bel-first official database). This academic bias could therefore exist in two ways: i.) the type of people (academic) and ii.) the type of transactions/companies (more technological and complex businesses). On the other hand, the database researched used in this study has the advantage to target specific and very relevant data points, confirmed by a relatively high response rate.

In order to tackle this biases, it would therefore be interesting to perform an additional and complementary study on this topic based on data gathered through a more general database.

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<sup>36</sup> These payoffs are defined as income entrepreneurs earned from their business in a particular year, where income is measured comprehensively, including wages and returns to capital for the unincorporated entrepreneurs and measuring the risk as the coefficient of variation of payoffs. The coefficient of variation of payoff among start-ups clearly exceeds that among ETAs. See (Parker & Van Praag, 2012).

### **3.6.2.2. Size of the database for a quantitative study**

Although the initially researched database contained more than thousand research subjects (see Section 4.1.2.) and an acceptable response rate of 20%, having only 170 data (whereof only 50 individuals who purchased their own company) as the basis for a quantitative study increases significantly the risk to have an overfitted model, in particular as the survey contained many variables.

It would therefore be interesting to perform an additional study on this topic based on data gathered through a more general database. The challenge there, however, is to find sufficient motivated (nascent) ETA entrepreneurs in the general database who are prepared to answer a detailed survey.

### **3.6.2.3. Perceptual variables**

Perceptual valuables such as alertness to opportunities, fear of failure and confidence about one's own skills equally are significantly correlated with nascent entrepreneurship and new business creation (Arenius & Minniti, 2005). As these variables should be included in economic models of entrepreneurial behavior, they could also be researched among nascent (ETA) entrepreneurs in order to determine the relation between these variables and nascent (ETA) entrepreneurship. Hopp & Sonderegger (2019) include in their theoretical model linking the pre-start experience, labor market experience and formal education, also pre-start-up intentions such as commitment and ability expectations, to the creation of new ventures. We did not research the intentions of the (nascent) ETA entrepreneurs and their impact on doing an ETA transaction. It would therefore be interesting to complement this quantitative study with a qualitative study, for example with some case studies (e.g. Robbie (1993) on MBIs).

### **3.6.2.4. Weak significant interaction effect**

We analyzed "age" as a moderating effect in the relationship between the dependent variable and the independent variables. After testing these different combinations of variables and interaction terms, one interaction term appeared to further improve the model: "age" and "origin of finance". Although, this interaction makes also theoretically and intuitively sense, it only shows a weak significant relationship (showing a borderline  $p$ -value of 0.057). Further analysis, based on other data sets, should improve our understanding of this effect.

### **3.6.3. Implications for practice**

The objective of this research and hopefully a lot of subsequent research on this very fascinating topic, is to get a better knowledge of the phenomenon of ETA transactions, its characteristics and drivers.

This study stresses the need for more academic research on the topic of ETA or ETA transactions and also for policymakers (such as PMV (Participatiemaatschappij Vlaanderen) in Belgium) and practitioners to give equal attention to startups and company transfers and to do so in a much more coordinated way.

The research performed in this article has certain some practical use. In fact, the outcome of this research should help the following different constituencies:

*A recruitment agency* in their search for a successor for a company's general management. The ETA entrepreneur could be a suitable candidate.

*A private equity firm* which is looking for a manager to run the company it plans to acquire, a so-called MBI candidate. The ETA entrepreneur could be a suitable candidate.

*The selling shareholders* which are looking for an appropriate successor to run the company. The ETA entrepreneur candidate could be a suitable candidate.

*HR managers*, whose goal is to keep the best employees, should make sure that potential ETA managers - often very talented and motivated people - have enough challenge in their current job in order them to remain with their current employer.

*Policy makers* can raise awareness of takeover opportunities and focus on creating a better match between potential buyers and sellers in marketplaces for business transfers. In fact, if incumbent business owners do not find successors for their business, the economic value of these businesses may be lost, with negative implications for employment, entrepreneurial experience and economic growth. Policy makers should also address the takeover option and takeovers should be given the same importance as new venture start-ups in policies. Several proposals could be made to improve the business transfer environment, such as the reduction of taxes, measures to encourage timely preparation of those who want to sell their business and financial support for those who want to take-over those businesses. The aging population and recent increases in the proportion of business owners tot the working population, combined with the positive effects of both phenomena on the preference for takeover, suggest that taking over a firm will increase in importance in the future.

And last but not least *the ETA candidate him/herself*, the more the phenomenon gets analyzed, known and understood, the more mainstream it becomes. The more mainstream it becomes and the more it becomes accepted as a real act of entrepreneurship, the more the constituencies involved should be easier to deal with (family, friends, banks, sellers, ...) It should for every would-be entrepreneur a way to fulfill his dream.

Ideally this and subsequent research should in fact lead to a model that could predict that certain people, for example working in a multinational or consulting environment, will be interested to perform an ETA transaction if certain conditions are met.

This research and subsequent research will also indicate that if the people who aspire ETA have certain profiles, the chance for them that ETA will happen is higher than if they did not have these profiles.

#### **3.6.4. Areas for further research**

The existing research exclusively dedicated to ETA up to today is very limited and has been discussed and integrated in this chapter.

Research on nascent entrepreneurship has grown rapidly. GEM- or PSED-type data has been the basis for well over 200 journal articles and Google Scholar counts nearly 6,000 works published in the 2009-2013 period, which use the term nascent entrepreneurship or nascent entrepreneur.

Most if not all this research could be applied on the currently non existing subsegment of nascent ETA entrepreneurship or nascent ETA entrepreneur.

A vast part of the research performed on nascent entrepreneurship and entrepreneurial entry, including the mode of entry, could be indeed the basis for a similar research effort on nascent ETA entrepreneurship and entrepreneurial entry via the ETA door.

Another are of further research on ETA could be a more in-depth analysis of the ETA manager, the individual who actually purchased a company, his/her profile, motivations etc.



Finally, it would be interesting to analyze what happens with the ETA manager and the company he purchased post-acquisition. Questions such as: what has been the impact of the ETA manager on the company, what has been the performance of the company post-acquisition, etc. certainly deserve further analysis.

Without any doubt, there is work to be done and many areas in the ETA space are still academic wasteland.

## Chapter 4. The Investment Criteria of a (nascent) ETA entrepreneur. What do they want to buy?

### 4.1. Introduction

#### 4.1.1. General Introduction

The second research question will consist of a thorough analysis of the investment criteria (IC) considered by (nascent) ETA entrepreneurs, while focusing exclusively on the experienced middle aged ETA entrepreneurs.

After a very thorough analysis, we did not find any academic research on IC specifically focused on ETA, maybe with the exception of some sporadic mentioning in the search funds literature (Morrisette & Hines, 2015), in syllabus (i.e. for student use) type of documents (Dennis & Laseca, 2016) (Kelly, P., 2017) and in the search fund statistics (Yoder & Kelly, 2018), Kelly & Heston, 2022) (Kolarova et al., 2020).

IC of ETA have clearly never been analyzed in the academic literature before.

The analysis in this chapter will try to answer the “what” question, describing a typical ETA target, based on the investment or decision criteria the (nascent) ETA entrepreneurs use to select their ETA targets. Besides the IC a such, we will equally further focus on certain related topics, such as the ideal company characteristics looked for by the (nascent) ETA entrepreneur and some specific topics such as the preferred deal scenario and the preferred shareholding structure.

Finally, we will compare the IC between the nascent entrepreneurs who are still looking to acquire a company and the ones who have already acquired their company. In fact, according to the Theory of Planned Behavior, having a clearly defined set of IC is an indication of entrepreneurial intentions and subsequent behavior (Kautonen, van Gelderen, & Fink, 2015).

The research questions put forward here are threefold:

- Is there a significant difference between the IC in an ETA context and the ideal ETA company characteristics on the one hand and on the other hand, the IC or ideal company characteristics in other areas, such as private equity, business angel investments, venture capital or search fund ETA entrepreneurs? Differences and similarities will be analyzed and explained.
- What is the relative importance of certain IC for the (nascent) ETA entrepreneur (and this, where possible compared with the importance of IC in other similar subasset classes)?
- Is there a significant difference between the IC of the nascent entrepreneurs from our data sample who are still looking to acquire a company and the ones who have already acquired their company?

*In order to find out what* do they really want to buy (or bought), we have questioned the (nascent) ETA entrepreneurs about the following:

- Investment criteria
- Location of the target (geography)
- Size of company (profitability, employment, turnover)

- Type of industry (services, manufacturing, ...)
- Experience in the industry
- Preferred deal scenario
- Valuation expectations
- Shareholding (majority v. minority, with/without partner)

Hopefully, this analysis will provide us with a better understanding of what the (nascent) ETA entrepreneur really is looking for in a company, although we realize that IC do not resonate equally with each entrepreneur/investor and ETA entrepreneurs should customize their target criteria based on their own skills and deficiencies, interests and personal references.

#### **4.1.2. Structure of this chapter**

This chapter has the following structure. Section 2 situates IC in the non-academic and academic literature, while giving an overview of IC per different type of investor and per theme. Section 3 elaborates on the possible theoretical background for IC and its relationship to the Agency Theory. Section 4 describes the different data gathering and data analysis methods used in the literature on IC and a description of these methods applied here in this research. Section 5 outlines the empirical strategy and presents the research findings, comparing IC of ETA transactions with IC of other relevant and comparable sub-asset classes. Finally, Section 6 concludes with a comparison with previous findings, indicating certain limitations of this research and several implications for the practice, as well as some suggestions for further research.

#### **4.1.3. Contribution to academic research**

This chapter will contribute to the literature in four ways.

Firstly, this chapter provides an updated and systematic comprehensive literature review of academic research performed on investment criteria used in the different sub-asset classes of private equity investments. The academic literature on investment criteria is abundant, almost every country and every asset or sub-asset class has its own dedicated article describing its investment criteria. After extensive research to uncover a single study that covers all possible investment criteria of one type of investor, let alone across different types of investors, it is clear that no such comprehensive study does exist. This Chapter has the ambition to make a relatively exhaustive and updated attempt of such a literature review of academic research performed on investment criteria used in the different sub-asset classes of private equity investments. In fact, our literature review provides the description of investment criteria on two axes: per investor type and per main investment criteria group.

Secondly, this chapter makes the first systematic and academically substantiated analysis of investment criteria used in an ETA context. IC of ETA have clearly never been analyzed in the academic literature before. By analyzing the differences and similarities between the investment criteria of the different sub-asset classes and the investment criteria of ETA, we were able to develop a framework of reference, situating the literature on investment criteria according to its relevancy for ETA. The main systematic comparison will be made between search fund investment criteria (which have equally never been systematically covered in the academic research) and the investment criteria of a seasoned experienced self-funded (nascent) ETA entrepreneur.

Thirdly, besides the typical investment criteria, this chapter also covers other investment criteria related topics, sometimes specific to ETA, which were sporadically and certainly not systematically covered in the existing academic literature such as location of the target (geography), ideal size of company (profitability,

employment, turnover), preferred type of industry, relevance of experience in the industry, preferred deal scenario, valuation expectations, preferred shareholding situation (majority v. minority, with/without partner), preferred business scenario or preferred seller.

Fourthly and finally, this chapter will attempt to shed the light on the differences of IC between the nascent ETA entrepreneurs (who are still looking to acquire their company) and the ETA managers (the ones who actually acquired their company). Such an analysis has not been performed before.

As this was the first academic study on the investment criteria of the ETA entrepreneur, our analysis does certainly make a contribution to the knowledge of the 'what' question in an ETA environment describing a typical ETA target, based on the investment or decision criteria the (nascent) ETA entrepreneurs use to select their ETA targets.

## **4.2. Situating IC in the literature**

The purpose of setting IC is to create a framework for the search process and for evaluation acquisition opportunities (Kelly, 2017). For an investor, deal selection based on IC emerges as the most important activity for value creation (Gompers et al., 2020).

There is ample academic literature published on investment criteria and the evaluation of identified opportunities in the widest sense of the word.

Although we did not find any academic research on IC specifically focused on ETA, besides the sporadic mentioning in the search funds literature, several non-academic books have been written on ETA, covering ETA investment criteria.

Most of the academic literature on IC is principally focused on the start-up and venture capital scene. However, there is equally a vast amount of research performed on the investment criteria of private equity and angel investing. These latter two domains are much closer to the ETA phenomenon, as they both mainly invest in mature cash-flow generating companies and therefore more comparable with ETA investing.

Different areas in the academic literature on IC could therefore providing us with the necessary academic background in order to better understand the ETA investment criteria and deal screening process.

In particular, the research on IC of Venture Capital (seed capital, start-up financing,...), Private Equity (growth equity funds, leveraged buyout funds, management buyouts, management buy-ins,...), Family Offices, Business Angel Investing could be very useful.

In order to discuss the research on IC in a structured way, the underlying Section will discuss the academic literature on IC per type of investor and for each type per investor, where available, per recurrent key criteria theme.

### **4.2.1. Professional literature on IC**

Although the academic literature on IC of ETA is surprisingly non-existent, several non-academic books have been written by (highly experienced) practitioners, from different background but all from the US, and are often a great blend of entrepreneurial best practices and street smarts. They generally offer a practical step-by-step roadmap to acquire successfully a small business, starting with finding and evaluating candidates for

acquisition, valuing and financing such an acquisition, negotiating and structuring such a transaction and finally explaining the legal documentation needed for closing such a transaction etc.

They all cover in detail the investment criteria ETA transaction.

Ed Pendarvis wrote “Buying a Business to Secure Your Financial Freedom. Finding and Evaluating the Business That’s Right for You” (Pendarvis, 2005). Rick Rickertsen wrote “Buyout. The Insider’s Guide to Buying Your Own Company” (Rickertsen & Gunther, 2001). Arnold Goldstein wrote “How to Buy a Great Business With No Cash Down” (Goldstein, 1989). Russell Robb wrote “Buying Your Own Business” (Robb, 2008). Richard Joseph wrote “Entrepreneurship Through Acquisition. How to Buy a Business” (Joseph, Nekoranec, & Steffens, 1993). Walker Deibel wrote “Buy then Build. How Acquisition Entrepreneurs Outsmart the Startup Game” (Deibel, 2018).

As ETA is often taught as an elective in some of the world’s top B-schools, certain syllabuses or primers, written for student use, do contain a description of ETA IC. For example, Dennis & Laseca (2016) for Chicago Booth B-School, Kelly, P. (2016) for Stanford B-School, T. Bovard (2020) for Columbia B-School (2020).

As mentioned before, two B-Schools (Stanford for North America and IESE for the rest of the world), do publish certain statistics on search funds, a small subsegment of ETA. These statistics report on the IC of search funds (Stanford: Yoder & Kelly, 2018; Kelly & Heston, 2022), (IESE: Kolarova et al., 2020).

Finally, certain websites who mainly cater for practitioners, such as Searchfunder.com, equally do elaborate on IC of ETA type of transactions.

Finally, Professors Richard Ruback and Royce Yudkoff of Harvard Business School (2016), who wrote a recent non-academic practitioner oriented book on ETA titled “Buying a Small Business”, spend almost two chapters on “identifying the characteristics you want in your business (chapter II.6.)” and “finding the right small business to buy” (chapter III.10). For them the most important criterion by far is “recurring customers”.

Although this PhD thesis is undoubtedly an academic document, we will sometimes refer to these highly experienced practitioners or “pracademics” in order to give the quoted academic research some support from the practice or have the academic research at least sanity checked by these practitioners.

#### **4.2.2. Academic Literature on investment criteria**

##### **4.2.2.1. Introduction**

Evaluating investment criteria is the so-called deal screening: a delineation of key policy variables which delimit investment prospects to a manageable few for in-depth evaluation and deal evaluation: the assessment of perceived risk and expected return on the basis of a weighting of several characteristics of the prospective venture and the decision whether or not to invest as determined by the relative levels of perceived risk and expected return (Tyebjee & Bruno, 1984).

Investors in general place a heavy emphasis on both their ability to select promising companies, as well as their capacity to add value through financial, governance and operational engineering (Block J. et al., 2019). They spent a significant amount of time screening companies and acquiring the right ones, as this per definition is their starting point for the value added strategies post-acquisition. A good start is half the battle.

Sørensen (2007) estimates the contribution of VC value-add to be 40% and that of deal sourcing and selection combined to be 60%. Gompers et al. (2020) confirm in their study that deal selection (for 49% of the VCs ranked as most important) is perceived as more important than deal sourcing (27%) and value-add (23%).

Despite the importance of the investment selection, however, only a few studies have yet assessed how these investors actually select their investments and conduct investment decisions (Block et al., 2019).

Previous literature has suggested that considerable differences in the decision-making of different investor types likely exist (Lerner et al., 2007).

After extensive research to uncover a single study that covers all possible investment criteria of one type of investor, let alone across different types of investors, it is clear that no such comprehensive study exist. In fact, more recent academic work has added new variables while leaving previous criteria behind. Moreover, there seems no consensus among the different academic studies and even between venture capitalists and private equity professionals themselves about the relative weight of specific evaluation criteria. Finally, decision-making criteria and their relative importance also vary between the different stages of the evaluation process (Hall & Hofer (1993), Fried & Hisrich (1994), Boocock & Woods (1997), Petty & Gruber (2011)).

Therefore, the most important conclusion from this academic research overview is that not all criteria are equally significant depending on different circumstances. Significance varies depending on time, geographic location, development stage of a venture, stage in the evaluation process and possibly even fund raising status of the investor in a given time. Therefore, one should always ask what, when, and why a particular investment criterion is important, as well as how it applies in a particular region at a particular time.

Although we will not cover the investment decision process as such in this chapter, an investors' investment process is like a funnel, starting with screening many businesses, although they ultimately only invest in a few companies.

Sahlman (1990) also emphasizes the importance of having a wide funnel to find promising investments. Gompers et al. (2016), for instance report that for every hundred opportunities considered, the average PE investor deeply investigates 15, signs an agreement with about eight and closes fewer than four. Carpentier et al. (2015) showed in their analysis of BAs decision process that of the 636 submissions only 15 entered the final negotiation phase. In probably one of the most comprehensive and broad studies of VCs (885 VCs in 681 VC firms), Gompers et al. (2016) show that the average firm in their sample screens 200 companies and makes only four investments in a given year.

In private equity, our personal experience as PE investor and statistics from Pitchbook seem to indicate that at least 100 deals have to be investigated in order to execute two or three.

In our survey of this paper on ETA investing, we equally asked the (nascent) ETA entrepreneur how many opportunities they looked at and to what extent and in which format they analyzed these. On average they looked at 18 teasers, 7 information memorandums and 10 acquisition targets (with no structured process). They submitted on average one letter of intent and looked into detail at 2.34 targets.

In order to structure our literature review, a more fine-grained analysis of IC is needed, as the supply side of the entrepreneurial ecosystems comprises a very diverse set of investor types.

Not surprisingly, and in line with our findings in the previous chapter, most of the academic research on investment or decision criteria has been written on venture capital or business angels. While deal sourcing, deal selection and post-investment value-added all contribute to value creation, VCs rate deal selection as the most important of the three (Gompers et al., 2020).

Although this research has certainly some relevancy for ETA transactions, the investment criteria of private equity investments in more mature companies (LBO's, MBO's, MBI's etc.) are more comparable to the investment criteria of ETA investing.

We therefore will sort the literature on investment criteria by type of investor or by studies focusing on more than one type of investor and for each type per investor, where available, per recurrent key criteria theme or IC group.

In the following Sections on the literature review, we use on the one hand the – slightly modified and adapted - classification of Block et al. (2019) of the different types of investors (Family Offices, Business Angels, Venture Capital Funds, Growth Equity Funds, Leveraged Buyout funds), while adding MBI's and ETA transactions as two additional investor types. On the other hand, we use the - slightly modified and adapted - categorization of Granz et al. (2020) in their recent systematic literature review on IC of the main IC groups for one investor type (the management team, the business, the financial traction), adding ourselves three other IC themes in the academic literature: different criteria in different stages, geography and other.

While extending the literature review on these two axes (type of investor and main IC group) and further building on Granz et al. (2020) literature review (only limited to VC and BA's IC), we equally widened our scope of the systematic literature review on IC by including all academic articles found on google scholar (and the general google as an additional check) or used as references in these academic publications regarding IC. We focused on a wide time boundary ranging between the early 1970s and this up until the end of March 2021. Limiting ourselves to publications in the English language, we defined several keywords before starting our internet search for publications. We included the words "investment criteria", "investment decision criteria", "investment-decision making", "investment-decision policies" and combined these with the different investor types such as "venture capital", "venture capitalists", "business angels", "informal investors", "angel investors", "private equity", "leveraged buyouts", "management buyouts", "management-buyins", "entrepreneurship through acquisition", "family offices", "growth equity funds" and all other similar terms etc. We included all the existing quantitative and qualitative publications, including academic working papers, but excluding nonacademic articles or publications. As IC are a very practice oriented topic, the latter are very common and widespread.

The combination of the description of IC on these two axes (investor type and main IC group), provides us in this chapter with a very comprehensive and systematic academic literature overview of IC, which will allow us to compare these different IC with the IC used in ETA transactions.

#### ***4.2.2.2. Different types of investors with investment criteria***

In order to analyze the academic research on IC among different investors, we need to clearly define these different types of investors.

We limit ourselves to investors' attitudes and investment criteria in privately held companies, i.e. non-stock exchange listed companies (the private markets) and to investors relevant to our research topic of (nascent) ETA entrepreneurs. Although some investors can have multiples classifications and there is a certain degree

of overlap between the different categories of investors, the academic research makes a distinction between the following types of investors (see also (Block et al. (2019):

#### *4.2.2.2.1. Venture capital funds (VCs)*

VCs are funds who raise pools of capital from accredited, mostly institutional, investors known as limited partners (LPs) to invest in privately owned companies with the goal to increase the value of the business they invest in and then sell these companies – or their equity stake (aka ownership) in them - for a profit. The VC firms fund and mentor startups and other young, often technology focused companies that are growing rapidly in exchange for a minority stake of equity (less than 50%) in those companies (Pitchbook, 2020). In most cases, the funded companies are not cash flow positive yet.

VCs are by far the best researched investor type in entrepreneurial finance. VCs serve often as a benchmark in order to be able to understand and classify differences between VCs and other investor types.

#### *4.2.2.2.2. Leveraged buyout or private equity funds (LBOs)*

These funds are equally funded by LPs to invest in promising privately owned companies with the goal to increase the value of the business they invest in and then sell these companies – or their equity stake (aka ownership) in them - for a profit. However, the LBO or PE funds invest in more mature companies operating in traditional industries and often take a majority stake (50% ownership or more). Although the structure of private equity investments can vary (e.g. investments ranging from investments in a company that is distressed, suboptimal, stagnant, fast-growing or outperforming), the most common deal type is a leveraged buyout (Pitchbook, 2020). In most cases, the funded companies are cash flow positive and significant amounts of outside debt is raised in order to finance a substantial part of the transaction (Kaplan & Stromberg, 2009) (Cumming, Siegel, & Wright, 2007).

#### *4.2.2.2.3. Growth equity funds (GEFs)*

Growth capital (also called expansion capital and growth equity) resides at the intersection of private equity and venture capital. This is a type of private equity investment, usually a minority investment, in relatively mature “later-stage” companies that are looking for capital to expand or restructure operations, enter new markets or finance a significant acquisition without a change of control of the business. Companies that seek growth capital will often do so to finance a transformational event in their lifecycle. These companies are cash flow positive, profitable or approaching profitability yet. The company may still be founder-owned and often has no prior institutional investment (Gompers et al. (2016), Ritter (2015)).

#### *4.2.2.2.4. Family offices*

Family Offices (FOs) are organizations that manage the wealth of one or more affluent business families by taking actions (i.e. investments) to sustain and grow their wealth. There are many different types and they offer in general a total outsourced solution to managing the financial and investment side of an affluent individual or family, providing budgeting, cash management, risk management, concierge, insurance, charitable giving, wealth-transfer, family-owned businesses, legal or tax services. Obtaining quantitative information about family offices is very difficult as they are not required to disclose any information about their investments (Gray (2005), Rivo-Lopez et al. (2017), Wessel et al. (2014), Wessel (2013). See also the Global Family Office Report 2019 (UBS, 2019). In this thesis, we only consider the private equity-like investments, i.e. investments in private non-listed companies, of the family offices.



#### 4.2.2.2.5. *Business Angels*

Business angels (BAs) (also known as an informal investors) are mostly older wealthy individuals that invest their own money, usually in exchange for convertible debt or ownership equity, in unlisted firms in which they have no family related connections (Politis, 2008), typically assuming a minority equity stake as well active involvement in portfolio companies (Mason C. , 2008). They are often retired entrepreneurs or executives who invest and also give support to start-ups or small companies (Collewaert & Manigart, 2016). An increasing number of these investors organize themselves into angel networks to share investment capital, as well as to provide advice to the companies where they invest in (Wiltbank (2005), Sudek (2007), Kerr et al. (2014)). As such they are an important source of entrepreneurial finance and have become an important source of funding in the recent years.

#### 4.2.2.2.6. *MBI candidate*

A management buy-in can be broadly defined as the transfer of ownership whereby executive control of a business gained by a manager or entrepreneurs or a team of managers who were not working for the company before the transaction (and in case of a team, who may not even have worked together before), together with VC or PE support (Robbie & Wright (1996), Robbie (1993)). With the exception of the VC or PE support, MBI-candidates are very similar type of investors as the (nascent) ETA entrepreneur. The latter therefore invests in much smaller transactions.

#### 4.2.2.2.7. *ETA entrepreneur*

An ETA transaction as opposed to a “normal” buyout is a smaller and more entrepreneurial version of the classical LMBO (Leveraged Management Buy Out) (see also Chapter 1 for definitions). The buyer/investor, the ETA manager, simply buys a relatively small company, almost entirely or entirely with his/her own funds, putting most of his/her own funds on the line, in order to become an entrepreneur and in order to further build up and professionalize the acquired company.

As opposed to a classical buyout, in an ETA transaction, the buyer/investor replaces the existing management team (i.e. often the seller) and will become very hands-on involved with the management of the company. In a classical buyout, the existing management team (or external management in case of an MBI) acquires (a relatively small) part of the company alongside a private equity firm, which often holds the majority. Very often, ETA transactions are being done by former senior managers of large groups or senior consultants, who are often tired of the politics in the large groups, and want to become entrepreneurs and owners of their own company. Most of these people are very ambitious, often had a very successful career and are aged mid-forties to late fifties. These ETA managers have most of the time made some substantial money in their careers and are therefore able to acquire themselves a small SME, entirely or at least as a substantial shareholder. They equally have gained significant experience and expertise in their area of business (see also Chapter 1 for more detail)

Most of them have no real time/exit horizon. ETA is a new step in their careers.

Given these characteristics of an ETA transactions, some of the investment criteria therefore have to be fundamentally different than in the other categories.

Undoubtedly the main difference between ETA investing and the other types of investing, possibly with exception of the MBI investors, is that in case of an ETA transaction, the ETA entrepreneur is going to manage the business him/herself. The business is mostly small (as opposed to the case in a MBI investment) and the new manager (and main shareholder) will be the ETA entrepreneur. As in the case of venture capital, private

equity or angel investing, the existing management plays an important role in the investment decision, it is therefore crucial for venture capitalists, private equity professionals and business angels, to assess the management in the businesses they want to invest in. This process of appraising the human capital (people) in a venture or existing business is called “human capital evaluation” (Smart G. , 1999).

Although an ETA entrepreneur, who will be the main manager him/herself, will equally have to assess the second tier management or other key people in the company, such as key sales people, he wants to invest in, the human capital evaluation element is of less importance in case of an ETA transaction.

Another difference, directly following from the above, is the importance of a business plan, presented by the existing management. This is crucial for a VC, PE or BA in order to invest (Tyebjee & Bruno, 1984) (Boocock & Woods, 1997). In case of an ETA transaction, there will most likely be no business plan available, as the seller of a small business in a traditional industry usually do not make those plans. Similar to an MBI, in an ETA transaction, the entrepreneurial ETA manager will have to generate the business plan him/herself.

Summarized, ETA is undoubtedly a true act of entrepreneurship and an ETA transaction is equally an investment made through an investment process and based on different IC. We will therefore look at the ETA IC through the theoretical glasses of the existing literature on venture capital, BAs and PE (such as LBO, GEF, MBI) ICs, as an ETA entrepreneur plays a similar role as venture capitalists, BAs or PE professionals do when searching and evaluating an investment opportunity.

#### **4.2.2.3. Investment criteria of VCs**

Research into the criteria venture capitalists use to assess venture proposals began in the 1970s (Wells, 1974) and has been of constant interest to scholars until the present.

There is and has always been a great deal of debate among academics and practitioners as to which screening and selection factors are the most important (Gompers et al., 2020) (Hudson & Evans, 2005) (Morawczynski, 2020).

The literature body is unstructured and heterogeneous because of the large number of publications and inconsistent results, often caused by the heterogeneity of venture capital practices, the subjective nature of the decision making process (Simic, 2015) and the inconsistent terminology used by different authors (Morawczynski, 2020).

For example, the literature is contradictory as to whether the VCs focus even more heavily on the attractiveness of the business opportunity rather than the quality of the management team. Sharma (2015) therefore concluded that not all the VCs follow the same investment decision process for evaluating new ventures and are following a multi-criteria perspective of decision-making.

Kaplan et al. (2004) analyzed VCs investment memoranda, that VCs consider factors that includes the attractiveness of the market, strategy, technology, product or service, customer adoption, competition, deal terms and the quality and experience of the management team. They do not distinguish the relative importance of the different factors.

A list of all possible detailed investment criteria set out in the literature would be very long. In some research the list can have as many as nearly 100 items (e.g. (Bachher & Guild, 1996)). Therefore IC are usually classified into several subcategories, but such groupings proposed by the researchers differ (Morawczynski, 2020).

In a very recent overview of the research on VCs and BAs IC, Granz et al. (2020) attempted to systematize and categorize the literature on both VC and BAs decision criteria into a framework.

Granz et al. (2020), as well as Beim & Levesque (2004) categorize the investment criteria following three main investment criteria groups who emphasize the importance of: (1) the business, (2) the management team and (3) the financial traction. Although, we and most other practitioners fully agree with this main classification, we have distinguished three additional themes in the literature: (4) different criteria in different stages, (5) geography and (6) other.

#### *4.2.2.3.1. The Management team*

With regard to funding of new ventures, a part of the literature reveals that the management team or the entrepreneur/founder is a key factor for VCs investment decisions. Drawing on cognitive theory, an experienced management team is a crucial decision criterion for VCs when assessing new venture proposals. Experience can moderate the future failure risk of increase the future returns of an investment. VCs do not classify managerial experience as a criterion that can be compensated by the high value of another criterion (Riquelme & Rickards, 1992). VCs therefore have to evaluate human capital via management assessment methods in order to predict the management team's performance (Smart G. H., 1999).

Tyebjee & Bruno (1984), MacMillan et al. (1985), Robinson (1987), Khan (1987), Dixon (1991), Bachler (1996), Muzyka (1996), Manigart et al. (1997), Zutshi & Lang (1999), Shepherd et al. (2000), Schefczyk (2001), Silva's (2004), Franke et al. (2006), Pintado et al. (2007), Franke et al. (2008), Visagie (2011) analyzed the criteria used by venture capitalists to evaluate new venture proposals. The most important finding of their research is that above all the quality of the entrepreneur (and his/her team) ultimately determines the funding decision and is a more important IC than market and product characteristics.

Knockaert et al. (2010) identify three different clusters of venture capital investors: those who focus on technology (technology investors), those who focus on finance (financial investors) and those who focus on human capital (people investors). For people investors, the human factors such as leadership capacities of the entrepreneur and the quality of the team are most important.

In a recent and very comprehensive research on the IC of VCs, Gompers et al. (2020) report that the large majority of VCs in their survey mention the management team as the most important factor when considering an investment, more important than business-related characteristics such as business model, product, market and industry. In the case of later-stage VCs the business-related factors cumulatively equal the team in importance (Gompers et al., 2016).

However, the variation in different criteria weights regarding the management shows that a consensus on investment criteria - what constitutes a well-functioning team – does not exist. Indeed, in their assessment of the management team, VCs depend often on soft criteria such as cognitive characteristics (e.g. realism, problem-solving abilities), personality traits (interpersonal skills, integrity), motivational variables (personal drive, power) (Granz et al., 2020), ability to cooperate (Hall & Hofer, 1993), ability to recognize risks (Macmillan et al., 1985), tenacity and ability to communicate (Knight R. M., 1994), commitment and thorough understanding of the business idea (Silva, 2004), passion and preparedness (Chen, Yao, & Kotha, 2009), interpersonal chemistry and pragmatism rather than creativity (Hisrich & Jankowicz, 1990). All this confirms that the evaluation of managerial capability is the most challenging task in the venture selection process (Rah, Jung, & Lee, 1994).

This research focus on management as one of the main or most important investment criterion is in any case less relevant in the case of ETA. In case of an ETA transaction, the existing management team, often the seller who has reached retirement age, is not an important investment criterion at all. At most, the quality of the second tier management can be an investment criterion for the (nascent) ETA entrepreneur who is going to run the business him/herself anyway. In ETA, the ETA manager will be the manager him/herself and obviously does not need to evaluate his/her own quality as entrepreneur in order to decide to make the investment or not.

#### 4.2.2.3.2. *The Business*

When selecting investment targets, VCs also place significant weight on the business, along with the management team. The business criterion entails both physical and non-physical assets such as patent and intellectual property assets. The quality of the business concept may be indicative of whether the new venture can achieve substantial competitive advantage.

Tyebjee & Bruno (1984) concluded that expected return to be determined by market attractiveness and product differentiation. Macmillan et al. (1987) see the competitive surroundings of the new venture and the demonstrated market acceptance of the product as the two decisive criteria for determining a new venture's success. Rea (1989) sees the business issues, markets that offer unconstrained opportunities for rapid growth as the most important IC. Hall & Hofer (1993), Fried et al. (1994) and Boocock et al. (1997) showed that VCs during their initial proposal screening primarily consider IC not related to the management team such as fit with the venture firm's lending guidelines, the long-term growth and profitability of the industry, the market characteristics and the business plan as the most important IC.

Certain scholars see technology related IC, such as patents, product superiority, technology appropriability, technological progress or innovation equally as very important (Baum et al. (2004), Knockaert et al. (2010), Zacharakis & Meyer (1998), Hsu et al. (2014), Jell et al., (2010).

Kaplan et al. (2009) develop a "jockey vs. horse framework" (entrepreneurial team vs. strategy, product technology and business model). Their research concluded that, at the margin, investors in start-ups should place more weight on the business ("the horse") than on the management team ("the jockey"). Indeed, firm business lines remain remarkably stable while management turnover is substantial.

Block et al. (2019) found that investors (VCs, BAs and FOs) rate revenue growth and the value-added provided by the company's product or service to be more important than the management team's track record. Their descriptive statistics equally confirm that VCs prefer to invest more in the more risky early stages and less in later stages than other investors. Hence, like BAs and in contrast to other investor types, they attribute significantly less importance to profitability but instead focusing on revenue growth. The VCs focus rather on scalability (leading to revenue growth) instead of profitability (Puri & Zarutskie, 2012).

Gompers et al. (2016) detect some cross sectional variation, as in the case of later-stage VCs the business-related factors cumulatively equal the team in importance. This suggests that as a company matures, the business becomes increasingly established while the specific executives become relatively less important.

Venture Economics ([www.ventureeconomics.com](http://www.ventureeconomics.com)) assigns VC companies to six broad industry groups: biotechnology, communications and media, computer related, medical/health/life science, semiconductors/other electronics and non-high technology. ETA investors usually invest only in the latter category and are therefore from an industry preference perspective hardly comparable with VCs.

For the (nascent) ETA entrepreneur, the business and its fundamental characteristics is undoubtedly one of the main IC as the ETA entrepreneur is going to significantly invest in the business he wants to acquire. The management criterion is definitely of lesser importance, as explained above.

#### *4.2.2.3.3. Financial traction*

Another set of criteria that influences VCs' investment decisions, deals with the financial characteristics of new ventures (Timmons et al., 1987). VCs' expectations for the new venture's positive earnings performance and the cash-out factor is an important criterion that VCs deploy during their due diligence (Tyebjee & Bruno, 1981) (Tyebjee & Bruno, 1984).

Rah et al. (1994) show that financing ability and not entrepreneur-related characteristics are considered the most important in evaluating venture proposals. Manigart et al. (1997) made a pan-European study on the valuation process of VCs. The most important information sources are the own due diligence report, the coherence of the business plan and the balance sheet and P&L account.

Hsu et al. (2014) showed that US VCs placed a greater emphasis on the economic potential of a new venture because of their ex post control mechanisms (outcome-oriented tracking instruments), which are in turn, based on the new venture's performance.

As mentioned above, Knockaert et al. identified three different clusters of venture capital investors. Financial investors focus primarily on financial conditions and make their investment decision based on a limited set of factors such as ROI, growth and team completeness. (Knockaert et al., 2010:1).

AS VCs as equity investors emphasize both market and finance issues (Mason & Stark, 2004), they set financially driven milestones for entrepreneurs and their ventures (Gompers & Lerner, 2001). One of the VCs' objectives is to deliver high returns to their investors. The VCs also have a short term investment horizon, caused by the "short-termism" of the general partners (Kaplan & Stromberg, 2004) requiring high returns. They do not want to be locked up and always will consider exit options.

Nascent ETA entrepreneurs generally do not have this short term view and are not pressed to deliver high returns in a short term frame. They invest a significant part of their personal wealth and are therefore less risk prone and focus more on stable profitable companies. Therefore, in order to make the right investment and obtain the necessary financing from the bank to finance the transaction, they have to thoroughly analyze the historic and future financials of their target company.

For these reasons, the (nascent) ETA entrepreneur will consider the financial traction equally as one of his/her main criteria, while the management criterion is definitely of lesser importance to him/her.

#### *4.2.2.3.4. Different criteria in different stages*

Certain studies have pointed out that research has to move from a single stage, single set of criteria to the more complex and realistic perspective of a multi-stage, multi-criteria and multi-person decision.

Hall et al. (1993) suggest that venture capitalists' initial proposal screening, key criteria identified include fit with the venture firm's lending guidelines and the long-term growth and profitability of the industry in which the proposed business will operate. In the second stage of proposal assessment, the source of the business proposal also played a major role in the venture capitalists' interest in the plan, with proposals previously reviewed by persons known and trusted by the venture capitalist receiving a high level of interest. They also

demonstrated the lack of importance venture capitalists attached to the entrepreneur/entrepreneurial team and the strategy of the proposed venture during these early stages of the venture evaluation process.

Fried et al. (1994) detect a six-stage process in the VC investment decision-making process with different investment criteria (and possible rejection of the transaction) along the way: origination, VC firm-specific screen (firm specific criteria), generic screen (generic criteria), first-phase evaluation, second-phase evaluation, and closing. Sakorn (2003) states that the literature could be subdivided in three stages: (1) exploratory research stage (2) validation research stage (3) advanced research stage. In other words, investment criteria can differ along the different stages of the investment process. Proposals have to satisfy different criteria at each stage of the decision-making process before they receive funding (Boocock et al. (1997)).

Kollmann et al. (2010) analyze the decision process of venture capitalists, focusing on aligning the evaluation uncertainty in the decision criteria of venture capitalists with the progress of the process. In the early steps of the process in particular, management criteria are uncertain, while at the end of the process other criteria couple with uncertainty.

In case of an ETA entrepreneur, this multi-stage and multi-criteria perspective should be equally applicable.

#### 4.2.2.3.5. *Geography*

Academic research has been published on investment criteria of VCs (and BAs to a lesser extent) in almost every country. Mainly regarding venture capital investment criteria: Croatia (Simic, 2015), Hungary (Edit, 2016), UK (Boocock & Woods, 1997) (Mason & Stark, 2004), Poland (Morawczynski, 2020), Pakistan (Immamuddin, 2009), Egypt (Ismail & Medhat, 2019), Singapore (Zutshi & Liang, 1999), Malaysia (Narayansami, Hashemoghli, & Rashid, 2012) Korea (Rah, Jung, & Lee, 1994), Portugal (Silva, 2004) (Nunes, 2014), India (Dhochak & Sharma, 2016) (Sharma, 2015), Canada (Feeney, Haines, & Riding, 1999) (Knight R. M., 1994), Indonesia (Rakhman & Evans, 2005), Spain (Pintado, Lema, Perez, & Van Auken, 2007), Japan (Ray & Turpin, 1993), Russia and CEE countries (Zinecker & Bolf, 2015) and across three countries (USA, South Korea, China) (Zacharakis, McMullen, & Shepherd, 2007), across three European countries (Hungary, Poland, Slovakia) (Karsai, Wright, Dudzinski, & Morovic, 1998), across three Asian countries (Taiwan, Sri Lanka, Thailand) (Chotigeat & Pandey, 1997), across two Asian countries (China and Pakistan) (Muhammad, Yaokuang, Juan, & Gohar, 2017) across three regions (USA, Canada, Europe, Asia-Pacific) (Knight R. , 1994).

According to Granz et al. (Granz, Henn, & Lutz, 2020), most literature on investment criteria is focused on the USA (39%), the UK (15%) and Canada (13%) and most of them (61%) used qualitative research methods. A small number of publications using continental European (Knockaert et al., 2010) or Asia-Pacific datasets (Rah, Jung, & Lee, 1994) (Chotigeat & Pandey, 1997) may indicate an inferior database on VCs (and BAs) investment criteria in these regions.

For example, Rah et al. (1994) considered the following factors in their analysis of the Korean VC evaluation model show that financing ability and not entrepreneur-related characteristics are considered the most important in evaluating venture proposals.

In their three country analysis, Zacharakis et al. (2007) show that VCs in rules-based market economies (US) rely upon market information to a greater extent than VCs in emerging economies (Korea), and Chinese VCs (transitional economy) weight human capital factors more heavily than either US or Korean VCs.

In general, one should be very cautious to compare across geographies as often different markets, in particular emerging markets, have completely different characteristics (e.g. availability of fund. Maturity of the market, maturity of technology,..) which can significantly influence the IC of the VCs.

In case of an ETA entrepreneur, certain differences due to different geographic, political and cultural circumstances should be equally observable.

#### 4.2.2.3.6. *Other criteria*

Rakhman et al. (2005) concluded that VCs, entrepreneurs (seeking VC in the future) and investees (businesses currently in receipt of VC money) did not always share the same investment preferences. In case of ETA, the entrepreneur and the investor are one and the same.

Petty and Gruber (2011) (Petty J. , 2009) who also analyzed venture capital decision making through a longitudinal study, indicate that also the portfolio of the venture capital firm (the so-called “Knapsack problems”: the available fund capital, the timing of a deal relative to the age or maturity of the fund and the composition of the portfolio (geographic concentration and company stage) and the venture capitalists management time play a role in the decision. This research is also less valid in the case of ETA as the ETA manager aims only to acquire one company and to dedicate his/her entire time to this investment.

Zacharakis et al. (Zacharakis & Shepherd, 2001) analyse the influence of information (amount and type) and overconfidence on venture capitalists’ decision making, leading to an overestimation of the likelihood that a funded company will succeed. Sometimes more information created greater confidence, but it also leads to lower decision accuracy. Information structured in an unfamiliar way, forces a VC out their comfort zone and has a negative effect on confidence and an even greater negative effect on their accuracy. This information availability bias and overconfidence could also happen in an ETA decision making process.

Please find here below in TABLE 4.1., an overview of the literature on the IC’s of VCs. Given the relevance in the ETA context only the business criteria have been summarized in the left column.

Table 4.1. Selected studies on ICs of VCs

Authors	Year	Geography	Key criteria			
			Mgmt/founder	Business	Financial	
Bachler & Guild	1996	Can	X			
Baum & Silverman	2004	Can		X		alliances to other ventures, patents
Beim & Levesque	2004	USA	X	X	X	
Block et al.	2019	world		X		revenue growth and value added of product plan and market characteristics
Boocock & Woods	1997	UK		X		
Chen et al.	2009	USA	X			
Dixon	1991	UK	X			
Dhochak & Sharma	2016	India	X			
Franke et al.	2006	D,A	X			
Franke et al.	2008	D,A	X			
Fried & Hisrich	1994	USA	X	X	X	[depending stage: 1ste stage = management]
Gompers et al.	2016	USA	X	X		
Gompers et al.	2020	USA	X			
Hall & Hofer	1993	USA		X	X	long term growth and profitability of industry
Hisrich & Jankowicz	1990	N/A	X			
Hsu et al.	2014	USA		X		technology and technological progress
Johnson	1979	USA	X			
Jell et al.	2010	Germany		X		innovation
Kaplan et al.	2004	USA	X	X	X	
Kaplan et al.	2009	USA		X		strategy, product technology, business model
Khan	1987	USA	X			
Knight	1994	a world	X			
Knight	1994	b Can	X			
Knockaert et al.	2010	Europe	X	X	X	technology
MacMillan et al.	1985	USA	X			
MacMillan et al.	1987	USA		X		competition, market acceptance of product
Manigart et al.	1997	Europe	X		X	own due diligence report, coherence of business plan
Mason & stark	2004	USA		X	X	business plan, market
Morawczynski	2020	Poland	X			
Muzyka et al.	1996	Europe	X			
Narayansamy et al.	2012	Malaysia	X			
Nunes	2014	Portugal	X			
Petty & Gruber	2011	Europe		X		product , market
Pintado et al.	2007	Spain	X			
Pointdexter	1976	USA	X		X	
Rah et al.	1994	Korea		X	X	not entrepreneur reated characteristics
Rahkman & Evans	2005	Indonesia	X			
Ray & Turpin	1991	Japan	X			
Rea	1989	USA		X		growth markets
Riquelme & Rickards	1992	N/A	X	X		
Robinson	1987	USA			X	
Sakorn	2003	USA		X		competitive advantage
Schefczyk & Gerpott	2001	Germany	X			
Sharma	2015	India	X	X	X	
Shepherd et al.	1999	Australia	X			
Shepherd et al.	2000	Australia	X			
Silva	2004	Portugal	X	X		sustainable advantage, growth potential
Simic	2015	Review				
Timmons et al.	1987	USA	X	X	X	
Tyebjee & Bruno	1981	USA	X			
Tyebjee & Bruno	1984	USA	X	X		market attractiveness and product differentiation
Visagie	2011	UK	X			
Wells	1974	USA	X			
Zacharakis & Meyer	1998	USA		X		product superiority
Zutschi et al.	1999	Asia	X			

Source: Granz. et al. (2020) (in white) and Hans Vanoorbeek (in grey)



#### **4.2.2.4. Investment criteria of BAs**

Compared with the literature on VCs IC, less attention has been given to angel investors whose investments often occur “under the radar” due to its private fragmented nature (Sudek, 2007) (Mason & Harrison, 2017). As BAs are wealthy individuals that invest their own money, they are an important pillar of entrepreneurial finance and have become an important source of funding for new and early growth businesses seeking risk capital in recent years (Block et al., 2019) (Kerr, Lerner, & Schoar, 2014) (Hellmann & Thiele, 2015) (Mason & Harrison, 2015) (Mason, Botelho, & Zygmunt, 2017). BAs provide alongside capital injection valuable non-monetary resources such as industrial knowledge, skills, mentoring management experience, networks to help the entrepreneur (Mason & Harrison, 1992), (Landström, 1993) (Politis, 2008) (Mason & Harrison, 2017).

In fact, BAs do have decision making criteria which can be used in order to get a better understanding of the ETA decision criteria. The BA’s decision making criteria are probably already more relevant for the analysis of ETA transactions given the many similarities between BAs and ETA entrepreneurs/investors.

Firstly, they both invest in more mature companies and both invest rather small amounts and most importantly their own money. Mason et al. (2002) show that the amounts BAs have available to invest range from £10,000 to over £1 million, with an average of £100,000, amounts very similar to the investment amounts a (nascent) ETA entrepreneur has at his/her disposal. Indeed, Block et al. (2019) confirm in their descriptive statistics that BAs represent the smaller investor type with regard to assets under management and company size. They are often individual investors that invest their own money and frequently make smaller investments than other investors (Lerner, 1998), very similar to ETA entrepreneurs.

Secondly, Mason et al. (2002) equally show that BAs have a (slight) preference for financing established firms (expansion, MBOs, MBIs) than start-ups, in particular if they are getting older (Bonini et al., 2018). An ETA entrepreneur always invests in established firms. However, in a more recent studies the same authors, conclude that BAs, unlike ETA entrepreneurs, invest mainly in typically innovative, technology-oriented and growth-oriented business.

Finally, regarding the characteristics of an individual BA, the similarities are equally very strong. The BA is a well-educated, middle-aged individual with considerable business experience and a substantial net worth (Freear, Sohl, & Wetzel, 1994). They range from the successful, cashed-out entrepreneur on the one hand to individuals with little or no experience with venture investing on the other.

On the other hand, however, the (nascent) ETA entrepreneur, the main (often majority) shareholder, plans to run the company him/herself after the transaction. A BA does not have that ambition at all. Hence the BA is often a minority shareholder (Mason, 2008) and hence BAs need to focus more on the entrepreneur/management (team). For the (nascent) ETA entrepreneur there is little or no focus on the latter.

For a recent literature review of BAs in entrepreneurial finance, see Francesca et al. (2018).

For a very recent overview of the research on VCs and BAs investment criteria see Granz et al. (2020). As they did for VCs IC, they equally made an attempt to systematize and categorize the literature on BAs IC into a framework.

Granz et al. (2020) categorize the IC following three main investment criteria groups. As they did in the case of VCs IC, they equally categorized the academic literature on BAs IC in three main areas: (1) the management team, (2) the business, (3) financial traction. We have distinguished two additional themes in the literature: (4) different criteria in different stages and (5) geography.

#### 4.2.2.4.1. *The Management team*

A large number of scholars have investigated the impact of the management team on BAs' investment decisions.

Granz et al. (2020) concluded based on their literature review that the angel industry primarily focuses on the entrepreneurial management team, whose relevance as an investment criterion is explained by the BAs motivation to build personal relationships with the entrepreneurs and to share personal experiences that help reducing information asymmetries.

Investigating management team characteristics is the most important of all the non-financial entrepreneurial venture attractiveness factors for Australian BAs (Hindle & Wenban, 1999), UK/US/Canadian/Australian BAs (Bernstein et al. (2017)), Canadian BAs (Bachher & Guild (1996)), Swedish BAs (Landström (1998)).

Kelly & Hay (1996) examined the difference between solo serial BAs and syndicate serial BAs in the UK, concluding that for the majority investments reviewed for both groups, the investors backed individuals personally known to them.

Haines et al. (2003) examined 51 BAs through expert interviews and showed that BAs look for honest, ethically conscious entrepreneurs with a clear and rational understanding of how a new business might succeed.

According to Mason et al. (2004) and Paul et al. (2007), BAs give more emphasis than VC fund managers to the entrepreneur and "investor fit" or "chemistry between entrepreneur and themselves" considerations.

Different characteristics, often intangible and subjective, of the entrepreneur are important. Such as the entrepreneur's or management's trustworthiness and enthusiasm (Sudek, 2007), trustworthiness and competence perceptions (Lefebvre et al., 2020), personal commitment to the new venture (Cardon et al., 2009), entrepreneurial capital (Erikson, 2002), passion (Cardon et al., 2009) (Chen et al., 2009) (Hsu et al., 2014) and persuasiveness (Mason & Harrison, 2003).

Impression management (i.e. style, content and structure of the presentation when pitching) is another key criterion for BAs to consider a new venture ready for funding (Mason & Harrison, 2003) (Stedler & Peters, 2003).

These findings confirm the BAs as hands-on investors and more emotionally engaged because they focus soft decision factors and on personal relationships with the entrepreneur, therefore placing great weight on the management team (Fiet, 1995) (Van Osnabrugge, 2000) (Paul et al., 2007) (Mason & Stark, 2004).

Finally, this relationship is not always rocksolid. Mason et al. (1996) examine among others the investment process of informal venture capital (a synonym for BAs). Although there are few situations where the relationship between investor and entrepreneur broke down, the naivety and inexperience exhibited by a minority of investors and entrepreneurs is striking. However, there are sometimes significant and consistent expectation gaps between investors and entrepreneurs in terms of the pricing of larger investments and the performance of the business. In recent articles, Mason et al. (2017) and Croce et al. (2016) found that the main reason for rejection ("the deal killer") of an investment opportunity relates to the entrepreneur/management team.

#### 4.2.2.4.2. *The Business*

BAs may also place emphasis on the market potential of the business and the industry (e.g. the technological surroundings of the product or service), as well as on the overall business opportunity.

BAs like to get involved in the business by contributing their experience to the firm. BAs therefore should stick to investments where they know the industry well or have familiarity with the concept, so that they can get involved in the business rather than simply gloss it over (Haar, Starr, & MacMillan, 1988) (Kelly & Hay, 1996). This give the BA an awareness of an adequate risk level to bear (Freear et al., 1997).

Feeney et al. (1999) performed an analysis of the acceptance and rejection criteria of private investors (a synonym for BAs) using formal qualitative analysis. The findings indicate that private investors view the overall business opportunity and the principals of the company as key criteria in the decision-making process. Active and occasional investors differ somewhat in the emphases that they place on particular criteria. Perhaps the single most important finding, however, is that the reasons that prompt investors to reject opportunities are not simply the converse of reasons that prompt them to invest.

Academic research which has focused on the importance of the market as important decision criterion, has distinguished: attractiveness of the product to potential customers (adoption) (Feeney, Haines, & Riding, 1999) (Haines et al., 2003), product status and protectability (product market readiness) (Mason & Harrison, 2002), competitive positioning and protection (Sudek, 2007) (Haar, Starr, & MacMillan, 1988), industry knowledge and large markets (Bachher & Guild, 1996), organizational, strategic and especially technological readiness (Granz et al., 2020), intellectual property and location (Brush et al., 2012), accessibility (Mason & Rogers, 1997), new growth-oriented businesses (market and potential) (Haines et al., 2003) (Landström, 1998).

Research by Maxwell et al. (2011) on Canadian BAs, distinguishes eight critical business factors - summarizing a larger list of investment criteria - used as heuristics by BAs to reduce the number of investment opportunities (elimination-by-aspects model): adoption, product status, protectability, customer engagement, route-to-market, market potential, relevant experience and financial model.

Carpentier et al. (2015) showed that angel group members focus more on market and execution risk than agency risk, similar to VCs. Inexperienced entrepreneurs are rejected for market and product reasons.

Kaplan et al. (2009) investigate the importance of the team ("the jockey") relative to the business model ("the horse"). Although the team has been recognized as important, VCs and BAs should place more weight on business models, since companies' business lines remain stable while management turnover is substantial.

Block et al. (2019) found that investors (VCs, BAs and FOs) rate revenue growth and the value-added provided by the company's product or service to be more important than the management team's track record. BAs focus less on profitability than other investors, as they invest relatively more in the more risky very-early stage companies (seed capital) (Hellmann & Thiele, 2015), companies who are often not mature enough to achieve profits. Revenue growth can be perceived as a sign of market acceptance. They attempt to mitigate this risk by syndicating with multiple other investors (Block et al., 2019) (Manigart, et al., 2006).

#### 4.2.2.4.3. *Financial Traction*

In addition to nonfinancial criteria, BAs assess financial information that new ventures provide within their business plans, especially when the investment process proceeds from the initial screening to the next investment stage (Hindle & Wenban, 1999) (Paul et al., 2007).

For Australian BAs (Hindle & Wenban, 1999), the most important financial new venture attractiveness factors were in order of importance: rate of return, capital growth, cash flow, time to exit and tax benefits. For Italian BAs, business proposals showing lower levels of profitability are more likely rejected after the due diligence (Croce et al., 2016).

Beyond that, poor pricing strategy and deal structuring (Mason & Harrison, 1996), as well as the undercapitalization of the new venture (Feeney et al., 1999) are financial criteria for why entrepreneurs do not receive funding from angels.

In fact, BAs will less focus on financial investment criteria such as return calculations, than VCs do (Dixon, 1991) (Mason & Rogers, 1997).

#### *4.2.2.4.4. Different criteria in different stages*

Research indicates that the emphasis of the investment criteria changes over the process, as those opportunities which pass the initial screening stage (typically less than 10%) are subject to closer scrutiny (Mason et al. (2017), Mitteness et al. (2012), Brush et al. (2012), Croce et al. (2016). IC can therefore be understood better if analyzed separately for every phase of the investment process (Eckhardt et al., 2006). At the screening stage (in comparison with the pre-screening stage), proposals are rejected more often for reasons related to the characteristics of the entrepreneur/management team and less so for the lack of business innovativeness (Croce et al., 2016).

Research by Maxwell et al. (2011) analyzed the business angel early stage decision making and show that angel investors do not use a fully compensatory decision model wherein they weight and score a large number of attributes. Rather, they use a shortcut decision making heuristic known as elimination-by-aspects to reduce the available investment opportunities to a more manageable size. If an opportunity is diagnosed with a fatal flaw, it is rejected in the first stage of the decision making process, but all opportunities with no fatal flaws do progress beyond that stage.

Mitteness et al. (2012) investigate how stage of funding and industry experience affect the evaluations of angel investors. The entrepreneur matters most when BAs are deciding whether a deal should proceed to due diligence. The opportunity matters most when BAs are switching to determining whether a deal matches their own investment goals as the deal progresses through the funding process.

Brush et al. (2012) analyzed firms that sought investment from a prominent angel group located outside of Boston. Tangible, quantifiable, objective organizational characteristics (e.g. organizational readiness, when key management roles are filled) are important during the first decision-making stage. In subsequent stages, such as the negotiation or the final funding stage, intangible, subjective and less quantifiable characteristics become more important.

#### *4.2.2.4.5. Geographic*

Several articles on BAs investment criteria were written on different geographies: Germany (Stedler & Peters, 2003) (Brettel, 2003), Japan (Tashiro, 1999), Sweden (Landstrom, 1998), Australia (Hindle & Wenban, 1999) (White & Dumay, 2020), Italy (Croce et al., 2016), Turkey (Tekler & Tekler, 2016), etc.

Many BAs also have a geographical limit beyond which they will not consider investing. For example, for many BAs the limit is 2 hours travelling time (Mason & Harrison, 2002).

A geographical limit which we could also observe among the ETA entrepreneurs.

#### 4.2.2.4.6. Other

Another particular IC and key driver for a BA is the need to contribute, to add value (Politis, 2007), articulated in the literature as ‘post-investment involvement’ (White & Dumay, 2020) or “co-business creator” (Landström, 1998). Notwithstanding that BAs are also principally motivated by capital gains from their investments, the satisfaction and pleasure derived for being involved in the entrepreneurial process prevails over both market and finance issues (Mason & Stark, 2004) (Van Osnabrugge & Robinson, 2000). They are motivated by the desire to have fun and to help the investee companies (Brettel, 2003) (Tashiro, 1999) (Haines et al., 2003). They want a more hands-on role in their investee business (i.e. the opportunity to contribute) and place therefore more emphasis on the chemistry between themselves and the entrepreneur.

Over time, angel investors have increasingly organized into associations—also referred to as groups, networks, or clubs, depending on the level of their internal structure (Mason et al., 2013)—usually on a geographic or industrial basis. The objectives of such organizations range from increasing the deal flow by sharing presentation pitches from potential entrepreneurs to performing joint due-diligence work on potential investment opportunities, ultimately reducing transaction costs (Mason (2006), Sohl (2007), Paul & Whittam (2010)). Bonini et al. (2018) provided preliminary evidence on the effects of membership in a business angel network on the IC of the members, in particular relating to the share of the BAs personal wealth invested in a given deal or the amount of equity stake in portfolio companies.

Please find here below in TABLE 4.2., an overview of the literature on the IC’s of BAs. In view of all the literature mentioned here above, not surprisingly, for the BA, the management/founder is always extremely important. Given the relevance in the ETA context, only when the business criteria are considered the most important criteria, these particular business criteria have been summarized in the left column. Only 2 exceptions in this regard can be observed: Argerich et al. (2012) sees - only in the initial screening phase - the business as the main IC and Tashiro (1999) sees for the Japanese BAs the level of technology and patents as the main IC.

Table 4.2. Selected studies on ICs of BAs

Authors	Year	Geography	Key criteria		
			Mgmt/founder	Business	Financial
Argerich et al.	2012	Spain		X	[in the initial screening phase]
Bachler & Guild	1996	Can	X		
Bernstein et al.	2017	USA,UK,Can, AU	X		
Block et al.	2019	world	X		
Brush et al.	2012	USA	X	X	
Cardon et al.	2009	USA	X		
Carpentier & Suret	2015	Can	X	X	
Croce et al.	2016	Italy	X		X
Feeney et al.	1999	Can	X	X	
Haar et al.	1988	USA	X		
Haines et al.	2003	Can	X	X	
Hindle & Wenban	1999	AU	X		X
Kelly & Hay	1996	UK	X		
Landström	1998	Sweden	X	X	
Lefebvre et al.	2020	France	X		
Mason & Harrison	1996	UK	X		
Mason & Harrison	2002	UK	X	X	relax IC = mgmt/founder
Mason & Harrison	2003	UK	X		
Mason & Harrison	2015	UK	X		
Mason et al.	2017	UK	X		
Maxwell et al.	2011	Can	X	X	X
Mitteneß et al.	2012	USA	X	X	
Paul et al.	2007	UK	X		
Stedler & Peters	2003	Germany	X	X	
Sudek	2006	USA	X		
Tashiro	1999	Japan		X	level of technology and patents
White & Dumay	2020	Australia	X	X	X

Source: Granz et al. (2020) (in white) and Hans Vanoorbeek (in grey)

#### 4.2.2.5. Investment criteria of PEs/LBOs<sup>37</sup>

Besides VC's and business angels, other research which looks at the selection criteria of private equity firms, principally focused on mature companies, can be useful to understand the ETA investment criteria. PE firms and ETA transactions have in common that they both make investments in mature companies operating in traditional industries and often take a majority stake (50% ownership or more). In both cases, the investment targets are cash flow positive and significant amounts of outside debt is raised in order to finance a substantial part of the transaction. The main difference is the size of the investment, as ETA transactions are usually much smaller in size than typical PE investments.

LBO funds invest in (larger) (less risky) mature companies and are in fact the largest of the different types of PE investors (Kaplan & Schoar, 2005) (Metrick & Yasuda, 2010).

Research by Capron & Jung-Chin (2007) compares acquisitions of private vs. public firms. The lack of information on private targets limits the breadth of the acquirer's search and increases its risk of not evaluating properly the assets of private targets. At the same time, less information on private targets creates more value-creating opportunities for exploiting private information, whereas the market of corporate control for public targets already serves as an information-processing and asset valuation mechanism for all

<sup>37</sup> Given that we cover the GEFs under a different heading here, we assume that PE and LBO funds are synonyms for the purpose of this analysis.

potential bidders. They concluded that acquirers favor private targets in familiar industries and turn to public target to enter new business domains. In case of an ETA transaction, which is always an investment in a private company, one can safely assume that an ETA entrepreneur is probably equally favoring targets in the industries familiar to him/herself, given his/her knowledge of the industry and his/her potential deal flow in that industry due to his/her established network.

Acharya et al. (2009) analyze private equity target selection patterns. They found that private equity funds buy stable companies within a profitability corridor far above zero. Private equity companies use in their selection peer instead of sector benchmarking, as the acquired companies are, on average, not equal to the industry.

Dawson (2011) examines the decision making criteria that are employed by private equity investors selecting family firms. Private equity professionals prefer family firms that are already professionalized and take into account family-specific criteria, including human resources and opportunities to reduce agency costs. Another article on family businesses by Ahlers et al. (2014) examines what happens if families sell their business to private equity firms. Two opposing effects: While the buyer gains real options for external (economic) value creation as a result of family departure, family exit after the sale triggers a loss of family dependent real options, which may subsequently reduce economic value for the new owner.

Block et al. (2019) see a very pronounced and significant difference with the other investor types as they attach a relatively higher importance to a companies' profitability and a significantly lower importance to revenue growth and scalability.

Gompers et al. (2016) indicated that PE investors rely primarily on internal rates of return and multiples to evaluate investments, while anticipating adding value to portfolio companies, with a greater focus on increasing growth than on reducing costs.

With regard to their financial structure, both LBOs (Kaplan & Stromberg, 2009) and ETA transactions acquire a company using a relatively small portion of equity and a relatively portion of outside debt financing. This makes them less risk prone when choosing their investment criteria. Opler and Titman (1993) argue that PE firms indeed systematically avoid companies with high costs of financial distress or high R&D costs and instead favors companies with entrenched management and high cash flows.

Please find here below in TABLE 4.3, an overview of the literature on the IC's of PE firms. Given the above and the fact that an LBO always includes outside debt financing, the financial criteria are dominant.

Although management is an important IC, PE firms easily replace a team that they see unfit and frequently bring in new management (Kaplan & Strömberg, 2008). Acharya & Kehoe (2008) report that one-third of the CEO in their sample is replaced in the first hundred days and two-thirds over a four-year period. Numbers which were confirmed by the practitioner PE magazine Real Deals, showing that 58% of portfolio company CEOs in private equity are made redundant within two years (Real Deals, 2017).

Table 4.3. Selected studies on ICs of PE firms

Authors	Year	Geography	Key criteria			
			Mgmt/founder	Business	Financial	
Acharaya et al.	2009	Europe			X	stable profitable companies
Block et al.	2019	world			X	profitability
Capron & Chen	2007	USA		X		familiar industries
Dawson	2011	Italy				family context (family specific)
Gompers et al.	2016	USA		X	X	growth potential/ IRR
Kaplan et al.	2009	world			X	cash flows
Opler & Titman	1993	USA	X		X	cash flows

Source: Hans Vanoorbeek

#### 4.2.2.6. Investment criteria of Management Buy-in candidates

Management buy-ins are a subset of private equity (Ennew et al., 1994) and within private equity the best approximation for ETA transactions. In their book on management buy-ins, Robbie and Wright (1996) and Robbie in his PhD thesis (1993) have analyzed the screening of target buy-in companies. Given the similarity between a buy-in manager and an ETA manager, both wanting to invest in a company which they want to run and further develop, it makes sense to look at the criteria used by potential buy-in managers to search suitable target companies. Unfortunately, with the exception of the research mentioned here above, very little research is exclusively dedicated on the topic of MBI IC, as the MBI phenomenon is often considered as a part of the MBO/PE/LBO world as they are both majority backed by the same institutional money (for example Scholes et al., 2007).

Robbie & Wright (1996:47) conclude that a buy-in manager is looking for a company in a familiar industry where there is good potential market growth, a strong customer base, some turnaround potential and with a basis competitive strength. It goes without saying that an MBI candidate, as he/she will be the manager post-MBI, will look less at the existing management as he/she will replace it anyway.

On the other hand, MBI candidates, are also rating the PE firm's characteristics in buy-ins (Robbie & Wright, 1996:45) as they are always backed by institutional money provided by VC or PE funds. Criteria such as the amount of equity they are offered, the personal chemistry with the PE, the speed of decision of the PE and finally the price of the deal, play equally a large role. The nascent ETA entrepreneur, who in general does not receive monetary support from institutional money providers, will not have to take such criteria into consideration.

Scholes et al. (2007) extended the conceptual work of Howorth et al. (2004) and Robbie & Wright (1995) surrounding the succession of private family-owned firms through MBOs and MBIs. They built on agency theory to analyze information sharing between vendors (i.e. family firm owners) and purchasers (MBO and MBI management teams) and price negotiation in the context of MBOs of private family-owned firms. Survey evidence confirms the importance of information sharing in MBO and MBI deals of family firms. In particular, external management teams need to address information asymmetry issues. For example, Halter et al. (2013) use information economics to analyze the different (and most explicit) information asymmetries in the context of a family-external succession through an MBI.

As such, it is highly recommended for MBI teams to conduct thorough pre-purchase due diligence evaluations and secure independent advice. External management may be able to obviate some difficulties by targeting family firms with whom they have developed relationships, as well as involving some incumbent



management as equity-holders in the transaction. The involvement of a PE firm increases the likelihood of a mutually agreed price given their expertise and knowledge.

For an ETA transaction, which is a kind of MBI given that in both situations an external manager (s) invest (s) in the business and take (s) on a management role (s) post-transaction, these findings are undoubtedly relevant.

Please find here below in TABLE 4.4., an overview of the literature on the IC's of MBI candidates. For the MBI candidate, the fundamentals of the business are by far the most important IC. The management or founder characteristics are of a lesser importance for the MBI manager as he/she will be fulfilling the role of the management him/herself post-transaction. The financial criteria are equally not first on their mind, as they always team up with a professional VC/PE, who is supposed to contribute the financial knowledge to the transaction.

Table 4.4. Selected studies on ICs of MBIs

<b>Authors</b>	Robbie & Wright
<b>Year</b>	1996
<b>Geography</b>	Europe
<b>Key criteria*</b>	<ul style="list-style-type: none"> <li>Potential market growth</li> <li>Industry (familiarity)</li> <li>Very stable demand</li> <li>Strong customer base</li> <li>Competitive strength</li> </ul>

Source: Robbie & Wright (1996:47)

\*in order importance based on the mean in the Likert scale

#### 4.2.2.7. Investment criteria of FOs

One of the core activities of a family office (FO) are investment related activities such as asset allocation, manager selection and monitoring, investing and investment performance management. Each family will decide, based on its values, culture and objectives, what activities its FO is to carry out. For a review on FOs see (Rivo-Lopez et al., 2017) and (Rosplock, 2014).

FOs investment criteria will be dependent on their objectives. These objectives can be financial management (i.e. preservation or growth in wealth) or less financial objectives such as providing a business education for the next generation. Once this objective has been determined, its investment activities need to be decided on, with specific allocation to the FO, a combination of public equity, fixed income, hedge funds, private equity, real estate, real assets etc. and this with the appropriate risk management capabilities. FO are typically not tied to a set of investment mandates forcing investments into a predetermined industry or criteria (Ayton, 2020). They are increasingly investing direct (UBS, 2018) and particularly focused on sectors and industries where the family wealth was created or where the FO has particular familiarity and expertise, including familiarity with the local legal and governmental environment. They are generally long term and patient investors (Brighton, 2020).

Block et al. (2019) add FOs as an investment type that prior corporate finance literature has largely neglected. Their study sheds light on the investment criteria of FOs and finds that, relative to other PE investors, FOs attribute greater importance to the profitability of portfolio companies but less importance to revenue growth. FOs does not want to risk losing family wealth and are therefore inclined to invest in already

profitable companies, rather than bearing the risk - and potentially high returns – of high growth companies. High growth leads to additional challenges and risks (e.g. entering new markets and hiring new employees) and FOs are less resourceful as they do not always have the capabilities to monitor and support high-growth companies. For the same risk aversion reason, they tend to favor co-investments and syndication. In general, FOs do not have many characteristics in which they significantly differ from the other investor types. They even share similarities with BAs as they are non-intermediated, tied to personal/family wealth and possibly confounded with not pure financial motives. However, they are more risk-averse than the typical BAs.

In that regard, (nascent) ETA entrepreneurs who invest a large part of their accumulated (much smaller) wealth, take a similar approach and equally invest in rather established firms with proven track record. Both investors equally tend to have a more long term approach, as they do not have to realize returns for their investors.

Please find here below in TABLE 4.5., an overview of the almost non-existent literature on the IC's of FOs.

*Table 4.5. Selected studies on ICs of FOs*

Authors	Block et al.	Brighton
Year	2019	2020
Geography	Europe	USA
Key criteria*	Profitability Favour co-investments/syndication Proven track record Long term Familiarity with industry	Long term Familiarity with industry Familiarity with environment (Local, legal)

Source: Block et al. (2019) (academic), Brighton (2020) (practitioner)

#### **4.2.2.8. Investment criteria of GEFs**

Growth capital (also called expansion capital and growth equity) resides at the intersection of private equity and venture capital (Gompers et al.,2016) (Ritter, 2015). There may be a grey area that separates late-stage growth-equity VC funds and some PE funds (Gompers et al.,2020).

As this type of investor is only emerging quite recently, very little academic research has been written about GEFs yet and their investment criteria, with the exception of Block et al. (2019). They are often treated within the group of LBO/PE investors as they are both active in later stage investing (see previous section 4.2.2.5.).

With regard to both assets under management and number of investments, they are significantly larger than FOs, BAs and VCs but usually smaller than LBOs. They attach a higher importance to profitability (but less than the LBO investors) and obviously revenue growth between 20%-50% p.a.. To a lesser extent and definitely less than the VCs they value extreme revenue growth (growth 100% p.a.) as important. GEFs consider it comparably important that all management team members have a relevant track record. GEFs invest in less risky later (growth and expansion) stages as compared to most other investors, where the companies have a functioning product and business model and have experienced initial market success. Their preferred industries are software and services, followed by consumer products and services and industrials and industrial technology (Block et al., 2019).

The PE industry press and research institutes such as Cambridge Associates (Cambridge Associates, 2013) have seen GEFs already for years as a distinct asset class with different characteristics from both VC and PE,

placing it somewhere between late-stage venture (covered in section 4.2.2.4.) and LBOs (covered in 4.2.2.5). Most targets are having a number (if not all) the following traits: founder –owned, no prior institutional investment, proven business model (established product and/or technology and existing customers), substantial organic revenue growth (usually in excess of 10% and often more than 20%), EBITDA positive or expected to be so within 12-18 months.

The investments made in later stage companies and in growth, GEFs have certainly in common with the (nascent) ETA entrepreneur. On the other hand, a GEF will invest by injecting capital in a fast growing company in order to finance the expected future growth. An ETA entrepreneur will invest a large part of his/her personal wealth in the acquisition of a more established and relatively stable company, having little left to support the further growth. Given the usually limited resources of an ETA investor, an ETA transaction is partially funded by debt. In general, GEF investors do not take on additional debt as they contribute with equity to fund the future growth of their investee companies.

Please find here below in TABLE 4.6., an overview of the almost non-existent literature on the IC’s of FOs.

*Table 4.6. Selected studies on ICs of GEFs*

Authors	Block et al.	Cambridge Associates
Year	2019	2020
Geography	Europe	USA
Key criteria	Profitability Favour co-investments/syndication Proven track record Long term Familiarity with industry	relatively mature companies proven business model (established product/technology, existing customers) substantial organic revenue growth (+20%p.a.) EBITDA positive or expected within 12-18 months no leverage, no prior insitutional capital

Source: Block et al. (2019) (academic), Cambridge Associates (2019)

#### **4.2.2.9. Investment criteria compared**

Few academic studies specifically compare the IC of different private equity sub-asset classes.

##### *4.2.2.9.1. Comparison of IC between VCs and BAs*

Haar et al. (1988) concluded that BAs and VCs have markedly different investment criteria. BAs are much less interested in a thorough business plan, competitive positioning or the industry than VC. They both rank the management ability of the venture team and a demonstrated need of the product or service in a market with large potential, very high among their investment criteria.

Bachher et al. (1996) analyzed the decision making criteria used by Canadian equity investors (BAs, private VCs and public VCs) to evaluate early stage technology based companies. All three types of investors rank the general characteristics of the entrepreneur as the most important decision criteria, the BAs relatively a bit more than the VCs.

Hellmann et al. (Hellmann & Thiele, 2015) (Hellmann, Schure, & Vo, 2017) have developed a theory of how angel and venture capital markets interact. They are dynamic substitutes. First these investors are “friends” in that they rely upon each other’s investments. However, they are also “foes”, because at a later stage the venture capitalists no longer need the angels.

Fiet (1995) describes the risk avoidance strategies of BAs and VCs. BAs rely more on the entrepreneur to protect them from losses due to market risk. Consequently they are more concerned with agency risk than market risk. The VC are more concerned with market risk as they have learned to protect themselves contractually from agency risk using boilerplate contractual terms and conditions. A missing institutional setting prevents the smooth exchange of information between the BA and the entrepreneur.

Equally drawing upon agency theory, Van Osnabrugge (2000), made a comparison of business angel and venture capitalists investment procedures and investment criteria. His analysis supports the main hypothesized notion that, although both investors reduce agency risks at all stages of the investment process, BAs are more sensitive to agency risk and place more emphasis on doing so ex post investment (the incomplete contracts approach), while VCs stress doing so more ex ante investment (the principal-agent approach).

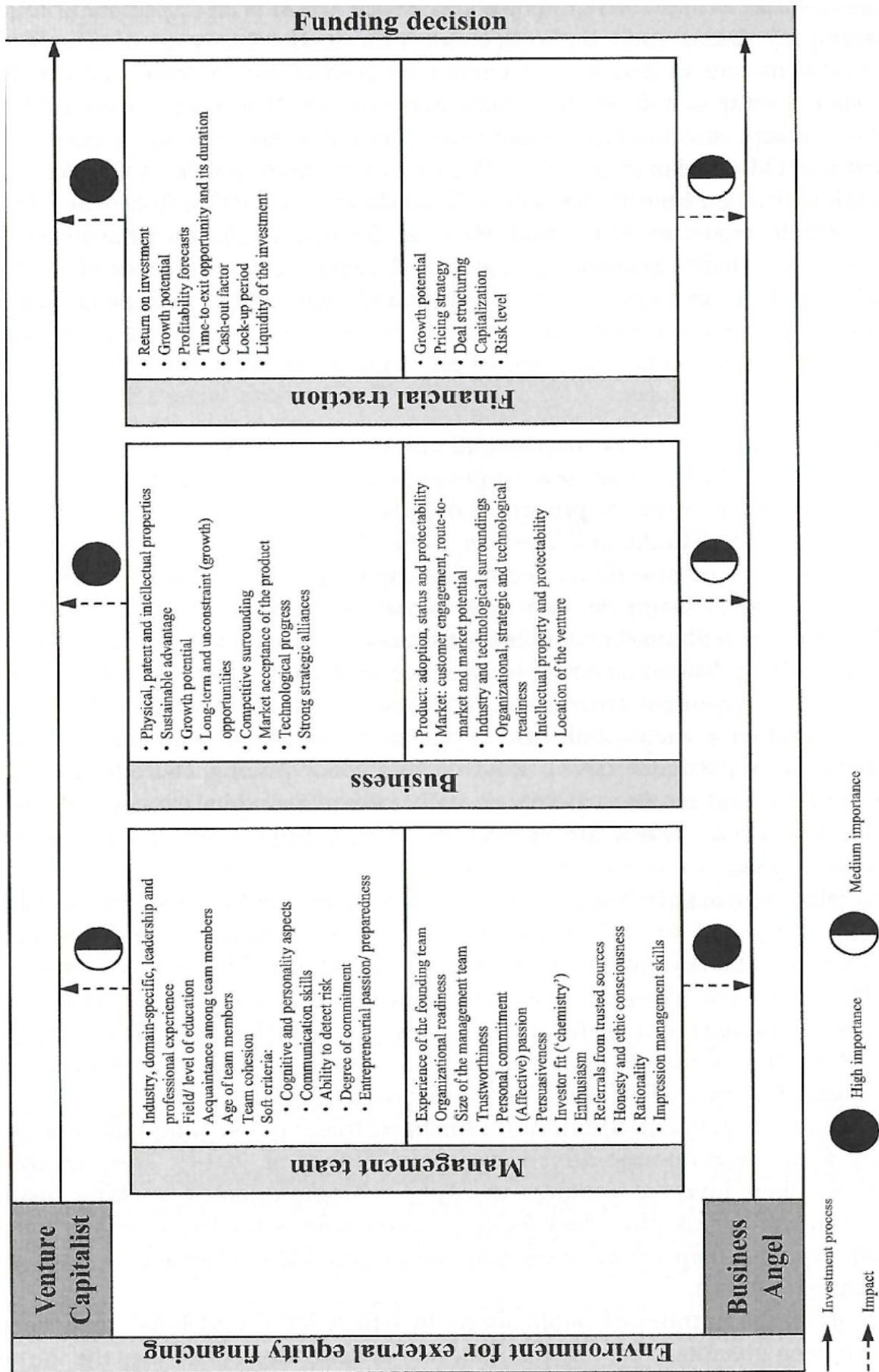
Mason et al. (2004) made a comparison of the investment criteria of bankers, venture capitalists and business angels. While bankers stress the financial aspects of the proposals, VCs and BAs, as equity investors, emphasize both financial and market issues. BAs give more emphasis than VCs to the entrepreneur and the “investor fit” considerations.

Hsu et al. (2014) performed a conjoint analysis of the decision policies of angel and venture capital investors. They found that strategic readiness for funding and affective passion matter more to angel investors, while economic potential matters more to venture capitalists. We also find that both investor types place similar weights on the specific human capital of entrepreneurs. These findings support the agency view that differences in the investment decision policies of angel investors and venture capitalists can be explained by examining the agency costs, market risks, information asymmetry, and control mechanisms that are structured into angel and venture capital deals.

Block et al. (2019) analyze the investment criteria of VCs, BAs and FOs through an experimental conjoint analysis. Overall the most important investment criteria are: (1) revenue growth, (2) value added of product/service and (3) management team track record. International scalability, current profitability, business model, and the reputation of existing investors are relevant but of lower importance.

For a recent systematic literature review on the research on VCs and BAs investment criteria, Granz et al. (2020), provided an overview of 54 articles of quantitative and qualitative studies published between 1974 and 2017. They develop a conceptual framework, illustrated here in FIGURE 4.1 here below, grounded on agency theory for investment criteria that VCs and BAs use for funding decisions. They categorize three main investment criteria groups: (1) the management teams (2) the business (3) financial traction.

Figure 4.1. Conceptual Frame Work for IC of BAs and VCs



Source: Granz et al. (2020)

Their review reveals that VCs focus in the first place on the business and financial traction because of their limited partners return expectations, whereas BAs initially employ investment criteria related to the entrepreneurial management team, as this careful selection allows them to mitigate their behavior-oriented agency problems. The institutional settings where VCs operate in allows them to conduct a more profound due diligence on growth potential, competitive surroundings and market acceptance as well as the technological progress of the product. In contrast, BAs usually lack these detailed comparative data to assess market risk. Therefore, BAs focus more on their personal fit (Mason & Rogers, 1997) and investment criteria regarding the management team (Granz et al., 2020).

#### *4.2.2.9.2. Comparison of IC between VCs and PEs*

Sullivan (2017) describes investments of the top-tier venture capital firms and private equity firms, as well as the criteria applied by those investors to select firms in which to invest. In this article, the author describes some examples of famous VC and PE investors and their investment firms, not really comparing the IC.

In their analysis of LBO investors, Block et al. (2019) see a very pronounced and significant difference with the other investor types as they attach a relatively higher importance to a companies' profitability and a significantly lower importance to revenue growth and scalability. In this regard they are the opposite of VCs who are much more risk prone.

#### **4.2.2.10. Investment criteria looking at ETA transactions**

As stated before, no dedicated academic research exists on the IC in an ETA context. Although some of the academic literature on search funds and some academic reports or syllabuses on search funds, briefly elaborate on the topic of IC, certainly nothing has been written on IC of the more seasoned experienced ETA entrepreneur.

Vaghely & Julien (2010) provide a frame to help understand the entrepreneur's use of information to identify opportunities. The entrepreneur's information processing is a dynamic combination of algorithmic (pattern-like) (cognitivist/recognition) and heuristic (trial and error) (constructionist/construction) information treatment, allowing him/her to identify opportunities.

In the process of evaluating the opportunity of an ETA transaction, the ETA manager should certainly do some business planning as (s)he will seek to improve the performance of established small and especially new firms. However, some contextual factors such as newness of the firms and the cultural environment of the firm significantly impact this business planning-performance relationship (Brinckman et al., 2010).

In case of an ETA transaction, the IC should maximize the chance that, within a reasonable amount of time, the ETA entrepreneur finds a good business that can be financed and acquired from a willing seller – and a business that the ETA entrepreneur can run successfully despite maybe having limited to no experience with this industry/business.

A primer on search funds and a practical guide to entrepreneurs embarking on a search fund from Stanford Business School (Kelly, 2017) describes a list of IC, as developed and refined by the search fund community over the years. See below in TABLE 4.7.. While the criteria are not absolute, they represent a collective history augmented by the successes and failures within the search fund model and their aim is to reduce a search fund's entrepreneur's key risks: (i) risk of finding a suitable company to acquire, (ii) risk of completing an acquisition and (iii) risk of managing and growing the company to provide an attractive return. Having a defined set of criteria provides a framework of ideal circumstances, not absolute restrictions (Kelly, 2017). No potential acquisition will meet all the IC. The classification of the following IC as applying to an industry

(as many searchers take an industry-focused approach) or a company. It is clear that many companies (though not all) share many of the macro attributes of the industry, and therefore classifying criteria as specific to the industry or company can be arbitrary.

Table 4.7. Desirable and Undesirable Characteristics of an industry or a company

	Desirable	Undesirable
Industry	<ul style="list-style-type: none"> <li>• Fragmented industry</li> <li>• Growing industry</li> <li>• Sizable industry – both revenues and number of companies</li> <li>• Straightforward industry operations</li> <li>• Relatively early in industry lifecycle</li> <li>• High number of companies in target size range</li> <li>• Healthy and sustainable profit margins (ROTC* &gt;20%)<sup>13</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Highly consolidated industry</li> <li>• Declining industry</li> <li>• High competitive intensity/limited barriers to entry</li> <li>• High customer pricing power</li> <li>• Unpredictable exogenous factors</li> </ul>
Company	<ul style="list-style-type: none"> <li>• Competitive advantage</li> <li>• High recurring revenue**<sup>14</sup></li> <li>• History of cash flow generation</li> <li>• Motivated seller for non-business reasons</li> <li>• Fits financial criteria, e.g. \$10 million to \$30 million in revenues and greater than \$1.5 million of EBITDA</li> <li>• Multiple avenues for growth</li> <li>• Solid middle management</li> <li>• Available financing</li> <li>• Reasonable valuation</li> <li>• Realistic liquidity options in 3-6 years</li> </ul>	<ul style="list-style-type: none"> <li>• Turnaround situation</li> <li>• High customer concentration</li> <li>• High customer churn</li> <li>• Small company – less than \$10 million revenues or \$1.5 million EBITDA</li> <li>• Limited or no management bench strength</li> <li>• Competitive auction</li> <li>• Public to private transaction</li> </ul>

13 ROTC = Return On Tangible Capital

14 Recurring revenue can be defined as regular monthly, quarterly or annual payments for services received every month or quarter from customers who stay for at least 18 months.

Source: Kelly (2017)

A similar paper from the University of Chicago on ETA (Dennis & Laseca, 2016), giving an overview of ETA and its evolution through the years, provides some characteristics of the ideal industries and targets for ETA and this looked through the lens of a traditional search fund. See TABLE 4.8. here below. In our thesis, we analyse, a so-called “alternative form of an ETA transaction” (Dennis & Laseca, 2016:8), i.e. the self-funded searcher, typically represented by a more seasoned experienced ETA entrepreneur.

Table 4.8. Characteristics of ideal industries and targets

<b>Industry</b>	<ul style="list-style-type: none"> <li>• Highly fragmented</li> <li>• Stable / low cyclicality</li> <li>• Growing at &gt;2x GDP</li> <li>• Low external risk factors (i.e. regulation, technology obsolescence, etc.)</li> </ul>
<b>Company</b>	<ul style="list-style-type: none"> <li>• High percentage of recurring / repeatable revenue</li> <li>• Track record of consistent profitability</li> <li>• Diverse customer base</li> <li>• Strong middle management</li> </ul>
<b>Financial</b>	<ul style="list-style-type: none"> <li>• Revenue between \$5 – 50 million</li> <li>• Stable cash flows of at least \$1 million</li> <li>• EBITDA margins &gt;10%</li> <li>• Low capex and working capital requirements</li> </ul>
<b>Context</b>	<ul style="list-style-type: none"> <li>• Owner seeking liquidity and wanting to retire / transition out of daily operations</li> <li>• No succession plan in place</li> <li>• Company in need of additional management, capital and board expertise to capture growth opportunities</li> </ul>

Source: Dennis & Laseca (2016)

Their paper equally shows that investors in search funds rated the company (and by default the industry), the so-called “Horse”, as the most important component of the Jockey & Horse metaphor of Kaplan et al. (2009). The “Jockey” or the management comes in second place as the searchers will be themselves the management after the transaction.

A paper of Stanford University’s Centre for Entrepreneurial Studies, on selected observations on search funds (Yoder & Kelly, 2018), equally elaborates briefly on the IC of search funds and their preferred industries, being in order of importance technology, healthcare and “other services”. Recurring revenues and a positive EBITDA margin are often among the characteristics sought by investors and ETA entrepreneurs in a company targeted for acquisition. The average purchase price (i.e. size) of a company was almost \$12m with a \$2m EBITDA.

A similar sister study paper from IESE Business School (University of Navarra) (Kolarova et al., 2020), who is reporting on the international (i.e. non-North American) search funds, describes the international (search fund) searcher as opportunistic in his/her search process. Recurring revenue, high EBITDA margins and stable cash flow history are often included in the IC. Regarding the targeted industries, in order of importance, technology, healthcare, transportation and logistics, and manufacturing represented the most targeted industries in recent years. Data from the most recent years demonstrate a shift away from acquiring general services businesses towards technology such as software, tech-abled services, financial services.

Morrisette & Hines (2015) describe in their research on search funds certain selection criteria, such as size (EBITDA between \$1-8 million), company stage of development (expansion stage to later stage), return expectations (on average 25%) and preferred industries. They do not attach a relative importance to those criteria. For an overview on these criteria and other common characteristics of search fund and independent sponsors, see TABLE 4.9. Search funds are predominantly active in the expansion or later stage of a company’s life cycle and mainly in the services industry and to a lesser agree in the manufacturing industry. Also the holding period of a search fund is relatively long and probably even longer for a self-funded ETA



searcher as they invest mainly with their own money and do not need to repay their investors at a certain moment.

Table 4.9. Common Characteristics of Private Equity Investments

	<b>Angel Investors</b>	<b>Venture Capital</b>	<b>Search Fund</b>	<b>Traditional Private Equity</b>	<b>Independent Sponsor</b>
Company Stage	Seed Stage to Later Stage	Seed Stage to Expansion Stage	Expansion Stage to Later Stage	Later Stage to Post IPO	Later Stage
Company Size (EBITDA)	Negative to 10 million	Typically Negative	1 million to 8 million	Greater than 3 million	Greater than 1 million
Fee Structures	N/A-Direct Investment	2% management fee and 20% carried interest	3%–5% search capital and 25%–30% carried interest	2% management fee and 20% carried interest	1%–2% success fee; 1%–2.5% management fee; 10%–20% carried interest
Source of Funds	High Net Worth (Self-Funded)	Institutional and High Net Worth	High Net Worth	Institutional	Institutional and High Net Worth
Roles of General Partners	N/A-Direct Investment	Board Seat or Advisory	Management Roles	Board Seat or Advisory	Board Seat or Advisory
Roles of Limited Partners	Highly Active	Active	Highly Active	Passive	Passive
Return Expectations	18%–35% AVG 30%	22%–45% AVG 27%	20%–40% AVG 25%	19%–30% AVG 25%	19%–30% AVG 25%
Holding Period	4–8 years	4–7 years	5–10 years	3–7 years	3–7 years

Source: Morissette & Hines (2015)

Hunt & Fund (2012) do not explicitly elaborate on the IC of an ETA entrepreneur. However, they explain “the size” investment criteria. Given the ETA entrepreneur’s financial capability, size is not a real matter of choice. While it is certainly true that entrepreneurship can be manifested in a wide array of sizes and innovative pursuits, very small businesses (e.g. businesses with a turnover of \$500,000 per year or less), rarely possess the financial capacity to simultaneously compensate the ETA entrepreneur and generate him/her a decent living standard, cover the debt maintenance associated with the business acquisition and still allow to invest in market-transforming strategic reorientation of the business. On the other side of the size spectrum (e.g. above \$20 million) when the deal is becoming too large, private equity investors, high net worth individual investors or family offices will equally pursuing this kind of transactions. This increased competition in this larger segment of the market will raise the price expectations and make it often unaffordable for the ETA entrepreneur. A threshold of \$20 million approaches indeed the upper limit for which entrepreneurship can generally be pursued by owner-operators, an essential characteristic of an ETA transaction. Transaction. Hunt & Fund analyze the executed ETA transactions through the data of Search Funds (Morissette & Hines, 2015), which they use as an approximation for the ETA phenomenon as a whole. Hunt & Fund provide a table of candidate selection criteria in their article, here below given in TABLE 4.10., comparing IC between LBOs and ETA transactions.

Table 4.10. IC comparison between LBOs and ETA

Target-Firm Features	Selection Criteria	
	LBO	ETA
Prior Results	Historical underperformance	Historical underperformance
Assets / Holdings	Large asset base	Often small. Sometimes virtually non-existent in service companies.
Investment Requirements	Low future capital requirements	Expectation of investment for growth.
Cost Structure	Potential for process improvements towards cost reductions.	Same, but cost reductions involve strategic realignment and emphasis on growth.
Market Position	Strong, even leading, market position.	Emphasis placed on untapped potential of marginalized performers.
Company Management	Strong team in place to implement profit goals.	Management team largely, if not wholly, replaced.
Value Multiples	Relatively low enterprise value.	Looking for value, but redirected growth strategy and long-term investment horizon can justify higher multiples.

Source: Hunt & Fund (2012)

Ruback and Yudkoff (2016) recommend in their book that the most important characteristic an ETA manager should want in his business, is to buy an enduringly profitable business with an established business model for success – one that is profitable year after year. Therefore, having recurring customers is key. Customers keep coming back if the company has an outstanding reputation or a certain level of integration with the customer systems (high switching costs) or the company’s products are only a small expense for the customer (the importance of being unimportant) etc. Companies that are less likely to have enduring profits are technology-driven companies or cyclical businesses, or businesses in highly competitive environments.

All the data and research here above are always linked to search fund ETA entrepreneurs. These ETA entrepreneurs are typically relatively young, recently business school graduates supported by different investors. In our analysis, we cover ETA through data provided by more seasoned managers, so-called self-funded searchers, who typically do not have outside investors which pay them to search for companies. Nevertheless, these search fund IC are undoubtedly very relevant for our analysis of the IC of more seasoned experienced nascent ETA entrepreneurs. In any case, although search funds are indeed effective examples of ETA transactions, they only constitute a small niche in the ETA space. Only a tiny part of the ETA transactions that take place originate from search funds. In particular in Europe, where search funds are almost non-existent. It is clear that search fund searchers and self-funded searchers (or experienced ETA entrepreneurs) have different track-records that imply different fund raising, management and operational capabilities, as well as distinctive networks of investors, intermediaries and sellers. These seasoned experienced ETA entrepreneurs typically rely on raising more debt to complete an acquisition and often target materially smaller companies than funded searchers as they have to support a larger management team and have deeper pockets as they are supported by several investors. Consequently, these seasoned experienced ETA entrepreneurs are typically winding up with a higher percentage of equity ownership (Yoder & Kelly, 2018). Furthermore, given the average age of an experienced ETA entrepreneur (46 years, according to our descriptive statistics in Appendix 3) versus a search fund backed entrepreneur (median 32 years, (Pohlmeyer & Rosenthal, 2016)), this could equally have an impact of the preferred targeted industries, probably the latter being more focused on more risky technology companies.

TABLE 4.11. provides an overview of the main differences in characteristics and IC between the search fund ETA entrepreneur and the self-funded seasoned experienced ETA entrepreneur. The latter being researched in this thesis.

Table 4.11. IC Differences between search fund and experienced ETA entrepreneurs

	Search fund	Self Funded Experienced
<i>Average age</i>	32	46
<i>Background</i>	post-MBA top B-School	senior management
<i>Fund structure</i>	Search fund	no fund
<i>Funding Search</i>	paid by investors (2 yrs)	self-funded
<i>Stage</i>	expansion stage to later stage	later stage
<i>Size</i>	small	very small
<i>EBITDA</i>	1 to 8	>1
<i>Industry</i>	technology, healthcare,...	more traditional businesses
<i>Equity contribution</i>	nothing or little (time)	significant equity contribution
<i>Leverage</i>	mid to high	high
<i>Shareholding</i>	relatively small	often majority
<i>Incentive</i>	carried (from investors)	no carried

Source: Hans Vanoorbeek

#### 4.2.2.11. Summary

TABLE 4.12. summarizes the main differences and similarities in characteristics and IC between the different private equity types of investors, analyzed in the previous sections (4.2.2.3. to 4.2.2.8.). We can conclude that the IC evolving around management and its capabilities have little or no importance to our (self-funded) seasoned, more experienced (nascent) ETA entrepreneur. Not surprisingly, as the ETA manager will become the manager of the acquired company and hence replaces the existing management. At the most, he/she want to check whether the existing second layer of management is capable to do the job and support him/her in the next phase. On the other hand, the IC relating to the business are of the utmost importance to the ETA entrepreneur. As he/she is going to invest a substantial part of his/her own money in the acquisition of his/her company, it has to be a company with the right business fundamentals. Finally, the IC regarding financial traction are equally very important. The company will be purchased with leverage provided by a bank. This will require the necessary financial performance by the acquired company.

In our study on the IC of the (nascent) ETA entrepreneur, we will therefore focus on IC belonging to the two groups of relevant IC (business and financial traction).

Table 4.12. IC The main differences and similarities between the different private equity types of investors and self-funded experienced ETA entrepreneurs - Summary table

	ETA (self funded experienced)	VC	BA	PE/LBO	MBI investor	FO	GEF
<b>Characteristics</b>							
<u>Differences</u>	more mature, stable established business ETA entrepreneur = own money investor cash flow is key	seed to expansion, growth more technology fund investor little or negative cash flow	combination of mature and growth both established and technology own money investor cash flow less important	mature, growth less important established business fund investor in management cash flow is key	mature, growth less important established business Buy in manager = own money investor cash flow is key	mature, growth less important familiarity with industry investor in existing management profitability & long term is key	growth proven business model investor in existing management organic revenue growth is key
<u>Similarities</u>	investors in private companies rather small companies small amounts but own money	investors in private companies rather small companies small to large amounts (fund money)	investor in private companies rather small companies small amounts (own money)	investor in private companies rather larger companies larger amounts (fund money)	investor in private companies rather larger companies small amounts (own money) next to fund	investor in private companies small & larger companies small & larger amounts (own money)	investor in private companies small & larger companies small & larger amounts (fund money)
<b>IC</b>	ETA entrepreneur = new management business is most important IC financial traction is key (leverage)	management team = most important IC business is important IC financial traction less important	management team = most important IC business is secondary IC financial traction less important	management team = important business is important IC financial traction = key (leverage)	Buy in manager = new management business is most important IC financial traction less important (fund)	management team is important business is most important IC financial traction is important	management team is important business is most important IC financial traction is important

Source: Hans Vanoorbeek

TABLE 4.13. provides an overview of the relevancy of the IC of the different private equity types of investors for the analysis of the IC of experienced ETA entrepreneurs in this chapter.

Table 4.13. IC Relevancy IC of different PE investors for analysis of IC of ETA entrepreneur

<b>VC</b>	*	
<b>BA</b>	**	(invest own money and also mature)
<b>PE/LBO</b>	***	(leverage, mature)
<b>MBI</b>	****	(invest own money, mature & leverage)
<b>FO</b>	**	(invest own money, mature)
<b>GEF</b>	*	
<b>Search fund</b>	*****	(both real ETA)

Source: Hans Vanoorbeek (\*the more stars, the more relevant)

In our subsequent discussion on the IC, the ideal company characteristics and some other relevant parameters linked to IC of the (nascent) ETA entrepreneur, this degree of relevancy of the different PE investors will be reflected in the comments when comparing the IC of the (nascent) ETA entrepreneur with the IC of other investor types.

#### 4.2.2.12. Investment criteria of ETA in this research

In order to find out what do they really want to buy (or bought), we have questioned in this study the (nascent) ETA entrepreneurs about the following:

- Investment criteria
  - We have asked the respondents to convey the importance they attach at a list of 18 different IC, relevant for the ETA environment.
- Location of the target (geography)
  - How important is geographic location for the respondents? and are they prepared to move their residence ?
- Size of company (profitability, employment, turnover)
  - We have asked the respondents to indicate their ideal company characteristics along the lines of ideal profitability, ideal turnover and ideal employment.
- Type of industry (services, manufacturing,...)
  - We have asked respondents about their favorite industries to invest in.
- Experience in the industry
  - We have asked the respondents whether they find previous work experience in the industry of the target company important.
- Preferred deal scenario
  - The respondents have been asked what their preferred business scenario once they acquired the company expressed in professionalization and improvement potential.
- Valuation expectations
  - We have asked the respondents to state their expected valuation, expressed in EBITDA multiple.
- Shareholding (majority v. minority, with/without partner)
  - We have asked the respondents what shareholder situation they prefer or are prepared to accept.
- Preferred seller
  - Finally, the respondents have been asked how they see the preferred seller situation.

The majority of these questions have been covered in some similar form in the literature, although not yet in the context of ETA. We will systematically discuss all of the above questions in Section 4.5 and situate them in the relevant literature.

### **4.3. Theoretical foundations for ETA investment criteria**

#### **4.3.1. Agency Theory**

##### **4.3.1.1. Introduction**

Agency theory studies the problems and solutions linked to delegation of tasks from principals to agents in the context of conflicting interests between the parties.

Agency theory (Eisenhardt, 1989) is concerned with resolving two problems that can occur in agency relationships. The first is the agency problem that arises when (a) the desires or goals of the principal and the agent conflict (and unaligned) and (b) it is difficult or expensive for the principal to verify what the agent is actually doing. The problem is that often in an organization the principal cannot verify whether the agent has behaved appropriately. The second problem is the problem that the principal and the agent may prefer different actions due to the fact that they have different attitudes towards risk.

Agency theory reestablishes the importance of incentive and self-interest in organizational thinking (Perrow, 1986). Much of organizational life is based on self-interest.

Michael Jensen is one of the first authors who uses the agency theory in the context of corporate raiders, takeovers, LBOs, buyout value generation (Jensen M. C., 1986) focusing on buyouts principally as a governance and control device. Many have followed, for example: (Lehn & Poulson, 1989), (Kaplan S., 1989), (Baker & Wruck, 1989), (Smith, 1990), (Denis, 1994), (Wruck, 1994) and (Cotter & Peck, 2001).

Agency theory has for 30 years been the dominant framework for explaining the leveraged buyout phenomenon and can be explained by its main two principles: the costs for business owners (principals) to monitor business managers (agents) and the divergent risk preferences among owners and managers (Eisenhardt, 1989). The information asymmetries between principal and agent resulting in limited opportunities for the former to monitor the latter (Shapiro, 2005).

The key idea of agency theory is that, especially in public firms or in mature industries where firms generate substantial cash flows, there are agency problems between owners (principals) and managers (agents of shareholders), i.e. managers will not act in the best interest of the owners. Because managers in public companies frequently own trivially small or no equity stakes in their companies and are not closely monitored, agency theory suggests they may not pursue non-profit maximizing behavior to the detriment of the shareholders (Jensen & Meckling, 1976). The same in mature cash flow generating companies, agency problems create a free cash flow problem (Jensen, 1993). Given that manager's compensation is more closely tied to sales than to profitability, they may continue to invest in growth or diversification rather than return free cash flow to shareholders (Wright et al, 2001). A theme that pervades the agency literature is that stricter governance and a more efficient incentive scheme can effectively mitigate the downside problems that plague mature firms.

There has been a vast amount of theoretical and empirical work on this. Changes in governance and incentive systems as well as activities to increase efficiency have therefore been examined closely.

#### **4.3.1.2. In the context of LBO's:**

Jensen conceptualized buyouts and buyout value generation mainly based on the large LBO model and applied an agency theoretic lens (Jensen & Meckling, 1976). By taking the firm private (public-to-private transactions by private equity), by using high leverage (the "L" of LBO), these agency costs are reduced, and as such efficiency in the firm should increase. As Jensen states it (Jensen M. C., 1984): "Corporate takeovers do not waste resources; they use assets productively" and "they do not harm shareholders of the target company, which gain substantial wealth".

In other words, LBOs provide a "carrot" and "stick" mechanism (Cotter & Peck, 2001) to ameliorate agency costs associated with free cash flows. First, managers start owning a substantial amount of shares, giving them incentives to work harder (the carrot). Secondly, firms borrow heavily to finance the purchase of the (publicly held) shares. This heavy debt burden forces managers to efficiently run the company to avoid default (the stick).

In another article, Jensen (Jensen M. , 1989) predicted that the leveraged buyout organizations would eventually become the dominant corporate organizational form. He argued that the private equity firm itself combined concentrated ownership stakes in its portfolio companies, strong incentives for the private equity professionals (the so-called carried interest) and a lean, efficient organization with minimal overhead costs. The private equity firm then applies performance-based managerial compensation, highly leveraged capital structures and active governance to the companies in which it invests.

Cotter and Peck examine the role buyout specialists play in structuring the debt used to finance the LBO and in monitoring management in the post-LBO firm. Their findings suggest that active monitoring by a buyout specialist substitutes for tighter debt terms in monitoring and motivating managers of LBOs (Cotter & Peck, 2001).

A good overview on the literature on private equity and LBOs is the article of Cumming and others (Cumming et al., 2007), focusing on global evidence related to both governance and returns (financial and "real" (productivity and broader performance) to private equity and leveraged buyouts.

#### **4.3.1.3. In the context of MBOs**

Bruton et al. (2002) used the agency theory as a foundation for hypothesis development and concluded that agency theory explanations of performance are generally valid throughout the buyout cycle (public-private-public cycle of ownership); i.e. increased managerial ownership leads to better firm performance. Their results suggest that agency theory is an appropriate theoretical base for explaining managerial choices during the buyout cycle.

For example, whether MBO's create value is thought to be dependent upon the ability to reduce owner-manager agency costs and that in such situations, value creation by reducing agency costs will depend upon pre-MBO agency costs (Chrisman et al., 2012).

A similar conclusion is made by Mike Wright (Wright et al., 2001a) and (Wright et al., 2001b), stating that agency theory focuses on buyouts principally as a governance and control device to increase profitability, organizational efficiency and limited attention to growth. This is especially in the context of mature firms, where discipline, incentives and limits to managerial discretion serve to mitigate the destruction downside of firm value.

#### **4.3.1.4. In the context of VCs**

Besides LBOs performed on mature companies, venture capitalists and business angels equally operate in a hazardous environment characterized by substantial asymmetric information and agency issues (Fiet, 1995) (Armit, Brander, & Zott, 1998) (Van Osnabrugge, 2000) (Arthurs & Busenitz, 2003) (Sahlman, 1990).

The goal conflict between VCs (principal) and entrepreneurs (agent) exists because VCs aim to maximize their overall portfolio return (Mason & Harrison, 2002) whereas entrepreneurs seek to maximize the return of their own venture. VCs invest on a portfolio basis (Gompers & Lerner, 2001) and use portfolio investments and syndication as tools to lower their market risk exposure (Fiet, 1995) (Zacharakis & Meyer, 2000). They equally reduce the risk of opportunistic behavior of the entrepreneur by stage compensation and financing, board seats, negative covenants and specific exit rights (Ibrahim, 2008). Before the transaction, they carefully screen and select their investment targets after a thorough due diligence process to reduce information asymmetries, as well as adverse selection or moral hazard. After the transaction they are not deeply engaged in the daily operations of their portfolio firms. They therefore screen and monitor the portfolio firms based on sophisticated contracts with contractual milestones to control decision-making and/or (staged) funding in portfolio firms (Gompers et al., 2020) (Gompers P., 1995). VCs control mechanisms are primarily outcome-oriented (focusing on the business and its financials) (Granz, Henn, & Lutz, 2020) and the explanatory power of agency theory is strongest in the pre-funding area (Arthurs & Busenitz, 2003).

#### **4.3.1.5. In the context of BAs**

The emphasis that BAs place on the entrepreneur as both the most significant investment criterion and the dominant deal killer reflects the presence of agency problems (Mason et al., 2017). This has two causes: first, agency theory assumes that there is a potential goal conflict between the principal (the BA) and the agent (entrepreneur/management team), with the risk that the agent will seek to pursue opportunistic behavior damaging the principal's financial interests. Landström (1998) and Kelly (2007) do not see that problem as the relationship BAs and entrepreneurs appears to be infused with high levels of interpersonal trust from the outset. Secondly, there are information asymmetries, with certain information difficult for the principal to obtain or to interpret (Mason & Harrison, 2017). This creates the risk of adverse selection by the principal, investing in a business in which they have been unable to verify the agent's competences or where the agent may have misrepresented themselves. Prowse (1998) argues that BAs therefore prefer entrepreneurs they know well, trust, and work with when screening investment targets. The agency problem between the BA and the entrepreneur partly does exist because of the lack of an institutional setting, a low level of sophistication of angel contracts and the less thorough due diligence performed, which makes it difficult to verify information and creates important information asymmetries (Fiet, 1995) (Van Osnabrugge, 2000). The BAs rely on the entrepreneur to manage market risk, which increases the BAs exposure to human risk (related to the management team) compared to market risk (market-related factors). It is therefore particularly important for BAs to monitor the entrepreneur on a personal level, in order to verify information so that the entrepreneur (agent) act in accordance to the BAs (principal) interest (Van Osnabrugge, 2000). In order to reduce information asymmetries, BAs control mechanisms are primarily behavior-oriented (focusing on human factors).

Consequently, VCs and BAs may either use behavior-oriented control mechanisms to observe and monitor the agent's behavior or outcome-oriented mechanisms to provide the agent with incentives for certain behavioral outcomes (Granz, Henn, & Lutz, 2020).



#### **4.3.1.6. In the context of ETA?**

This focus on the agency theory has severely restricted the ability of scholars to look past the buyout model motivated by financial engineering gains to see instead the entrepreneurial aims and outcomes often associated with buyouts, particularly small buyouts and entrepreneurial acquisitions (Hunt & Fund, 2012).

Wright et al. (2001) argued already that investors such as VCs or LBO firms equally invest in buyouts to realize entrepreneurial opportunities, introducing an entrepreneurial view of buyouts, which incorporates upside incentives for growth and improvements not associated with pure efficiency gains or more effective monitoring to curtail opportunism, as the latter the agency theory would expect. As ETA transactions are undoubtedly a true act of entrepreneurship (Hunt & Fund, 2012), this entrepreneurship perspective could fit the buyout, and definitely the entrepreneurial buyout, better than the (traditional) agency perspective.

We therefore fully agree with Hunt & Fund (2012). In the context of ETA, the agency theory and the academic literature around it, seems to have only a limited relevancy. In fact, the principal (the investor) and the agent (the ETA manager) are the same, as in case of an ETA transaction, the ETA entrepreneur is the main investor/shareholder and is going to run the company him/herself. Unless he/she has schizophrenic characteristics, the ETA entrepreneur is fully aligned with him/herself as investor.

However, when the ETA entrepreneur uses a co-investor and finances part of the transaction via the backing of a private equity fund or business angel investor, agency issues could arise between the ETA entrepreneur and these co-investors/backers. In that case, however, one could debate, depending on the relative shareholder stakes, whether we are still talking here of a typical ETA transaction or rather an MBI.

As the ETA entrepreneur fully intends to be an active owner-manager from the outset, long before even consummating the acquisition, the typical agency issues (Jensen & Meckling (1976), Jensen (1986) and managerial intention issues (Carland et al., 1984) that might arise in management buy-outs are rarely, if ever, evidenced in the case of ETA (Hunt & Fund, 2012). Principal-agent and manager-entrepreneur roles are intentionally conflated through ETA in order to maximize the entrepreneurial effects of the acquisition.

Although in certain cases, the agency theory could explain why some ETA transactions would lead to improved efficiency and superior performance. In particular, if in the previous governance structure of the ETA target company, there was a misalignment between the owner/shareholder and the management, in case the company was run by external management which did not own any shares in the company. In fact, after an ETA transaction, the manager and the owner are quasi-identical or at least the ETA manager is a significant shareholder and therefore fully aligned with the principal. Equally, every ETA manager will purchase "his/her entrepreneurial dream company" with a lot of leverage, which on its turn, as Jensen (1984) stated it, could force him to run his/her company as efficient as possible.

Contrary to LBOS, VCs, BAs and PEs which are theoretically founded in the agency theory, in the context of ETA, the agency theory and the academic literature around it, seems to have only a limited relevancy.

However, agency theory could play a role and have some relevancy if the so-called Type 2 agency problems (Panda & Leepsa, 2017) (Gilson & Gordon, 2003) (Schleifer & Vishny, 1997) (Shapiro S. P., 2005) exist post ETA acquisition. In the case of ETA, we could envisage two concrete situations where this could be the case: i.) the case whereby the previous shareholder and/or manager invests alongside the ETA entrepreneur and a majority shareholder minority shareholder relationship exists and ii.) the previous owner and/or manager remains after the acquisition still in charge of the company or parts of the company, even on a temporary basis.

In the first case, the underlying assumption of this type of agency problem is the conflict of interest between the majority and minority owners. In most cases, however, the vast majority (63%) of the ETA entrepreneurs prefers to be the majority shareholder (see descriptive statistics in 4.5.8., table 4.30). A situation where the majority shareholder uses his voting power in favour of his own benefit and hampering the interests of minority shareholders (Fama & Jensen, 1983) is therefore rather unlikely. On the other hand, respectively 71% and 77% of the ETA entrepreneurs (see descriptive statistics in 4.5.8., table 4.30), are prepared to team up with a private equity firm or high net worth individual/business angel, most likely in a minority position, in case the deal is too large for them. In the latter case, however, the private equity firm or business angel will provide the ETA entrepreneur, which will then be de facto an MBI manager, with the appropriate incentive system to make sure the mutual interests are fully aligned (Jensen & Meckling, 1976).

Although agency problems could take place in the second case, the ETA entrepreneur has become the major shareholder and will be in control. The sooner he/she gets on the learning curve of the company, the less chances the previous owner/manager will have to create an agency problem due to the information asymmetry. The ETA entrepreneur, and now owner of the company, should as soon as possible install the necessary monitoring tools to reduce such a risk.

Agency Theory in general, however, does therefore not fully explain the individual entrepreneurial motivations to perform an ETA transactions and does not discuss the role of capabilities, interests or characteristics of an ETA manager.

Even Arthurs & Busenitz (2003) agree in their analysis on the agency theory in the context of the venture capital-entrepreneur relationship, that the venture is really an extension of the individual entrepreneurs and the unique resources that lead them to found their ventures. The entrepreneur sees him/herself as the psychological owner (“ownership plus”) regardless of his/her financial equity position.

In ETA, the acquisition of an existing business system is the vehicle through which ex-ante entrepreneurial intent is operationalized. This is the dynamic that differentiates ETA from all other forms of entrepreneurial finance because the owners are creating new value from existing value, and new innovations for dormant assets (Hunt & Fund, 2012).

As ETA constitutes its own class of entrepreneurially motivated activity, ETA must therefore be conceptualized as a separate value-generation vehicle in and of itself (Hunt & Fund, 2012). Among all the different types of entrepreneurial finance techniques, ETA stands the most resolutely as equal parts entrepreneurship and finance.

#### **4.3.2. Other theoretical foundations of IC in an ETA context**

After a thorough analysis of the extensive existing literature on IC, it is clear that very few authors, as opposed to in other academic areas, mention academic theories or elaborate on the theoretical foundations of IC. IC are in fact very close to practice and vary, as said before, depending on different circumstances. Significance varies depending on time, geographic location, development stage of a venture, stage in the evaluation process, investor type and possibly even fund raising status of the investor in a given time. All this lays far away from academic theories.

Possible theoretic foundations could be:

— Resource-based Theory

Resource-based Theory examines performance differences of organizations based on their resources. Organizations compete against others on the basis of their resources and capabilities (Wernerfeldt, 1984) (Barney & Clark, 2007) (Barney, 1991). Resource-based theory posits that an organization can achieve sustainable competitive advantage by controlling resources that are valuable, rare, imperfectly imitable and nonsubstitutable (Barney, 1991; Miles, 2012:222). For an investor is therefore important to understand which criteria (resources) make a company attractive (competitive). Comparing the IC between the nascent entrepreneurs who are still looking to acquire a company and the ones who have already acquired their company, we analyze the intentions of the ETA entrepreneurs. According to the Theory of Planned Behavior behavior (Kautonen, van Gelderen, & Fink, 2015), having a clearly defined set of IC is an indication of entrepreneurial intentions and subsequent. Although Kautonen et al. (2015) focus on start-ups as the intended business, where obviously the choice of IC is less relevant, developing a business plan, a product or a service for a start-up, can be considered as the IC of a start-up. Already defining IC and thereafter analyzing possible target companies based on these IC makes the ETA entrepreneur a nascent entrepreneur (Krueger, 2009). Many questions asked in the study of Kautonen et al. (2015), in particular regarding the effective behavior (activities, time spent, money invested) (the so-called second wave in their study) have equally been asked in our survey. As the results of their study support the relevance of the Theory of Planned Behavior in the context of business start-up behavior, linking entrepreneurial intentions and their relevance for predicting subsequent actions, one could extend this theoretic relevance equally for ETA behavior.

— Signaling Theory (Ismail & Medhat, 2019)

Signaling Theory is the idea that one party (termed the agent) credibly conveys some information about itself to another party (the principal) (Spence, 1973) (Connelly, Certo, Ireland, & Reutzel, 2011). Ismail & Medhat (2019), who wrote an article on IC of VC in Egypt, are using the Signaling Theory to explain why venture capitalists rely on the information they gather about entrepreneurs to predict whether a venture will be successful. Before selecting their investments, venture capitalists typically expend great effort and time in gathering information to overcome informational gaps and to reduce opportunistic behavior as much as possible (Zacharakis & Meyer, 1998).

Regarding ETA in particular, this lack of academic theoretic foundation is even more obvious. The concept of ETA is not grounded in theory and even more intertwined with 'practice'. This could deter some scholars as they will inevitable be confronted with the 'non-academic practice' and this in different fields, often outside their expertise or comfort zone. Entrepreneurship, corporate finance and valuation, entrepreneurial finance, strategy, accounting, fiscal issues, legal issues, cultural issues, legal contracts, negotiating tactics...are all meeting each other in an ETA transaction. The academic literature on IC of ETA is surprisingly non-existent. Only non-academic books have been written on the topic by (highly experienced) practitioners and are often a great blend of entrepreneurial best practices and street smarts. Furthermore, the ETA classes - popular in all the top-business schools of the world - are almost all taught by practitioners.

There are easier nuts to crack for academic researchers (Hunt & Fund, 2012).

### **4.3.3. Social Identity Theory and IC**

In the next chapter we will try to answer the question what makes (nascent) ETA entrepreneurs more or less likely to become active ETA entrepreneurs. To address this question, we theorize that founder social identities affect the nascent-active gap (see Chapter 5).

One could equally argue based on this theory that the influence of the entrepreneur's social identity as a founder or - for the first time here - as an acquirer of a company, could have an influence on the type of company he/she wants to acquire and hence, the IC, he/she considers important. Research on identity in entrepreneurship represents a central, dynamic, and quickly growing field of research (Mmbaga et al., 2020). Recent entrepreneurship research has increasingly moved beyond its earlier theoretical presumption that all or most entrepreneurs are primarily driven by narrow economic goals, such as value appropriation.

Scholars acknowledge the wide range of motivations, aspirations and meanings that serve as the basis for entrepreneurs' behavior. Therefore applying a social cognitive perspective towards efforts to understand key aspects of entrepreneurialism makes sense (Hmieleski & Baron, 2009). The diversity in entrepreneurial behavior reflects the heterogeneity of the roles and identities entrepreneurs apply (Gruber & MacMillan, 2017).

Drawing on the social identity theory, Fauchart & Gruber (2011) have come up with three primary types of founder identities which systematically shape key decisions in the creation of new firms, thereby "imprinting" the start-ups with the founders' distinct self-concepts. In other words, they derived a novel typology that provides a multidimensional conceptualization of firm founders and tries to explain how three distinctive types of social identities led founders to create different sorts of firms.

In the case of ETA, where as opposed to startups no companies are created, but rather selected out of an existing pool of companies which are for sale, the founder identity can equally influence the choice of a potential acquisition target, imprinting the ETA targets with the acquirer's distinct self-concepts. The founder identity of the acquirer could as such have an impact on the IC to choose such a possible target.

### **4.3.4. Entrepreneur Opportunity Fit**

Opportunity recognition has received a significant amount of attention in the entrepreneurship literature (Baron & Ward, 2004) (Shane & Venkataraman, 2000). How (nascent) ETA entrepreneurs judge one or multiple opportunities and ultimately select a single opportunity to exploit may prove critical not only to an understanding of venture creation or acquisition, but also to an understanding of venture success. Although many have researched the entrepreneur, the opportunity itself (i.e. its characteristics and prerequisites) has received less attention and the fit between the entrepreneur and the opportunity has hardly been researched (Hurt & Serviere, 2011). Fit theories (for example person-environment fit theory (Schneider, Smith, & Goldstein, 2000) (Tarique, Schuler, & Gong, 2006) seek to describe a perfect match, or ideal compatibility, between a person and some defined concept. Markman and Baron extended the fit theory to the realm of entrepreneurship (Markman & Baron, 2003) broadening the person-organization fit framework to encompass the context of a new venture formation. Although exclusively focused on start-ups, it is highly likely that their findings are also applicable on ETA transactions. Hurt & Serviere (2011) developed an entrepreneur-opportunity model, which build upon existing fit theories and suggests that venture success is a function of a good fit between the entrepreneur and the opportunity, each possessing important characteristics that must closely match in order to form a good fit. This model suggests that an entrepreneur possesses certain attributes such as knowledge, skills, abilities and personal characteristics (e.g. self-efficacy,

perseverance, social skills,...) and resources (e.g. financial (e.g. personal savings, venture financing), social (e.g. networks) and human capital (education, work experience,...) for venture success. Similarly the opportunity (the ETA target) requires certain resources (e.g. financial, social and labor) for venture success and encompasses market realities (e.g. size, timing, first mover advantage, niche...). The closer the fit between the entrepreneur and opportunity, the greater the likelihood of realizing venture success. It is therefore key that an ETA entrepreneur tries to optimize this fit. Some research has been performed on this opportunity person fit (Naveed Anwar & Daniel, 2016) (Serviere, Hurt, & Miller, 2015) (Serviere, Hurt, & Miller, 2015) (Miller & Munoz, 2016).

## **4.4. Methodology**

### **4.4.1. An overview of the methodologies used in research on investment criteria**

#### **4.4.1.1. Data gathering methods**

Empirical evidence on investors' investment criteria are indeed scarce, arguably due to the empirical challenges of isolating the effects of different company characteristics (Block J. et al., 2019). This is not possible using observational data, as it would require assessing investors' preferences between two identical companies.

Different data gathering methodological tools have been used to analyze investment criteria, such as interviews, questionnaires, verbal protocols, experiment, participant observation.

A good overview of the different methodologies in the literature on IC are given by Carpentier et al. (2015), Simic (2015), Nunes (2014) and Granz et al. (2020).

The first wave of literature on investment criteria (between 1980 and 1995) mainly focused on VCs and was primarily empirical-qualitatively driven. Early research on the investment criteria of VCs, used simple, structured-mail questionnaires asking VCs to rank the importance of various criteria, i.e. questionnaires with a descriptive appraisal ((Tyebjee & Bruno (1984), Macmillan et al. (1985), Macmillan et al. (1987)). Sandberg et al. (1989) criticize this method and suggest the use of the verbal protocol method in researching the VCs decision processes. However, articles that exclusively build upon post-interviews and questionnaires have often been criticized for problems arising from retrospective and self-reporting biases (Shepherd & Zacharakis, 1999).

Since the mid-nineties, the VC industry started playing a growing role in financial intermediation and became the most appropriate form of financing for innovative firms in high-tech sectors (Bottazzi & Da Rin, 2002), which lead to an increasing access to an increasing quantity of data. This enabled more sophisticated data analyses and more and more empirical-quantitative research was published on investment criteria. Hall et al. (1993) attempted to uncover the criteria used by venture capitalists through semi-structured interviews and verbal protocol analysis of venture capitalists' evaluations of actual venture proposals. Sixteen verbal protocols—in which the participants “think aloud” as they review business proposals— were made of venture capitalists' venture evaluation decisions. Fried et al. (1994) gathered data from eighteen VCs in three different regions of the US. Personal interviews about the investment process and investment criteria each used on their most recent investments yielded information that we analyzed for generic criteria.

In the late nineties, also the IC of BA start to become more and more the subject of academic research. Mason et al. (1996) examine among others the investment process of BAs. They collected their data via telephone ex-post interviews with 31 business angels and with 28 owner-managers. Drawing upon agency

theory, Van Osnabrugge (2000), made a comparison of business angel and venture capitalists investment procedures and investment criteria, based on 40 personal ex-post interviews and 262 questionnaire responses

More recently, questionnaires and surveys based on an increasing sample size remain popular in the academic research. Zacharakis et al. (2000) used an actuarial model, called a “bootstrap model”, whereby the questionnaires and surveys yield the cues that experts believe are the most important to the decision to accept or reject investing. In other words, a bootstrap model reaches the same conclusion as an expert since it uses the same information as the expert. Aiming at developing an understanding on how venture capitalists select early-stage projects in small equity markets, Jorge Silva (2004) used in his Portuguese pilot study participant observation technique. Rakhman et al. (2005) sent a questionnaire, using a four-point scale (from irrelevant to essential) to three groups of concerned parties: VCs, entrepreneurs (seeking VC in the future) and investees (businesses currently in receipt of VC money). Data analysis, based on parametric tests, indicated that, for several criteria, the three groups shared the same criteria, however they did not always share investment preferences.

In recent years, the increasing number of BAs have lead to increasing research efforts on their IC. Paul et al. (2007) examine the process that BAs undertake when they invest in new and small businesses, based on 30 ex-post interviews with business angels, while Sudek (2007) made a similar study using an ex-post general survey to rank the different investment criteria of BAs. Mittenes et al. (2012) used a self-administered questionnaire real time to analyze how the stage of the funding process and industry experience affect the evaluations of BAs. Carpentier & Suret provide a literature overview on the methodologies used in the research of BAs IC. They found that most of the research adopts a post-hoc approach based on interviews and or surveys administered after the decision, likely to produce biased results. They themselves used a real-time longitudinal approach, following each proposal from its inception in the system to the ultimate decision.

Overall, the literature body on investment criteria of VCs and BAs features a transition in methodologies (Granz et al.,2020). According to Granz et al. a trend can be noticed from descriptive studies (market-based and practice-oriented studies, descriptive, profile-focused) to more analytical studies (quantifiable, theory-oriented, behavior-driven, post-investment relationship focused).

Summarized, the survey questionnaire, sometimes complemented by some (ex-post) interviews or verbal protocols, is the most common data gathering method in the research on IC. A survey is also meant to inform both academics and practitioners about the (here VC) practice in more granular way (Gompers et al., 2020).

#### **4.4.1.2. Data analysis methods**

Indeed, later publications have moved from an exclusively descriptive questionnaire approach to more experimental methodologies for data analysis such as a conjoint analysis for researching the decision criteria and policies of venture capitalists. This technique requires participants to make a series of assessments based on a fixed set of attributes. As PE investors usually assess companies holistically and evaluate multiple criteria simultaneously, in conjoint analysis, they equally measure decision criteria conjointly.

Conjoint analysis. Shepherd & Zacharakis (1999) are the pioneers of this research real-time method which eliminates biased results due to the fact that people are poor at introspection and often suffer from recall and post-hoc rationalization biases. Knockaert et al. (2010) followed an inductive research design and used a conjoint analysis to decompose the investment decisions of VCs, using a unique hand-collected dataset comprising 68 European early-stage high-tech VCs. Hsu et al. (2014) used an experimental conjoint analysis of more than 2,700 investment decisions nested with a mixed sample of venture capitalists and angel

investors. Franke et al. (2008) obtained their data in a conjoint experiment with 51 professionals in VC firms analyzing using discrete choice econometric models. Bernstein et al. (2017) did use a similar correspondence testing methodology to randomize investors' information sets about start-up characteristics in nearly 17,000 emails to 4,500 investors, varying the characteristics and record when investors in early-stage companies click and chose to learn more about the particular company. Block et al. (2019), use a large scale conjoint analysis of 19,474 screening decisions by 749 PE investors, which they obtained by contacting 15,600 investment professionals listed in Pitchbook<sup>38</sup>.

Overall, researchers have applied a balanced range of quantitative and qualitative methodologies to investigate the phenomenon of VCs and BAs investment criteria.

Granz et al. (2020) found in their literature overview on the IC of VCs and BAs that almost 2,5 times more articles were written on IC of VCs than the IC of BAs, in line with our findings (see literature overview in Section 4.2.2.3.). They equally see a shift from more case-study and interview based methodologies in the early days (period earlier than 90s) to more methodologies based on experiments, proprietary secondary data and surveys. Furthermore, more than half (52%) of all publications exclusively focused on VCs utilized quantitative research methods. Meanwhile, 66,67% of articles addressing BAs utilized qualitative approaches. Finally, they equally found that almost 40% of the literature on IC in their overview is focused on the US (e.g. Chen et al., 2009), around 15% on the UK (e.g. Mason & stark, 2004) and only a relatively small part of publications on continental European (e.g. Knockaert et al, 2010) or Asian (e.g. Rah et al., 1994) datasets.

Nunes (2014) and Simic (2015) both equally provided an overview table of data analysis methods applied in the research on IC of VCs. Data analysis through descriptive statistics was by far the most used method in the research on IC, followed by a large distance by a content analysis method. Other methods such as factor analysis, cluster analysis, regression analysis and conjoint analysis were much less applied in the research on IC.

Recently, Gompers et al. (2020) made probably the most comprehensive and broad survey of VCs, surveying 885 venture capitalists at 681 firms through a survey validated by, in the first place practitioners, as well as sociology and marketing research experts, using Qualtrics via email. They used different databases, starting from the alumni from Harvard, Chicago Booth and Stanford Business School (more than 40% of all VCs holding an MBA from one of these three schools) and covered in total a large fraction of the VC industry (63% of all assets under management in the US) in their survey. After their survey, they interviewed 29 VCs asking them more detailed questions in order to provide further clarification and more richness on the topics. In their data analysis, they limited themselves to a descriptive analysis approach.

As a general conclusion, the descriptive statistics method, often complemented with a t-statistic analysis, is by far the most used research methodology in the literature on IC.

A small minority of the scholars perform a logistic or linear regression analysis in order to determine which IC are the most important for the investor and eventually leads to a successful investment (logistic regression: Zacharakis & Meyer, 1998; Block et al., 2019; Ismail & Medhat, 2019) (linear regression: Tyebjee Bruno, 1984).

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<sup>38</sup> Pitchbook is one of the most comprehensive databases in entrepreneurial finance and is regularly used for research in the field of PE investments (e.g. Block et al., 2019).

## **4.4.2. Methodology used in research on (nascent) ETA entrepreneurship**

### **4.4.2.1. Introduction**

Although, one could argue that a comparison with venture capitalists or private equity professionals criteria is farfetched given that venture capitalists and PE professionals, as opposed to ETA entrepreneurs: (i) do not invest with their own money (ii) have a limited investment horizon as they have a portfolio return pressure, investing in several companies, leading to a diversified portfolio (iii) and most importantly, they are not involved with the operational management, once the investment is made.

Nevertheless, both, the venture capitalists and PE professionals and the ETA managers have in common that they rationally want to make an investment in a company that has upside potential and downside protection and will create value in the medium term for its respective shareholders. The latter makes it worthwhile to analyze and compare their respective main investment criteria. Many questions about investment decisions, valuation, deal structure, fund operations and the relationship between general partners and limited partners are broadly similar in the two industries (Gompers et al., 2020).

BAs and MBI candidates, as investors, are therefore much closer to the ETA managers. They indeed both invest their own money. The MBI candidate plays equally an operational management role once the investment is made.

In short, the search process and evaluation criteria used by venture capital firms, angel investors, private equity firms, MBI candidates, should be compared with the search process and evaluation criteria used by potential ETA candidates.

Finally, this study wants to focus on ETA entrepreneurship involving more seasoned and senior managers and less on the recent MBA graduates or search fund searchers. We did not find any academic research on investment criteria specifically focused on ETA, maybe with the exception of some sporadic mentioning in the search funds literature (see section 4.2.2.10) and in student-targeted syllabuses or primers.

As a matter of fact, using search funds as an approximation of ETA transactions, is neglecting the vast majority of the ETA transactions which are performed by experienced middle aged ETA managers, as opposed to the search fund post-MBA's. These experienced middle aged managers have accumulated the necessary funds themselves throughout their career to purchase a company and are prepared to invest a significant of their personal wealth in the company of their dreams. It goes without saying that their investment criteria could substantially differ from the investment criteria of the post-MBA searchers.

### **4.4.2.2. Data gathering**

#### *4.4.2.2.1. Quantitative method based on survey through Qualtrics®*

For this research on more seasoned (nascent) ETA entrepreneurs, the email addresses of the Vlerick database of all the attendees to the Academy and the Conference since its beginning 6 years ago, were used. See Chapter 2 on data collection. This homogeneous database contained 1,128 email addresses of previous participants to both of these activities. After some clearance of this database for non-eligible data, 868 email addresses remained and the questionnaire was sent to those remaining sample and this on behalf of Vlerick.

The analysis of these data provided us with sufficient homogenous data points, in order to allow a quantitative research method.



The response rate was a healthy 20%, i.e. N=170 (120 nascent ETA entrepreneurs who are still looking to acquire a company and 50 ETA managers, who already acquired already their company). In this chapter, given some missing values on the specific topic of IC, we have further left out 9 datapoints. The total number of data is therefore 161.

Our database was therefore large enough for a quantitative research approach, we decided to use a cross sectional design (survey research) via an internet-based self-completion questionnaire and this through Qualtrics® software. Surveys have become more common recently in the financial economics literature (Gompers et al., 2020). The survey was anonymous as data collected about investment behavior is sensitive and anonymity is required to fully comply with the latest data security legislation (EU-GDPR). The survey is fully confidential and all the reported results are based on the aggregation of many responses to exclude the possibility of inferring any specific respondent's answers.

#### 4.4.2.2.2. *Investment criteria related questions asked*

The research questions put forward here are twofold:

Firstly, the main purpose of the questions is to get a better understanding of the evaluation process of the (nascent) ETA entrepreneur: how do ETA candidates evaluate the identified opportunities, i.e. on the basis of which criteria or put differently: what do they want to buy.

In order to find out what do they really want to buy (or bought), we have questioned in this study the (nascent) ETA entrepreneurs about the following:

- Investment criteria
  - We have asked the respondents to convey the importance they attach at a list of 18 different IC, relevant for the ETA environment.
- Location of the target (geography)
  - How important is geographic location for the respondents? and are they prepared to move their residence ?
- Size of company (profitability, employment, turnover)
  - We have asked the respondents to indicate their ideal company characteristics along the lines of ideal profitability, ideal turnover and ideal employment.
- Type of industry (services, manufacturing,...)
  - We have asked respondents about their favorite industries to invest in.
- Experience in the industry
  - We have asked the respondents whether they find previous work experience in the industry of the target company important.
- Preferred deal scenario
  - The respondents have been asked what their preferred business scenario once they acquired the company expressed in professionalization and improvement potential.
- Valuation expectations
  - We have asked the respondents to state their expected valuation, expressed in EBITDA multiple.
- Shareholding (majority v. minority, with/without partner)
  - We have asked the respondents what shareholder situation they prefer or are prepared to accept.
- Preferred seller
  - Finally, the respondents have been asked how they see the preferred seller situation.

The vast majority of these questions have been all addressed and covered - at least in some similar form - in the literature on IC (see Section 4.2 for a detailed literature overview), although not yet in the context of ETA. Previous literature has indeed suggested that considerable differences likely exist in the decision-making of different investor types (Lerner et al., 2007). For every different IC topic, as enumerated here above, we will compare these outcomes with or ideal company characteristics of other relevant and comparable (i.e. belonging to similar sub-asset classes) type of investors, such as private equity, business angel investments, venture capital or search fund ETA entrepreneurs. Differences and similarities will be analyzed and explained.

We will systematically discuss all of the above questions in Section 4.5 and situate them in the relevant literature. Certain questions are added specifically tailored to the ETA topic and will be discussed accordingly hereafter.

The main questions to be asked to the nascent entrepreneurs and ETA managers regarding their IC can be grouped in different groups of questions:

- What are your evaluation criteria in order to kill a deal or to continue the process? (criteria such as location, size (expressed in turnover, profitability, employment), industry, price...)
- What price were you prepared to pay? (expected EBITDA multiple)
- What type of shareholding do you prefer? (majority, minority, 100% shareholder)
- What type of deal do you envisage (involvement and improvement potential)?

These IC and the ideal ETA company characteristics, as well as their relative importance, will be compared with IC or ideal company characteristics in other areas, such as private equity, business angel investments, venture capital or search fund ETA entrepreneurs. Differences and similarities will be analyzed and explained.

Secondly, the questionnaire equally distinguished, on the one hand, the nascent ETA aspirers (the ones who are still looking to acquire a company) and, on the other hand the ETA executors, i.e. the ETA managers (the ones who have purchased their own company). We should therefore be able to compare the answers of both groups. Are the investment criteria (“what”) of the ETA aspirers different from the ones who did one?

Finally, this is the first questionnaire in the existing research exclusively dedicated to seasoned middle aged ETA entrepreneurs. All other questionnaires have included start-up entrepreneurs or search fund principals.

#### **4.4.2.3. Data analysis (statistical methods)**

The data set contains not only the individuals who are interested to do an ETA transaction, it also includes the ETA entrepreneurs who actually have already acquired a company. Statistical analysis are hereby used to discover the factors that distinguish the individuals who actually acquired a company and those who haven't yet acquired a company.

In line with the predominant academic literature covering the topic of IC (see Section 4.4.1.), we will in our analysis of the ETA IC use the descriptive statistics approach, complemented by a univariate t-statistic analysis and a logistic regression analysis.

The descriptive statistical analysis answers the question posed to the (nascent) ETA entrepreneurs “While searching for a suitable target company, how important do you rate each of these criteria?”. The results of the answers of the survey provide us with a clear view on the characteristics of the investment criteria and preferences of the (nascent) ETA entrepreneur.

Following the vast majority of the literature, for example Block et al. (2019) and Gompers et al. (2020), the different tables of data report averages and their standard errors. In our descriptive statistics, most tables equally report means, standard deviations and variances.

Our descriptive statistics equally provides us with the answer of the differences between two subsamples of the respondents as we test differences between the (nascent) ETA entrepreneurs who are still looking to acquire a company and the ones who already acquired their company. We therefore take the independent variable here as a dichotomous variable: “acquired a company: yes or not yet”.

When the dependent variable is continuous or ordinal, two-sample t-test<sup>39</sup> were performed. When the dependent variable is categorical, Chi-square tests<sup>40</sup> were performed<sup>41</sup>.

Statistical significance of the differences between subgroup are measured at the 5% level, denoted by \*, i.e. conclusions of significance are based on  $p$ -values<sup>42</sup>  $< 0.05$ . If  $p < 0.05$ , there is a significant difference in the outcome variable between respondents who acquired a company and those who did not yet acquired a company. For some highly skewed variables, we report medians and test using bootstrapped standard errors to get better power. For further detail see 4.5.2.4.

As certain scholars used a factor analysis in their analysis of IC ((Tyejbjee & Bruno (1984), MacMillan et al., (1985) and (1987), Rahkman & Evans (2005), Dhochak & Sharma (2016)), we equally attempted to perform a factor analysis on the data provided in the first part of the questionnaire, indicating a preference for each of the different IC based on a Likert scale. As our exploratory factor analysis did not produce the necessary latent variables, we discontinued this attempt. For further detail see 4.5.2.3.

Finally, following a relatively small minority of the scholars who are applying a regression analysis in the context of IC (Tyejbjee, 1984; Zacharkis & Meyer, 1998; Block et al. 2019; Ismail & Medhat, 2019), in order to complement our t-statistic and given our prediction is categorical (i.e. whether one acquires a company or not), we equally applied a logistic regression on our data set in order to predict the categorical dependent variable (acquiring a company or not) using a given set of variables (the IC) For further detail see 4.5.2.5.

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<sup>39</sup> The two-sample t-test (also known as the independent samples t-test) is a method used to test whether the unknown population means of two groups are equal or not.

<sup>40</sup> The Chi-Square Test of Independence determines whether there is an association between categorical variables (i.e., whether the variables are independent or related). It is a nonparametric test.

<sup>41</sup> A t-test tests a null hypothesis about two means; most often, it tests the hypothesis that two means are equal, or that the difference between them is zero. A chi-square test tests a null hypothesis about the relationship between two variables.

<sup>42</sup> When you perform a hypothesis test in statistics, a p-value helps you determine the significance of your results. The p-value is a number between 0 and 1 and interpreted in the following way: A small p-value (typically  $\leq 0.05$ ) indicates strong evidence against the null hypothesis (no effect), so you reject the null hypothesis (a hypothesis that proposes than no statistical significance exists in a set of given observations e.g. no variation exists between variables or that a single variable is no different than its mean, in other words the idea that a theory being tested is false).

## 4.5. Research outcome

### 4.5.1. Introduction

The analysis in this chapter will try to answer the “what” question, describing a typical ETA target, based on the investment or decision criteria the (nascent) ETA entrepreneurs use to select their ETA targets. Besides the IC as such, we will equally further focus on certain related topics, such as the ideal company characteristics looked for by the (nascent) ETA entrepreneur and some specific topics such as the preferred deal scenario and the preferred shareholding structure.

The research questions put forward here are twofold:

- How do these IC and the ideal ETA company characteristics, as well as their relative importance, compare with IC or ideal company characteristics of other relevant and comparable (i.e. belonging to similar sub-asset classes) type of investors, such as private equity, business angel investments, venture capital or search fund ETA entrepreneurs? Differences and similarities will be analyzed and explained.
- How do the IC between the nascent entrepreneurs from our data sample who are still looking to acquire a company and the ones who have already acquired their company compare? The latter analysis will be performed through a univariate statistical analysis.

Descriptive statistics describe and summarize the data (N=163) obtained on IC of ETA transactions. A complete overview of the summary statistics of all the variables can be found in Appendix 4.

As mentioned above, we discuss the different questions asked to the (nascent) ETA entrepreneurs on the different topics in the following sections:

#### 4.5.2. Investment criteria

#### 4.5.3. Location and mobility

#### 4.5.4. Ideal target

- size
- profitability
- employment

#### 4.5.5. Industry

- Previous work experience
- Preferred industry

#### 4.5.6. Preferred business scenario (degree of involvement)

#### 4.5.7. Expected valuation

#### 4.5.8. Preferred shareholding (100%, majority, alone or with partner)

## 4.5.2. Investment criteria

### 4.5.2.1. The list of IC. Selection of criteria

Firstly, we have asked the (nascent) ETA entrepreneurs on the importance they give to different investment criteria, while searching for a suitable target company. They were asked to score the importance of different search and investment criteria on a scale in order to rank (specify level of agreement with a statement) the underlying characteristics of the target's company or their preferences on the deal structure.

In order to ascribe a quantitative value to these qualitative data and make it amenable to statistical analysis, we have used a 5 points Likert rating scale, a type of psychometric response scale in which responders specify their level of agreement to a statement typically in five points: (1) Very unimportant; (2) Unimportant; (3) Neutral (midpoint); (4) Important; (5) Very Important.

To properly analyse Likert data, one must understand the measurement scale represented by each. Numbers assigned to Likert-type items express a "greater than" relationship; however, how much greater is not implied. Because of these conditions, Likert-type items fall into the ordinal measurement scale. A numerical value is assigned to each potential choice and a mean figure for all the responses is computed at the end of the evaluation or survey. In our survey: the higher the number, ranging from 1-5, the more important the respondents give to this investment criterion.

These investment criteria are based on academically validated questionnaires in similar research domains. Our main inspiration came from the research on MBIs, who have a very similar entrepreneurial and investor profile as the (nascent) ETA entrepreneur, in particular the research performed by Ken Robbie (1993) (Appendix, p8 question 2) and subsequently by Robbie & Wright (1996). We adopted the following IC from them in our survey: Location, Industry, Particular technology, Sales turnover, Potential Market Growth, competitive strength, Customer Base, Asset value, Turnaround Potential. In their analysis covering the MBI candidate's IC, they concluded that that a buy-in manager is looking for a company in a familiar industry where there is good potential market growth, a strong customer base, some turnaround potential and with a basic competitive strength.

We also used IC lists from the research on venture capitalists, mainly from Tyebjee & Bruno (1981) (1984) and from Malone (1989) on more mature smaller company buyouts in order to double check the IC used in our survey.

We have equally tweaked some criteria, the search fund criteria in mind, e.g. instead of having "customer base" as a criterion, we have put the emphasis on "stable demand (recurring customers)", as suggested by Ruback et al. (2016) and Robbie & Wright (1996). We equally added the word "stable" (i.e. low risk of obsolescence) to the technology IC, as suggested by Dennis & Laseca (2017), Robbie & Wright (1996) and Ruback et al. (2016).

Furthermore we have added some criteria ourselves based on our personal experience, the practical wisdom from the non-academic books and existing literature on the same topic. For example, we have added some criteria on valuation (Gompers et al., 2020), cash flow (Robbie & Wright, 1996), future investment requirements (a variation on the cash-flow criterion, Meuleman & Vanoorbeek, 2018), management (see Section 4.2.2.3.1., 4.2.2.4.1. for a detailed overview of the literature), buy & build potential (Deibel, 2018) and exit opportunities (Tyebjee & Bruno, 1984) and leverageability (Gompers et al., 2016)

The list of IC for a suitable target company in our survey is illustrated in TABLE 4.14. and TABLE 4.15. (Likert scale).

Table 4.14. Investment criteria for a suitable target company statistics\*

Variable (#163) Investment Criteria Importance	Min	Max	Mean	Std Deviation	Variance
Location	1.00	5.00	3.74	0.94	0.89
Industry	1.00	5.00	3.79	0.88	0.77
Particular or stable technology	1.00	5.00	3.61	0.77	0.59
Sales turnover	1.00	5.00	3.58	0.80	0.64
Potential market growth	1.00	5.00	4.21	0.77	0.59
Stable demand/ recurring customers	1.00	5.00	4.07	0.73	0.53
Competitive strength (v. imports)	1.00	5.00	3.80	0.78	0.60
Valuation multiples	1.00	5.00	3.54	0.80	0.64
Highly cash flow positive	1.00	5.00	3.78	0.79	0.63
Leverageable (less equity needed)	1.00	5.00	3.71	0.89	0.79
Asset value	1.00	5.00	3.02	0.84	0.70
Turnaround potential	1.00	5.00	3.52	1.03	1.06
Professionalisation & improvement	1.00	5.00	4.12	0.78	0.61
Previous financial track-record	2.00	5.00	3.71	0.71	0.50
Future investment requirements	2.00	5.00	3.82	0.68	0.47
Management and presence of good	2.00	5.00	3.71	0.81	0.65
Buy and build potential	2.00	5.00	3.80	0.87	0.76
Exit opportunities	1.00	5.00	3.37	1.06	1.13

\*minimum value = 1, maximum value = 5. The higher the value, ranging from 1-5, the more important the respondents give to this investment criterion. The mean is calculated as the sum of the values divided by the number of values.

Table 4.15. Investment criteria for a suitable target company statistics (Likert scale)

Variable (#163)	Very unimportant	Unimportant	Neutral	Important	Very important					
Location	3.07%	5	6.13%	10	23.93%	39	47.24%	77	19.63%	32
Industry	1.23%	2	6.75%	11	23.31%	38	49.08%	80	19.63%	32
Particular or stable technology	1.23%	2	4.29%	7	36.81%	60	47.85%	78	9.82%	16
Sales turnover	1.84%	3	5.52%	9	34.36%	56	49.69%	81	8.59%	14
Potential market growth	1.23%	2	1.23%	2	9.82%	16	50.31%	82	37.42%	61
Stable demand/recurring customers	1.23%	2	1.23%	2	12.27%	20	60.12%	98	25.15%	41
Competitive strength (v. imports)	0.61%	1	3.68%	6	27.61%	45	51.53%	84	16.56%	27
Valuation multiples	0.61%	1	6.75%	11	41.72%	68	39.88%	65	11.04%	18
Highly cash flow positive	0.61%	1	3.68%	6	30.06%	49	48.47%	79	17.18%	28
Leverageable (less equity needed)	2.45%	4	4.29%	7	30.67%	50	44.79%	73	17.79%	29
Asset value	2.45%	4	23.93%	39	44.79%	73	26.38%	43	2.45%	4
Turnaround potential	4.29%	7	9.82%	16	33.74%	55	34.36%	56	17.79%	29
Professionalisation/improvement	0.61%	1	1.23%	2	17.79%	29	46.63%	76	33.74%	55
Previous financial track-record	0.00%	0	4.29%	7	31.29%	51	53.99%	88	10.43%	17
Future investment requirements	0.00%	0	3.07%	5	25.15%	41	58.90%	96	12.88%	21
Management (incl good second	0.00%	0	7.36%	12	29.45%	48	48.47%	79	14.72%	24
Buy and build potential	0.00%	0	7.98%	13	26.38%	43	43.56%	71	22.09%	36
Exit opportunities	4.29%	7	17.18%	28	30.67%	50	33.13%	54	14.72%	24

A picture thus emerges of the (nascent) ETA entrepreneur looking for a company with growth potential in the first place, followed by professionalization and improvement potential, as well as stable demand, caused by recurrent customers.

#### **4.5.2.2. The IC of the ETA entrepreneur and this in comparison with other similar investors**

The top three investment criteria for the (nascent) ETA entrepreneur (based on the mean score in the survey, as we did not ask the respondents themselves to rank them in order of importance) are in order of importance: 1.) Potential market growth (mean = 4.21) 2.) Professionalization and improvement (mean = 4.12) and 3.) Stable demand and recurring customers (mean = 4.07).

*Potential market growth and recurring customer base.* Not surprisingly, these criteria find a strong echo in the literature on search funds. Ruback et al. (2016) sees stable to slightly growing demand and recurring customers as the most important IC in their analysis. Kelly (2020), Dennis & Laseca (2016), Hunt & Fund (2012) equally see growth and recurrent customers as key IC. However, Kelly (2020) did see only little correlation between expected industry growth and returns. The actual growth rate experienced and industry definition can differ in reality, perhaps accounting for the lack of apparent connection between industry growth rate at acquisition and returns. Kelly (2020) did equally not see much correlation between high recurring revenue at acquisition and returns. Possibly caused by applying a narrow definition of recurring revenue at acquisition. In the case of the MBI-candidates (Robbie, 1993) (Wright & Robbie, 1996), similar IC are equally mentioned as very important (their top three in order of importance: market growth potential, a strong customer base with stable demand and stable technology). In case of PE investors, overall revenue growth came equally out as the most important criterion (Block et al. 2019).

*Professionalization and improvement.* The professionalization and improvement criteria is a bit less pronounced in the search fund literature. For example Hunt & Fund talks about “emphasis placed on untapped potential”. This can be explained by the fact the, contrary to the search fund entrepreneurs who are mostly in their early thirties post-MBA, our data sample contains experienced managers in their late 40s, who probably feel more comfortable in their management skills and experience to improve and professionalize the company they acquire. Hence, a similar improvement potential IC can be observed among the MBI candidates, equally often experienced managers (Robbie & Wright, 1996).

*Management.* In the case of an ETA transaction, the track record of the management team and the team in place is not important (only 14% judge this as a very important IC and more than one third of the respondents answers neutral to unimportant) as the (nascent) ETA entrepreneur is going to run the business him/herself and replace the management largely, if not wholly (Hunt & Fund, 2012). In the case of VCs (Gompers et al., 2020) or PE investors (Gompers et al., 2016) (Block et al., 2019) or BAs (Bernstein, 2017) these investors are not going to run the company themselves and they need first of all a good management team in order to make a successful investment. For these type of investors the track record of the management team is very important. However, in our study, the respondents still find it important that at least a second layer of managers is of good quality (mean = 3.71), avoiding the new CEO to “do it all” and to ultimately require an investment in hiring and training an appropriate layer of middle management, thus reducing profits (Kelly, 2017).

Gompers et al. (2020) analysed the investment criteria of VCs, distinguishing early-stage from late-stage VCs, the latter more comparable with (nascent) ETA investors. Business factors are more important for late stage-investors than the management team. This is can be explained by investors facing greater uncertainty about the business early stage and focusing more on the team. These findings are consistent with Gompers et al. (2016) as late stage VCs are similar than PE funds in that they see business factors and valuation as highly

important. We elaborated in detail in our literature overview in Section 4.2. regarding this balance between management or business as the main IC.

*Competitive strength.* Competitive strength (mean = 3.80) refers to the business model and its position vis-à-vis the competition. It is equally considered an important IC. Actually, all the investor types consider this important. For example, the PE investors see the business model, the way it produces value added products or services or its international scalability as very important (Block et al., 2019).

*Previous financial track record.* This IC (i.e. performance of historic financial numbers such as P&L and balance sheet), is equally highly valued (mean = 3.71) as an IC by (nascent) ETA entrepreneurs. This is according to Gompers et al. (2020) not surprising, as later stage opportunities (such as ETAs) having longer track records and therefore easier to evaluate, compared with early-stage opportunities, often in IT and healthcare, requiring greater understanding of the technology and development timelines.

*Technology.* Technological innovation, in our survey even qualified as “stable” is not a very important IC (mean = 3.61). On the contrary, the experienced ETA entrepreneurs invest rather in low-tech services or manufacturing businesses, driven by a stable (i.e. not subject to obsolescence) technology. In case of the VCs or even BAs, which are often focused on early-stage technology, this IC is of the utmost importance (Gompers et al., 2020).

*Turnaround potential.* This IC is not considered really important for the ETA Entrepreneur (mean = 3.52). An ETA entrepreneur is clearly not looking for a turnaround, per definition a riskier venture (Boyle & Desai, 1991), as he is investing a significant part of his/her own wealth (see Chapter 3). On the other hand, an MBI candidate - who is backed a by well-funded PE firm – is less averse to some turnaround work (Robbie & Wright, 1996).

*Asset value.* The asset value IC (i.e. the fixed assets on the balance sheet) is of less importance to the ETA entrepreneur (mean = 3.02). One could argue that the lack of importance the (nascent) ETA entrepreneurs put on the asset value is slightly contradictory with their view of leverageability, which they find rather important in the same survey (mean = 3.71). In order to obtain leverage from a bank, in particular in the smaller segment of the leveraged loan market, the asset value is very important, in particular as most of these transactions are rather small here (for the size see below section 4.5.4.) (see on bank financing of SMEs criteria: Beck et al. (2011)). The ETA entrepreneur could therefore not be fully aware of such bank requirements.

*Exit opportunities.* This exit IC is the least important for the ETA entrepreneur (mean = 3.37). Exit opportunities, however, are crucial for a PE and VC investor (in particular later stage) (Gompers et al., 2020), as their investment horizon is rather between 3-7 years. Their funds are structured as ten-year vehicles and they have to provide their institutional investors (and themselves a profit share or carry) with a return on their invested capital. ETA entrepreneurs are investors for the long run, as they invest with their own money and do not have any exit pressure from external investors.

For the IC, location, industry and valuation, we would like to refer to respectively Section 4.5.3., Section 4.5.5. and Section 4.5.7. for further explanation.

Finally, as shown by Gompers et al. (2020), some VCs can be contrarian and avoid sectors that were hot. One cannot exclude that certain (nascent) ETA entrepreneurs have a similar attitude.



#### 4.5.2.3. Factor analysis

As certain scholars used a factor analysis in their analysis of IC (Tyejee & Bruno, 1984) (MacMillan et al., 1985 and 1987) (Rahkman & Evans, 2005) (Dhochak & Sharma, 2016), we equally attempted to perform a factor analysis on these data.

Factor analysis is a technique that is used to reduce a large number of variables into fewer numbers of factors (data reduction). This technique extracts maximum common variance from all variables and puts them into a common score. Given that the literature (see in particular our literature overview in Section 4.2.2.3 and 4.2.2.4. and Granz et al., 2020), already distinguishes – out of the numerous different IC’s of TABLE 4.14 - four main groups of IC’s, i.e. management, business, financial traction and geography, factor analysis could possibly help us to understand whether there is a more general patterns underlying the responses to this question and we could reduce the 18 IC’s in this question to those four latent variables.

We therefore made a correlation matrix, showing the Pearson correlation between the different variables as given in in TABLE 4.14. (naming them alphabetically from a to r). See here below in TABLE 4.16.

Table 4.16. Correlation matrix (Pearson correlations)

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r
a	1.00	0.17	0.22	0.05	-0.03	0.07	0.13	-0.10	-0.08	0.03	0.01	-0.08	0.02	0.07	-0.07	0.01	-0.19	-0.10
b	0.17	1.00	0.23	0.02	0.17	0.07	0.12	-0.06	-0.13	-0.11	0.18	0.02	0.13	0.12	-0.02	-0.03	0.00	0.02
c	0.22	0.23	1.00	0.03	-0.08	0.12	0.02	-0.13	0.08	-0.08	-0.03	-0.03	-0.07	0.04	-0.09	0.10	0.03	0.19
d	0.05	0.02	0.03	1.00	0.19	0.17	0.07	0.15	0.09	0.05	0.17	0.03	0.10	0.12	0.05	0.08	0.06	0.05
e	-0.03	0.17	-0.08	0.19	1.00	0.15	0.19	0.11	0.02	0.12	-0.04	0.18	0.29	-0.08	0.11	0.07	0.24	0.06
f	0.07	0.07	0.12	0.17	0.15	1.00	0.35	0.08	0.20	0.29	-0.05	-0.23	0.05	0.16	0.16	0.04	-0.02	0.10
g	0.13	0.12	0.02	0.07	0.19	0.35	1.00	0.09	0.00	0.09	0.07	-0.04	0.02	0.03	0.01	0.09	0.08	0.13
h	-0.10	-0.06	-0.13	0.15	0.11	0.08	0.09	1.00	0.21	0.32	0.17	0.06	0.19	0.09	0.34	0.02	0.16	0.18
i	-0.08	-0.13	0.08	0.09	0.02	0.20	0.00	0.21	1.00	0.28	0.11	-0.12	-0.10	0.21	0.12	0.08	0.13	0.21
j	0.03	-0.11	-0.08	0.05	0.12	0.29	0.09	0.32	0.28	1.00	0.09	-0.08	0.13	-0.03	0.15	-0.02	0.00	0.14
k	0.01	0.18	-0.03	0.17	-0.04	-0.05	0.07	0.17	0.11	0.09	1.00	0.32	0.23	0.04	0.13	0.21	0.06	0.05
l	-0.08	0.02	-0.03	0.03	0.18	-0.23	-0.04	0.06	-0.12	-0.08	0.32	1.00	0.44	-0.27	0.04	0.05	0.11	0.04
m	0.02	0.13	-0.07	0.10	0.29	0.05	0.02	0.19	-0.10	0.13	0.23	0.44	1.00	-0.12	0.18	0.14	0.15	0.13
n	0.07	0.12	0.04	0.12	-0.08	0.16	0.03	0.09	0.21	-0.03	0.04	-0.27	-0.12	1.00	0.08	0.07	0.01	0.16
o	-0.07	-0.02	-0.09	0.05	0.11	0.16	0.01	0.34	0.12	0.15	0.13	0.04	0.18	0.08	1.00	0.07	0.16	0.10
p	0.01	-0.03	0.10	0.08	0.07	0.04	0.09	0.02	0.08	-0.02	0.21	0.05	0.14	0.07	0.07	1.00	0.12	0.14
q	-0.19	0.00	0.03	0.06	0.24	-0.02	0.08	0.16	0.13	0.00	0.06	0.11	0.15	0.01	0.16	0.12	1.00	0.35
r	-0.10	0.02	0.19	0.05	0.06	0.10	0.13	0.18	0.21	0.14	0.05	0.04	0.13	0.16	0.10	0.14	0.35	1.00

As we can see, the Pearson correlation between variables is rather low to unexisting (the highest is only 0.35). Variables that have no correlation cannot result in a latent construct based on the common factor model (Bartholomew, Knott, & Moustaki, 2011).

Nevertheless, after the screeplot was suggesting that the numbers of factors should be five, we performed an exploratory factor analysis (EFA) in R (not illustrated here) using an oblimin rotation (assuming correlations between factors), indicating five factors, leading to low factor correlations (<0.3). Thereafter, we repeated the EFA using varimax rotation (assuming no correlations between factors), equally leading to low factor loadings (correlation coefficient for the variable and factor). Finally, we repeated this oblimin and varimax rotation indicating four factors instead of five, leading to similar results, i.e. low factor loadings. We therefore concluded that we could not distinguish latent variables from these observed variables.

#### 4.5.2.4. Two sample t-test

Our descriptive statistics equally provides us with the answer of the differences between two subsamples of the respondents as we test differences between the (nascent) ETA entrepreneurs who are still looking to acquire a company and the ones who already acquired their company. We therefore take the independent variable here as a dichotomous variable: “acquired a company: yes or not yet”.

Given that the dependent variable (the different IC) is continuous or ordinal, we perform a two-sample t-test.

Assumptions of two-sample t-tests were fulfilled in order to assume equal variances. The normal distribution per group was tested visually by boxplots and QQ-plots and equality of variances was tested using a Levene’s test<sup>43</sup>. Sample size per group is large enough to assume the test is robust against minor deviations.

Conclusions of significance are based on  $p$ -values  $< 0.05$  (\*). If  $p < 0.05$ , there is a significant difference in the outcome variable between respondents who acquired a company and those who did not yet acquired a company.

TABLE 4.17. provides here below the results of the IC and the two-sample t-test.

Table 4.17. Investment criteria for a suitable target company statistics - Two sample t-test

Variable (#161) Criteria Importance	Test statistic <sup>2</sup>	df <sup>1</sup>	$p$ -value	Mean Not Yet	Mean Yes
Location	2.197	161	0.02944*	3.845	3.489
Industry	-0.3542	161	0.7236	3.776	3.830
Particular or stable technology	2.158	161	0.03237*	3.690	3.404
Sales turnover	-1.716	161	0.08812	3.509	3.745
Potential market growth	2.068	161	0.04021*	4.293	4.021
Stable demand (recurring customers)	1.953	161	0.05254	4.138	3.894
Competitive strength and limited exposure to import	0.7725	161	0.4410	3.828	3.723
Valuation multiples	-0.7797	161	0.4367	3.509	3.617
Highly cash flow positive	0.3519	161	0.7254	3.793	3.745
Highly leverageable (i.e., less equity needed)	0.6658	161	0.5065	3.741	3.638
Asset value	-1.207	161	0.2291	2.974	3.149
Turnaround potential	0.3709	161	0.7112	3.534	3.468
Professionalisation & improvement potential	-0.5571	161	0.5782	4.095	4.170
Previous financial track-record	1.257	161	0.2105	3.750	3.596
Future investment requirements	0.0877	161	0.9302	3.819	3.809
Company management and presence of good second	0.8891	161	0.3753	3.741	3.617
Buy and build potential	-0.2983	161	0.7659	3.784	3.830
Exit opportunities	-0.5991	161	0.5499	3.336	3.447

<sup>1</sup>df = Degrees of Freedom<sup>2</sup> The t-distribution, just like the standard normal, has a mean of 0. When the t-statistic is negative, this mean that it lies to the left of the mean.

<sup>43</sup> The Levene's test is an inferential statistic used to assess the equality of variances for a variable calculated for two or more groups. Some common statistical procedures assume that variances of the populations from which different samples are drawn are equal. Levene's test assesses this assumption. It tests the null hypothesis that the population variances are equal (called *homogeneity of variance* or *homoscedasticity*). (<http://www.sthda.com/english/wiki/compare-multiple-sample-variances-in-r>).

Very few significant differences in most of the outcomes between respondents who acquired a company and those did not yet were found. Obviously, respondents who are still looking to acquire a company and respondents who already acquired a company, look at IC with very similar glasses. However, the t-test indicated that certain differences exist.

Regarding “location” as an IC, respondents who did not yet acquired a company found this IC more important (mean = 3.845) than the people who acquired their company (mean = 3.489). In our analysis, this difference is found statistically significant. This could possible explain why ETA entrepreneurs who are more flexible on the location IC, could be more successful in finding their company.

Regarding “Particular or stable technology” as an IC, respondents who did not yet acquired a company did find this IC more important (mean = 3.690) than respondents who acquired their company (mean = 3.404). In our analysis, this difference is found statistically significant. This could possible explain why ETA entrepreneurs who are less rigid on the technology of their ideal business, could have more chances in acquiring a company.

Regarding “Potential market growth” as an IC, respondents who did not yet acquired a company found this IC more important (mean = 4.293) versus the ones who did acquire one (mean = 4.021). In our analysis, this difference is found statistically significant, which could indicate that a more pragmatic view on growth potential could increase the chances to acquire a company.

#### **4.5.2.5. Logistic regression analysis**

Following a relatively small minority of the scholars who are using a regression analysis in the context of IC (for example: Tyevejee, 1984; Zacharkis & Meyer, 1998; Block et al. 2019; Ismail & Medhat, 2019), in order to complement our t-tests and given our prediction is categorical (i.e. whether one acquires a company or not), we equally applied a logistic regression on our data set in order to predict the categorical dependent variable (acquiring a company or not) using a given set of variables (the IC).

The use of a regression analysis is in fact another statistical methodology, having a complementary value to the, in the research on IC commonly used, t-tests and provides some additional insights for the two following reasons:

Firstly, the t-test measures whether the means of certain IC differ between the two types of respondents (acquired and not yet acquired/still looking), while the regression analysis considers the variables from another point of view. In the t-test is the dependent variable the particular investment criterion and the independent variable the fact whether the company is acquired or not. The t-test has therefore no real predictive value.

Secondly, in the case of a regression analysis, one can measure different independent variables at the same time. In case of the t-test, one can only measure one variable at the same time.

It makes therefore sense to perform this additional analysis in our research in order to understand which IC have a positive effect on the nascent ETA entrepreneur acquiring a company or not.

##### **4.5.2.5.1. Variables**

In order to detect the severity of multicollinearity in our regression analysis (i.e. whether two or more independent variables are highly correlated with one another in our regression model), variance inflation factors (VIF's) indicated no problems of multicollinearity (no problematic high VIF's).

#### 4.5.2.5.1.1. Independent variables

As shown in TABLE 4.14 and TABLE 4.15, we asked the nascent ETA entrepreneurs to quantify the importance they attach to 18 different IC of a suitable target.

We decided not to regroup the IC, given the inherent subjectivity linked to subdividing IC into groups, and retained the 18 IC variables as independent variables. All these independent variables are continuous.

#### 4.5.2.5.1.2. Dependent variable

The dependent variable is: the decision to acquire a company or not.

#### 4.5.2.5.1.3. Control variable

Age is added as a control variable here, as in Chapter 3 (see Section 3.5.4.4.) age was found to have a strong association with acquiring a company or not. The control variable used here is therefore age.binary (0/1).

#### 4.5.2.5.1.4. Moderator variable

In line with Ismail & Medhat (2019), who considers “VC industry experience” as a moderator in their logistic regression, in order to determine which IC are important for the venture capitalists to fund an acquisition, we consider, in the context of ETA, “industry experience” (Q45) of the (nascent) ETA entrepreneur equally as a moderator.

In our context, the “industry experience” variable measures how important it is as an IC that the target company is active in an industry where the ETA entrepreneur had some previous work experience. It is clear that this experience in a particular sector is a third variable here that affects the strength of the relationship between the independent variables (the IC) and the dependent variable (acquire a company or not (yet)). Industry experience in a similar industry allows the ETA entrepreneur to have a better view on certain IC and their relative importance.

Two distinct models have been analyzed: one without moderator (see Section 4.5.2.5.2.) and the other one including a moderator (see Section 4.5.2.5.3). Both univariable and multivariable analyses are made.

4.5.2.5.2. Model with individual variables (without moderator)

Table 4.18. Univariable & multivariable logistic regression (18 IC, without moderator)

		Not yet	Yes	OR (univariable)	OR (multivariable)
location	Mean (SD)	3.8 (0.9)	3.5 (1.0)	0.68 (0.47-0.97, <b>p=0.033</b> )	0.69 (0.45-1.06, p=0.097)
industry	Mean (SD)	3.8 (0.9)	3.8 (0.8)	1.07 (0.73-1.60, p=0.722)	1.51 (0.92-2.57, p=0.114)
particular.or.stable.technology	Mean (SD)	3.7 (0.8)	3.4 (0.8)	0.62 (0.39-0.96, <b>p=0.036</b> )	0.53 (0.29-0.95, <b>p=0.035</b> )
sales.turnover	Mean (SD)	3.5 (0.8)	3.7 (0.7)	1.48 (0.95-2.38, p=0.090)	2.18 (1.26-3.99, <b>p=0.008</b> )
potential.market.growth	Mean (SD)	4.3 (0.6)	4.0 (1.0)	0.64 (0.41-0.99, <b>p=0.046</b> )	0.44 (0.23-0.79, <b>p=0.008</b> )
stable.demand	Mean (SD)	4.1 (0.7)	3.9 (0.8)	0.64 (0.39-1.01, p=0.058)	0.62 (0.32-1.16, p=0.136)
competitive.strength	Mean (SD)	3.8 (0.7)	3.7 (0.9)	0.84 (0.54-1.30, p=0.439)	1.03 (0.58-1.83, p=0.928)
valuation.multiples	Mean (SD)	3.5 (0.8)	3.6 (0.9)	1.19 (0.78-1.83, p=0.434)	1.08 (0.62-1.87, p=0.777)
highly.leverageable	Mean (SD)	3.7 (0.9)	3.6 (1.0)	0.88 (0.60-1.29, p=0.504)	0.79 (0.48-1.30, p=0.358)
asset.value	Mean (SD)	3.0 (0.9)	3.1 (0.8)	1.29 (0.86-1.96, p=0.228)	1.26 (0.72-2.22, p=0.418)
turnaround.potential	Mean (SD)	3.5 (1.1)	3.5 (1.0)	0.94 (0.68-1.31, p=0.709)	0.63 (0.38-1.01, p=0.057)
professionalisation.improvement.potential	Mean (SD)	4.1 (0.7)	4.2 (0.9)	1.13 (0.73-1.79, p=0.576)	1.52 (0.83-2.84, p=0.179)
previous.financial.trackrecord	Mean (SD)	3.8 (0.7)	3.6 (0.7)	0.74 (0.45-1.19, p=0.210)	0.47 (0.24-0.88, <b>p=0.021</b> )
future.investment.requirements	Mean (SD)	3.8 (0.7)	3.8 (0.6)	0.98 (0.60-1.61, p=0.930)	0.97 (0.52-1.84, p=0.920)
management	Mean (SD)	3.7 (0.8)	3.6 (0.8)	0.83 (0.54-1.26, p=0.373)	0.77 (0.45-1.28, p=0.311)
buy.and.build.potential	Mean (SD)	3.8 (0.9)	3.8 (0.9)	1.06 (0.72-1.58, p=0.764)	1.06 (0.64-1.77, p=0.828)
exit.opportunities	Mean (SD)	3.3 (1.0)	3.4 (1.3)	1.10 (0.80-1.53, p=0.547)	1.32 (0.87-2.04, p=0.199)
age.binary		0 85 (75.2)	28 (24.8)		
		1 33 (60.0)	22 (40.0)	2.02 (1.01-4.04, <b>p=0.045</b> )	1.59 (0.69-3.66, p=0.269)

Number in dataframe = 170, Number in model = 163, Missing = 7, AIC = 197.3, C-statistic = 0.783, H&L = Chi-sq (8) 6.76 (p=0.562)

As seen in TABLE 4.18., the two IC, “sales & turnover” and “potential market growth” are the most important variables to determine whether an ETA entrepreneur acquires a company or is still looking and this followed by “particular or stable technology” and “previous financial trackrecord”. The *p*-values in both univariable and multivariable regression seem to confirm this.

In order to further improve our model, the model with the lowest AIC using an automatic selection procedure in R (which yielded the same result as a manual selection procedure) is presented in TABLE 4.19 here below. It is seen that the best model contains only “location”, “industry”, “particular or stable technology”, “sales &

turnover”, “potential market growth”, “stable demand” and “previous financial track record” as IC. Again the univariable analysis, sometimes used to select variables, already indicated this. Hence, these IC are the most important criteria to predict whether the ETA entrepreneur is going to acquire his/her company or not.

*Table 4.19. Multivariable logistic regression - improved model (18 IC, without moderator)*

		Not yet	Yes	OR (multivariable)
location	Mean (SD)	3.8 (0.9)	3.5 (1.0)	0.68 (0.45-1.02, $p=0.064$ )
industry	Mean (SD)	3.8 (0.9)	3.8 (0.8)	1.67 (1.05-2.75, $p=0.035$ )
particular.or.stable.technology	Mean (SD)	3.7 (0.8)	3.4 (0.8)	0.50 (0.28-0.84, $p=0.011$ )
sales.turnover	Mean (SD)	3.5 (0.8)	3.7 (0.7)	2.27 (1.33-4.06, $p=0.004$ )
potential.market.growth	Mean (SD)	4.3 (0.6)	4.0 (1.0)	0.43 (0.24-0.73, $p=0.003$ )
stable.demand	Mean (SD)	4.1 (0.7)	3.9 (0.8)	0.64 (0.36-1.11, $p=0.116$ )
previous.financial.trackrecord	Mean (SD)	3.8 (0.7)	3.6 (0.7)	0.58 (0.32-1.00, $p=0.054$ )
exit.opportunities	Mean (SD)	3.3 (1.0)	3.4 (1.3)	1.31 (0.90-1.92, $p=0.162$ )

Number in dataframe = 170, Number in model = 163, Missing = 7, AIC = 183.5, C-statistic = 0.758, H&L = Chi-sq (8) 7.95 ( $p=0.438$ )

#### 4.5.2.5.3. Model with individual variables (with moderator: industry experience)

Based on the previous model selection, “industry experience” was included as moderator here.

By including “industry experience” as a moderator in the model, combining the moderating factor with the independent variables, as illustrated in TABLE 4.20, the model further improved (based on AIC & C-statistic).

*Table 4.20. Multivariable logistic regression - model with interactions (18 IC, with moderator)*

		Not yet	Yes	OR (multivariable)
industry.experience	Mean (SD)	2.9 (1.0)	2.8 (1.0)	0.06 (0.00-7.77, $p=0.274$ )
location	Mean (SD)	3.8 (0.9)	3.5 (1.0)	0.60 (0.14-2.37, $p=0.478$ )
industry	Mean (SD)	3.8 (0.9)	3.8 (0.8)	3.61 (0.89-20.43, $p=0.102$ )
particular.or.stable.technology	Mean (SD)	3.7 (0.8)	3.4 (0.8)	0.56 (0.08-3.67, $p=0.547$ )
sales.turnover	Mean (SD)	3.5 (0.8)	3.7 (0.7)	9.92 (1.10-129.32, $p=0.060$ )
potential.market.growth	Mean (SD)	4.3 (0.6)	4.0 (1.0)	0.04 (0.00-0.26, $p=0.002$ )
stable.demand	Mean (SD)	4.1 (0.7)	3.9 (0.8)	0.18 (0.02-1.49, $p=0.118$ )
previous.financial.trackrecord	Mean (SD)	3.8 (0.7)	3.6 (0.7)	1.06 (0.15-7.18, $p=0.952$ )
exit.opportunities	Mean (SD)	3.3 (1.0)	3.4 (1.3)	0.52 (0.14-1.86, $p=0.316$ )
industry.experience:exit.opportunities	Interaction	-	-	1.34 (0.90-2.02, $p=0.154$ )
industry.experience:industry	Interaction	-	-	0.80 (0.46-1.32, $p=0.390$ )
industry.experience:location	Interaction	-	-	1.04 (0.65-1.69, $p=0.859$ )
industry.experience:particular.or.stable.technology	Interaction	-	-	0.92 (0.49-1.72, $p=0.799$ )
industry.experience:potential.market.growth	Interaction	-	-	2.30 (1.25-4.58, $p=0.011$ )
industry.experience:previous.financial.trackrecord	Interaction	-	-	0.77 (0.40-1.46, $p=0.414$ )
industry.experience:sales.turnover	Interaction	-	-	0.67 (0.31-1.35, $p=0.284$ )
industry.experience:stable.demand	Interaction	-	-	1.52 (0.75-3.16, $p=0.247$ )

Number in dataframe = 170, Number in model = 163, Missing = 7, AIC = 189.4, C-statistic = 0.79, H&L = Chi-sq (8) 4.94 ( $p=0.764$ )

After running several models, the final model is based on the  $p$ -value of the interaction terms and on the AIC criterion (lowest). Only one significant interaction between the moderator (“industry experience”) and an independent variable (“potential market growth”) in the model could be observed. A profound knowledge of an industry (such as knowing the customers or the suppliers, understanding the market drivers and the products, following the innovation in that industry etc.) influences the relationship between the importance of potential future growth in that industry and acquiring a company or not, given that a knowledge of the

industry allows someone to have a better idea of the future growth potential of that industry. The final model is illustrated in TABLE 4.21 here below.

Table 4.21. Multivariable logistic regression - final model (18 IC, with moderator)

		Not yet	Yes	OR (multivariable)
location	Mean (SD)	3.8 (0.9)	3.5 (1.0)	0.65 (0.42-0.98, <b>p=0.043</b> )
industry	Mean (SD)	3.8 (0.9)	3.8 (0.8)	2.05 (1.21-3.65, <b>p=0.011</b> )
particular.or.stable.technology	Mean (SD)	3.7 (0.8)	3.4 (0.8)	0.44 (0.25-0.77, <b>p=0.004</b> )
sales.turnover	Mean (SD)	3.5 (0.8)	3.7 (0.7)	2.48 (1.41-4.62, <b>p=0.002</b> )
potential.market.growth	Mean (SD)	4.3 (0.6)	4.0 (1.0)	0.06 (0.01-0.31, <b>p=0.001</b> )
stable.demand	Mean (SD)	4.1 (0.7)	3.9 (0.8)	0.66 (0.36-1.16, <b>p=0.162</b> )
previous.financial.trackrecord	Mean (SD)	3.8 (0.7)	3.6 (0.7)	0.53 (0.29-0.95, <b>p=0.035</b> )
exit.opportunities	Mean (SD)	3.3 (1.0)	3.4 (1.3)	1.38 (0.95-2.05, <b>p=0.098</b> )
industry.experience	Mean (SD)	2.9 (1.0)	2.8 (1.0)	0.06 (0.00-0.50, <b>p=0.014</b> )
industry.experience:potential.market.growth	Interaction	-	-	1.95 (1.17-3.44, <b>p=0.014</b> )

Number in dataframe = 170, Number in model = 163, Missing = 7, AIC = 180.7, C-statistic = 0.775, H&L = Chi-sq (8) 3.07 (**p=0.930**)

In case we consider the 18 IC in the survey as 18 individual independent variables (and we do not group them), the best model [lowest AIC and very high C-stat 0.775] to predict whether the ETA entrepreneur is going to acquire his/her company is based on the combination of the 9 investment criteria including one interaction represented in TABLE 4.21 (i.e. “location”, “industry”, “particular or stable technology”, “sales turnover”, “potential market growth”, “stable demand”, “previous financial trackrecord”, “exit opportunities” and “industry experience”).

As seen in TABLE 4.21., the multivariable logistic regression shows the highest OR’s for the criteria “sales&turnover” and “industry” (both above 2x), while having a low *p*-value (even lower than in the model without moderator) showing strong statistical significance. These IC are therefore the most important variables to determine whether an ETA entrepreneur acquires a company or is still looking. The three IC, “sales & turnover”, “potential market growth” and “particular or stable technology” show equally a strong statistical significance given their low *p*-values. This followed by “industry”, “industry experience” and “previous financial trackrecord”. The other IC play clearly a less important predictive role.

#### 4.5.2.5.4. Conclusion

Both models do show a strong resemblance and are generally in line with the results of the t-statistic analysis performed in Section 4.5.2.4. (TABLE 4.17).

The three criteria “potential market growth”, “particular or stable technology” and “sales turnover” are the IC variables in the model that have the strongest significant influence on whether a company gets acquired or not. The t-test analysis indicates that these three variables, in particular the first two, have a similar low *p*-value.

Other important IC such as “industry”, “location”, “previous financial track record” also significantly influence the decision to acquire a company or not. However, in the t-test analysis performed in the previous section, only “location” seems to have a low *p*-value, indicating a large difference between the people who acquired their own company and the ones who are still looking.

### 4.5.3. Location

Location is an important investment criterion for the (nascent) ETA entrepreneur (see TABLE 4.1 (mean = 3.74) and TABLE 4.2 (67% consider it important or very important), and even more for the nascent ETA entrepreneur than for the ETA manager (see TABLE 4.4 and the *p*-value regarding location), as an ETA manager has to daily run the business and will therefore need to live relatively close to his/her company.

ETA entrepreneurs know through their experience that physical distance between leaders (i.e. the management) and followers (employees) has a negative effect on performance, which has been several times confirmed in the literature (Bass & Avolio, 1990) (Howell & Hall-Merenda, 1999) (Yagil, 1998) (Antonakis & Atwater, 2002) (Howell, Neufeld, & Avolio, 2005).

The question whether he/she would be so dedicated to move his/her residence and to a certain degree sacrifice his/her current private environment and lifestyle (house, school, family, friends,..) in order to manage the company he/she acquired is illustrated in TABLE 4.22.

Table 4.22. Importance of location

Variable	Still looking		Already acquired	
	%	#	%	#
Are you / were you prepared to move your residence?	100%	116	100%	47
Yes	31.90%	37	19.15%	9
No	68.10%	79	80.85%	38

Regarding the location, almost of a third of the nascent ETA entrepreneurs is prepared to move, while two third is not. A relatively small percentage, as in a small country as Belgium, a move is in most cases not even needed.

In the search fund literature we do not find little reference to location or preparedness to move as an IC. It is assumed that the potential ETA search fund entrepreneur, who is mostly a post-MBA in his/her early thirties (and most likely not married) (Kolarova et al., 2020) relocates to the location of the company they acquire, wherever it is located (Kelly, 2017). In the past, few entrepreneurs have raised search funds for the purpose of focusing a search on a region of the United States or a specific country, a so-called regional search. For the most part, these have been formed for personal reasons, or reflect limitations in the searcher's ability to relocate (Kelly, 2017). Such a provision has to be disclosed in a satisfactory manner so the investors believe the restrictions do not hamper the probability of finding an acquisition target. According to Yoder & Kelly (2018) and Kelly & Heston (2022), 64% of the search funds in the US made an investment in another state as the state from which the ETA entrepreneurs conduct their searches. Ruback et al. (2016) did see a tighter geographical preference for ETA entrepreneurs who started their search after holding a traditional job for a decade or more, compared with the ETA entrepreneurs who started a search right out of Business School. Older entrepreneur are most likely less mobile as they usually have acquired their own house, have a family with children going to local schools, an existing (local) network etc.

Robbie and Wright (1995) equally confirmed that location was an important criterion (23.6% very important, 20% important) for MBI-candidates. Not surprisingly as the MBI manager is managing the business on a daily basis and therefore has to be based close to the head office.

Mason et al. (2002) found in their analysis on BAs that over one-half (55%) of the BAs have a geographical limit beyond which they will not consider investing. For the majority of these investors the limit is 2 hours travelling time (which in Belgium brings you to the other side of the country). The findings of Brush et al.



(2012) suggest that the importance of location remains a very important investment criterion through the entire investment decision-making process, as most BA have the desire to be involved in the entrepreneurial process. A board seat or even informal monitoring requires that the venture is accessible (Mason & Rogers, The business angel's investment decision: An exploratory analysis, 1997).

For VC firms, Gompers et al. (2020) found that respondents were less likely to identify a specific geographic focus, due to the recent globalization of the VC industry. As the VC professionals do not have to effectively daily manage their investments and rather supervise these while sitting on their boards, they do need to live at relatively short distance from their investment. A similar case could be argued for PE firms.

Although the nascent ETA entrepreneurs according to our descriptive statistics seem to find location a more important IC than the ETA managers (TABLE 4.17.) and are more prepared to relocate than the actual ETA managers (32% v. 19% - see TABLE 4.18.), we performed a Pearson's Chi-squared  $\chi^2$  test<sup>44</sup> (test-statistic: 2.683 and  $p$ -value = 0.1014) indicating that there was no significant difference between respondents who already purchased a company and the ones that are still looking. The difference in the descriptive statistics could possible be explained by hindsight bias. Once one has acquired his/her company, it is easier to think that one would not be prepared to move. If you are still looking and eager to be successful and a acquire a company, one could be prepared to sacrifice more, in a particular after a long and tedious search process. Although from our analysis in Section 4.5.2.4., we know that for "location" as an IC, the mean value for respondents who did not yet acquired a company was significantly higher than for the people who acquired their company (see TABLE 4.17.).

#### **4.5.4. The "ideal" company (turnover, profitability, employment)**

Similar to the research on search funds (Kelly, 2017) (Dennis & Laseca, 2016) (Hunt & Fund, 2012) (Kelly & Heston, 2022), we asked our respondents the characteristics of their ideal company according to the three following parameters: size, profitability and staff size. From our results in TABLE 4.14., we know that sales and profitabilty (previous financial trackrecord) are important IC for the ETA entrepreneur. The descriptive statistics of the ideal company characteristics are represented in TABLE 4.23. here below.

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<sup>44</sup> We checked whether the ch-square goodness-of-fit test is appropriate when the following three conditions are met: 1. The sampling method is simple random sampling. There is no relations between the subjects in each group. This is the case here. 2. The variable under study is categorical. This is the case here. 3. The expected value of the number of sample observations in each level of the variable is at least 5. This is the case here.

Table 4.23. The “ideal” company

Variable	Still looking		Already acquired	
	%	#	%	#
Ideal sales size of the target company?	100%	116	100%	47
Sales below 2 million	23.28%	27	12.77%	6
Sales between 2-10 million	59.48%	69	57.45%	27
Sales between 10-20 million	11.21%	13	25.53%	12
Sales above 20 million	6.03%	7	4.26%	2
Ideal profitability of the target company?	100%	116	100%	47
EBITDA below 300,000	27.59%	32	14.89%	7
EBITDA between 300,000-1 million	57.76%	67	59.57%	28
EBITDA between 1-2 million	9.48%	11	21.28%	10
EBITDA above 2 million	5.17%	6	4.26%	2
Ideal staff size of the target company?	100%	116	100%	47
Number of employees below 5	19.83%	23	8.51%	4
Number of employees between 5-20	51.72%	60	34.04%	16
Number of employees between 20-50	23.28%	27	44.68%	21
Number of employees above 50	5.17%	6	12.77%	6

Compared to the search funds, these criteria, in particular the EBITDA criteria, are certainly lower. Search funds, whether they are based in the US (predominantly) or in Europe or elsewhere have similar IC. They typically target companies in the \$2-30m (Kelly, 2017) or \$5-50m (Denis & Laseca, 2016) revenue range and the \$1-5m EBITDA range (Kelly, 2017), \$1-8m (Morissette & Hines, 2015) or stable cash-flows of at least \$1 million (Dennis & Laseca, 2016) (Hunt & Fund, 2012), requiring on average \$2-10m of equity capital (Kelly, 2017) ([www.Searchfund.org](http://www.Searchfund.org)). Regarding EBITDA levels, expressed in percentage of sales, most studies indicate that at least 10% (Dennis & Laseca, 2016) or even 15% (Kelly, 2017) is desirable, providing a reasonable margin of safety. Kelly (2017) considers too small SME’s, i.e. less than \$10 million revenues or less than \$1.5 million EBITDA even as undesirable. The average purchase price of a search fund sponsored acquisitions in the US was almost \$17m with a \$1.7m EBITDA (Kelly & Heston, 2022) and internationally \$11 million (median), with less than 10% below \$4m (Kolarova et al., 2020).

The reason why these size criteria are substantially lower in our data sample can be explained that we analyse experienced seasoned ETA entrepreneurs, who invest rather with their own (limited) equity (80% of respondents is prepared to invest between €100k -600k) and to a much lesser extent with external funds, coming from investors with deep pockets as in the case of search funds (who have several millions at their disposal).

Although the size criteria differs could indeed slightly differ between search fund targets and self-funded non-search fund backed search targets (i.e. the targeted audience in our data sample), in both cases we are talking of relatively small companies, where according to Ruback et al. (2016) “The Importance of being Unimportant” is ideal. If the small business you acquire provides something that only makes up a small portion of its customers’ expenses, then those customers are much less likely to be difficult on price negotiations and less likely to switch to other suppliers.

Comparing these “ideal company” statistics with the other asset classes such as VC, PE, BA or MBI’s does not make much sense. VC and PE investments are made through fund structures, who are supported by large institutional investors or wealthy individuals, who are able to invest large amounts at the time and therefore focus on (much) larger size targets. MBI candidates usually invest also in much larger companies as they always represent a small shareholding alongside a cash-rich PE sponsor. Finally, BAs, equally investing their

own money, invest smaller amounts, ranging to £1million (Mason et al., 2002), in current money<sup>45</sup> £1.45 million and on average £145k, amounts which are in line with the amounts invested by the ETA entrepreneur and possibly targeting similar size investments.

Our descriptive statistics equally test differences between the (nascent) ETA entrepreneurs who are still looking to acquire a company and the ones who already acquired their company. We therefore take the independent variable here as a dichotomous variable: “acquired a company: yes or not yet”.

Given that the dependent variable (the different IC) is continuous or ordinal, we perform a two-sample t-test. Conclusions of significance are based on  $p$ -values < 0.05 (denoted by \*) and <0.001 (denoted by \*\*\*). If  $p < 0.05$  or  $p < 0.001$ , there is a significant difference in the outcome variable between respondents who acquired a company and those who did not yet acquired a company.

TABLE 4.24. provides here below the results of the “ideal company” and the two-sample t-test.

Table 4.24. The “ideal” company - Two sample t-test [Q42\_93/94/95 by Q64R]

Variable (#161) Criteria Ideal company	Test statistic	df	p-value	Mean Not Yet	Mean Yes
Ideal Size (in million of €)	-1.629	161	0.10530	2.000	2.213
Ideal profitability (in k or million €)	-1.750	161	0.08208	1.922	2.149
Ideal staff size (number of employees)	-3.466	161	0.000677***	2.138	2.617

<sup>45</sup>The variables of the ideal company criteria are recoded to ordinal variables values, whereby the lowest number has the value 1 and the highest the value 4. The higher the value, ranging from 1-4, the more important the respondents give to this investment criterion. The mean is calculated as the sum of the values divided by the number of values.

Based on the two-sampled t-test analysis here above and an additional confirmatory  $\chi^2$  test<sup>46</sup>, we do not find a significant difference regarding the “ideal” turnover (size) and “ideal” EBITDA (profitability) between respondents who acquired a company and those who are still looking. On the other hand, regarding the “ideal” staff size of a target company, there is a significant higher mean value for respondents who acquired a company compared to those who are still looking. As the Chinese saying “I wish you many employees” means “I wish you a lot of trouble”, the latter could be caused by the fact that having a large staff size is often considered not to be an advantage in a high wage, highly unionized country such as Belgium. Nascent ETA entrepreneurs, who are still looking, therefore do not desire a lot of employees. The ETA managers, who acquired a company, have already a company with a certain number of employees and have accepted this fact.

As a general remark, possible differences between the nascent ETA entrepreneurs and the ETA managers could be explained by the fact that once the deal situation gets more concrete, ETA managers are often prepared to relax their investment criteria in certain circumstances and this in order to get the deal done. For example, Mason et al. (2002) showed in their study on BAs in the UK that BAs investment preferences are not necessarily a good guide to their actual investments. Most of the BAs indicate that they are willing to relax their investment criteria, notably when the entrepreneur/management team has high credibility. Also when the required investment amount is relatively small and the location of the business is very close to home, pragmatism could prevail. Furthermore, BAs will also more likely invest if the referral is recommended

<sup>45</sup> Using [www.inflationtool.com](http://www.inflationtool.com): the value of 2002 British pound today

<sup>46</sup> In order to perform an additional robustness analysis, we equally regarded the ideal company criteria as categorical variables and performed a  $\chi^2$ -test, leading to similar conclusions ( $p$ -values: ideal size = 0.099, ideal profitability = 0.11, ideal staff size = 0.005).

by a trusted source (Harrison, Dibben, & Mason, 1997). A similar pattern could be detected among (nascent) ETA entrepreneurs as pragmatism and opportunism often prevails when looking for the acquisition of a company.

#### 4.5.5. Industry criteria and industry with previous work experience

##### 4.5.5.1. Previous work experience in in the industry

As Gompers et al. (2002) did in their analysis on the investment focus of VC firms, asking whether VCs were experienced and even specialized in certain industries, we asked the (nascent) ETA entrepreneurs equally whether they prefer to invest in industries in which they are knowledgeable and have experience due to previous work experience in that industry. The results are illustrated in TABLE 4.25. (based on Likert Scale 1-5 in original survey) here below.

Table 4.25. Previous work experience in industry

Variable	%	#
Importance of target company being active in an industry with previous work experience	100%	163
Very unimportant	9.82%	16
Unimportant	24.54%	40
Neutral	38.04%	62
Important	23.93%	39
Very important	3.68%	6

Surprisingly only about 27% of the respondents considers previous work experience in a certain industry important (23.9%) of very important (3.7%) when they are looking at a target company to acquire. Given their average age and experience, as well as their long time career in an industry, one would expect that in particular these type of experienced ETA entrepreneurs would attempt to leverage their knowledge, experience, track record and network in a particular industry to the fullest. Although Ruback & Yudkoff (2017) viewed that most people do not learn much that is relevant to buying and running a small business in a traditional post-MBA job.

In the case of search funds, the ETA searchers are mostly in their early thirties and the vast majority starts searching shortly after their MBA (e.g. 75% within 3 years post-MBA (Kolarova, 2020)). Given that these searchers at this stage have not been able to acquire a profound work experience in a particular industry yet, it is less important for them to invest accordingly.

In the case of VCs, different scholars (Tyebee et al. (1984), Gompers et al., (2020), Zutschi et al. (1999) found that VCs screening criteria reflect a tendency to limit investments to areas the VC was familiar with or specialized in, in terms of technology, product and market scope of the venture. For example, in Gompers et al. study, only 39% of the VC firms were generalists without an industry focus. Franke et al. (2008) studied German and Austrian VC professionals and reported that both novice and experienced VCs consider industry experience as their central investment criterion. Shepherd et al. (2003), drawing on cognitive theory, shows that the experience of VC's has a significant influence on their decision making. Results showed that for relatively inexperienced VC's, increasing experience is associated with improvements in reliability and performance relative to a benchmark. However, beyond a certain point, greater experience at the venture capital task may not always result in better decisions. Gompers et al. (2020) found that for a VC, overall the management team is the most important factor of selection, whereby ability and industry experience are the

most important qualities of the management team. As in the case of ETA, the ETA entrepreneur will become the manager, his/her industry experience is therefore equally important.

Regarding BAs, Mittenes et al. (2012) equally found that differences between BAs, notably in terms of their industry experience, have a moderating impact on their IC and evaluation of funding investment opportunities. Argerich et al. (2013), as well as Kelly & Hay (1996) and Mason & Harrison (2002) found that previous experience and knowledge of certain industries presenting the opportunity was also found to have an influence on the evaluation received for the business opportunity by BAs. Curiously, the previous knowledge of a business angel influences success, but is not reflected in any of the evaluations, most likely, given that in these cases the project that is being presented is already at the evaluation stage with those investors who knew about it previously or because angels accept to meet entrepreneurs because of referrals. Therefore, those projects will very likely meet investors after the forum, regardless of the evaluations of their 'pitch'. White & Dumay (2020) consider personal experience as a key driver in the investment process of BAs. The interviewed angels were adamant that their personal experience strongly guides them during both the decision-making process and post-investment involvement. Corroborating participants supported this finding, noting that an advantage that business angels bring is their knowledge and experience. Finally, the literature is unanimous on the fact that the expertise and experience of the entrepreneurs themselves remains at all times a very important IC for a BA (Fenney et al. (1999), Van Osnabrugge & Robinson (2000), Mason & Stark (2004), Carpentier & Suret (2015), White & Dumay (2020)).

In the case of PE, Opler & Titman (1993) argue that private equity systematically avoids companies with high costs of financial distress and instead favors companies with entrenched management and high cash flows. Muzyka et al. (1996) concluded that industry-related experience outweighs all other investment criteria. Schefczyk & Gerpott (2001) findings suggest that the (German) VC industry should in due diligence put more emphasis on the managers' functional experience and unless the company is active in an entirely new market, a high proportion of managers with experience in the relevant industry. In an ETA transaction, the ETA entrepreneur will become the manager. Hence his/her experience is crucial.

This is also the case with MBI's who also prefer to invest in familiar industries (Robbie & Wright, 1996).

In general, research by Capron & Shen (2007) compares acquisitions of private vs. public firms. They concluded that acquirers favor private targets in familiar industries and turn to public target to enter new business domains.

Sørensen & Phillips (2011) argue that founders with prior employment experience in an industry perform better than those without such experience, because they are able to "exploit knowledge their founders acquire from their employers".

Different researchers, for example (Klepper (2001), Klepper & Sleeper (2005), Franco & Filson (2006)) analyzed the phenomenon of employees leaving incumbent firms to start their own firms, e.g. through spinoffs, in the same industry. The main premise of the model was that spinoffs inherit knowledge and (technological) know-how from their parents that shapes their nature at birth. The existing research covers only the startup situation and unfortunately does not mention ETA transactions. However, one can assume that in the case of an ETA transaction, an ETA manager can equally heavily influence the company he acquired through his/her previous experience and knowledge.

Given all these findings, one should assume that an ETA manager is probably equally favoring targets in the industries familiar to him/herself. An experienced ETA manager has during his/her career developed a knowledge of a certain industry and most likely established a network in that industry. His/her potential deal flow will therefore be in that industry. As we did not include in our study some detailed data on the background of the ETA managers and the specific industries in which they invested (we only described the industry sector in general), we cannot confirm this at this stage. However, the results of the descriptive statistics in the previous chapter (see Chapter 3, Appendix 3) confirm that the backgrounds of the (nascent) ETA entrepreneurs (i.e. their experience) are similar to their preferred industries in which they want to invest (see also further 4.5.5.2.).

In order to analyze whether the nascent ETA entrepreneurs who are still looking have a different view on this preference for known industries than the ETA entrepreneurs who already acquired a company, we performed a Two Sample t-test (test-statistic: 0.333 and  $p$ -value = 0.7396) indicating that there are no significant difference between the two groups. Even the means between the two groups are very similar (mean in group not yet = 2.888 and mean in group yes = 2.830).

#### **4.5.5.2. Preferred Industries**

From our results in TABLE 4.14. on the main IC, we know that the type of industry is undoubtedly an important IC for the (nascent) ETA entrepreneur.

A paper from the University of Chicago on ETA (Dennis & Laseca, 2016) shows that investors in ETA rated the company (and by default the industry) as the most important component of the Jockey & Horse metaphor of Kaplan et al. (2009).

As mentioned here above, an ETA manager is probably equally favoring targets in the industries familiar to him/herself, given his/her knowledge of the industry and his/her potential deal flow in that industry due to his/her established network. In our survey (see Chapter 3, Appendix 3 descriptive statistics), the respondents have a rather diversified industry sector experience, whereby production (17.9%) and professional services (16.7%) are the two preponderant categories, followed by finance (11.9%) and trade & distribution (8.3%).

In TABLE 4.26. here below, we asked the respondents what their preferred industry is to invest and to indicate their top three of preferred industries. The table indicates that production (28%), followed by trade & distribution (18.3%) and professional services (16.7%) are equally the dominant preferred industries (weighted based on a top 3). Not coincidentally, very similar categories as the ones described in the previous chapter, describing the background of the (nascent) ETA entrepreneurs.

The list of industries is based on the list provided by the descriptive statistics of Parker & van Praag (2012) and to a lesser extent Robbie (1993). Certain industries have been slightly modified<sup>47</sup>.

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<sup>47</sup> The industry "agriculture" has been extended to equally include "agribusiness". The categories "Production" and "Building" are two separate categories. "Trade" also includes "distribution" businesses. The categories "Finance" and "Real Estate" are two separate categories. A category "Other" has been added.

Table 4.26. Preferred Industries\*

Industry	Min	Max	Mean	Std Deviation	Variance	Top 1	Top 2	Top 3	Top weighted %	Count
Capital intensive	1.00	3.00	2.47	0.81	0.65	3	2	10	2.4%	15
Agribusiness/agriculture	1.00	3.00	2.11	0.94	0.88	7	2	9	3.5%	18
Production	1.00	3.00	1.53	0.70	0.49	64	32	13	28.0%	109
Building	1.00	3.00	2.50	0.65	0.42	2	8	14	3.8%	24
Trade & distribution	1.00	3.00	1.93	0.73	0.54	26	39	20	18.3%	85
Retail/food	1.00	3.00	2.19	0.77	0.59	7	12	13	6.0%	32
Retail/non-food	1.00	3.00	2.12	0.64	0.41	4	15	7	5.1%	26
Repair/transport	1.00	3.00	1.83	0.80	0.64	5	4	3	2.7%	12
Finance	1.00	3.00	2.31	0.82	0.67	3	3	7	2.3%	13
Real estate	1.00	3.00	2.29	0.82	0.68	5	5	11	3.8%	21
Professional services	1.00	3.00	1.97	0.78	0.61	25	31	23	16.7%	79
Other	1.00	3.00	2.27	0.88	0.78	12	6	23	7.4%	41
<b>Total</b>						<b>163</b>	<b>159</b>	<b>153</b>	<b>100.0%</b>	<b>475</b>

\*Respondents have to choose 3 industries and rank these 1 to 3. The mean is calculated as the sum of the values divided by the number of values. The weighing is done according to: top 1 given a weight of 3, top 2 given a weight of 2, top 3 given a weight of 1

No data exist on targeted industries of seasoned experienced self-funded ETA entrepreneurs. However, in the case of search funds, some data exist on preferred industries.

Firstly, a recent paper of Stanford University’s Centre for Entrepreneurial Studies (Kelly, 2020), an academic research centre which represents the main comprehensive and systematic collection of data pertaining to North American search funds, equally elaborates briefly on a search fund’s preferred industries, being in order of importance technology, healthcare and “other services”. The targeted technology subcategories are in order of importance: tech-abled services (83%), software (76%), education (51%), fin-tech (36%) and e-commerce (21%).

Secondly, a similar sister study paper from IESE Business School (University of Navarra) (Kolarova et al., 2020), who is reporting on the international (i.e. non-North American) search funds, depicts the preferred industries of the international (search fund) searcher, in order of importance, technology, healthcare, both by far the most targeted industries, followed by transportation and logistics, and further with some distance, manufacturing and other services. Results which are almost identical with their North American counterparts. Data from the most recent years, however, demonstrate a shift away from acquiring general services businesses towards technology such as software, tech-abled services, financial services.

Thirdly, Morrisette & Hines (2015) made a historic analysis of the targeted industries (equally based on the Stanford CES data (2014)), concluding that search funds are predominantly targeting industries in the services industry (including retail and B2B) (on average 61% of preferred industries), to a lesser agree in the manufacturing industry (18%) and finally with no preference (17%).

Finally, Hunt & Fund equally provide, based on the Stanford CES data on search funds, a comparative table (see TABLE 4.27. here below) of the favored industries for ETA investors and this in comparison with BAs and VCs, showing that ETA entrepreneurs clearly prefer more traditional industries.

Table 4.27. IC Favored industries by funding source

Search Funds	Angel Investments	Seed and Startup VC
Misc. Services (60%)	Software/Internet (19%)	Software (24%)
Manufacturing (20%)	Health/Biotech (18%)	Biotech (15%)
Distribution (5%)	Bus. Products & Services (16%)	Med Devices & Equip (10%)
Manufacturing/Service (5%)	Consumer Prods & Srvcs (15%)	Media & Entertainment (9%)
All Other (10%)	Hardware (12%)	Industrial & Energy (8%)

Source: Hunt & Fund (2012)

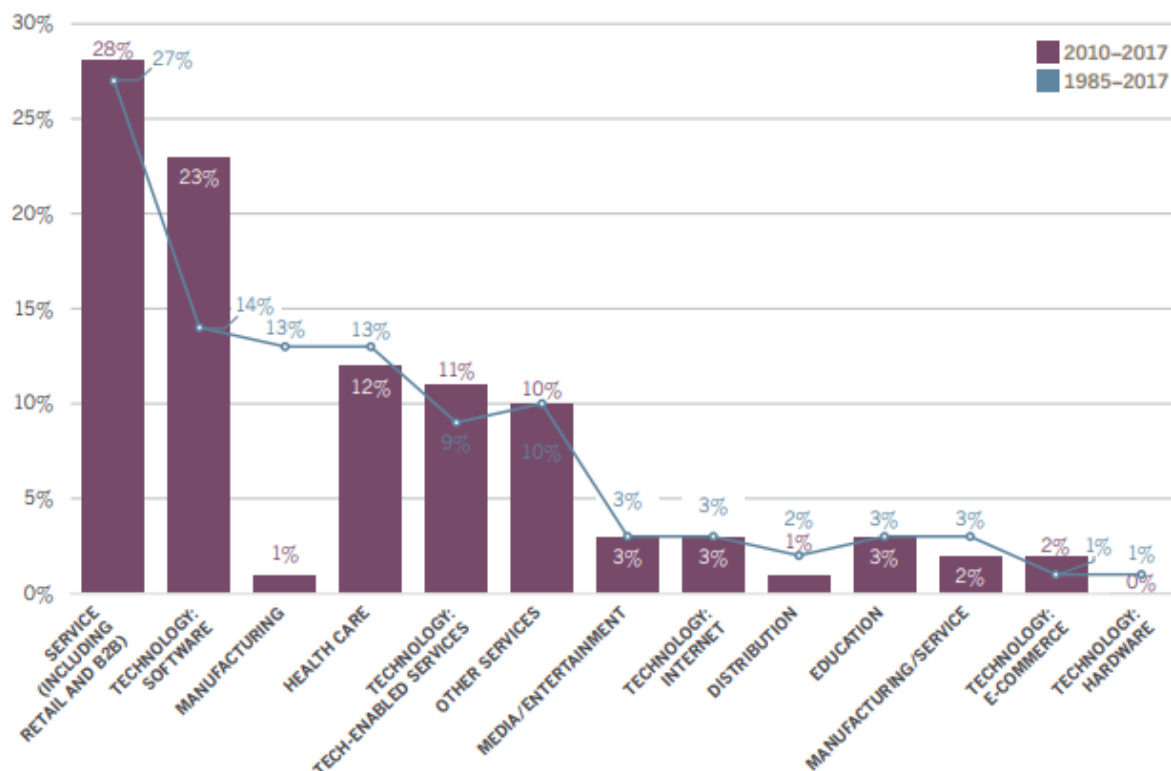
Lofstrom et al. (2014) analyze why some individuals, such as ETA entrepreneurs, are more likely to become small-business owners than others, by classifying industries using measures of entry barriers. These industry-specific barriers vary from industries. A low-barrier industry is characterized by a limited prevalence of cost leadership and product differentiation strategies among incumbents. A high-barrier industry on the other hand is characterized by at least one demanding requirement for entry, e.g. fixed capital in the case of (some) production companies or capital intensive industries or technical knowledge and innovation barriers in the case of high tech companies.

In our survey, the (nascent) ETA entrepreneur realizes these barriers and therefore is less inclined to invest in industries where the barriers are high, such as capital intensive industries (capital), agribusiness/agriculture (technical knowledge & capital), building (capital), finance (technical knowledge), transport (capital). Regarding his/her preference for production, in particular compared to his/her younger search fund colleagues ETA entrepreneurs, our older ETA entrepreneurs clearly prefer production to services industry. This could be explained by the fact that more seasoned experienced entrepreneurs have more own capital at their disposal and have less trouble with these barriers. However, one can assume that in case of very high capital requirements for that production, the ETA entrepreneur will lose his/her enthusiasm very fast as high capital expenditures leave less room for error (Dennis & Laseca, 2017). Lofstrom indeed sees the manufacturing industry as a high barrier industry. He even sees the trade (due to working capital requirements), and the professional services (capital) as high barrier industries.

Regarding actually acquired companies by search fund (as opposed to targeted industries), the Stanford CES data (Yoder & Kelly, 2018), as illustrated in FIGURE 4.2. here below, show a great preponderance of companies in service-related industries or light manufacturing. Recent figures from the last seven years equally demonstrate a shift away from manufacturing businesses toward technology, software and other services businesses (Kelly & Heston, 2022) (see also Kolarova et al., 2020). In their paper from the University of Chicago, Dennis & Laseca (2016) equally see a shift over the years from an almost exclusive focus on business services industries to investments in companies active in - in order of importance - technology (more tech-enabled than pure tech), manufacturing and healthcare. Also other industries are beginning to gain more popularity. The recent statistics of Stanford's CES further confirm this trend towards technology type businesses.



Figure 4.2. Industries of acquired companies (N=160)



Source: Stanford GSB data on search funds (Yoder & Kelly) (2018)

In our survey, we did not collect statistics on the different industries where the individuals who performed an ETA transaction invested in. However, the Stanford CES data differ significantly from our results of preferred industries, in particular regarding their preference for technological industries such as software, healthcare or tech-enabled services. We therefore assume that the investment preferences from young MBA graduates, which are on average more technology savvy, can fundamentally differ from older seasoned managers mostly coming out of traditional industries. Given the prevalence of tech firms across the entire US economy compared with the Belgian more traditional industry focused SME world, could equally be part of the explanation. Knight's research (Knight R., 1994) shows that high technology investments are not nearly as popular with VCs in other parts of the world as in the US and high technology is even viewed as a negative criterion in many countries. Even Ruback et al. (2016) sees technology driven companies as more risky given that technology changes often and therefore could endanger enduring profitability and recurring revenue. MBI candidates, who are also on average older, equally prefer companies having stable technologies and stable demand (Robbie & Wright, 1996).

Comparing preferred industries between different investor asset classes, Block et al. (2019) show in their descriptive statistics that LBO funds and to a lesser extent FOs and GEFs have the most similar industry preferences (industrials, consumer products and services) than the (nascent) ETA entrepreneur. BAs and in particular VCs invest rather in software and services, biotechnology (in line with findings from Hunt & Fund, 2012 see TABLE 4.23. here above). The recent move observed in the search fund preferred industries to more technology and healthcare oriented businesses can also be observed in the PE industry (Bain & Company, 2021). In 2020, the broad technology sector (including fin-tech, SaaS-based businesses, etc.) attracted the most PE investments (32% of total). Although it is likely that the ETA industry will follow this trend, the very high valuations in this area are a limiting factor, in particular for self-funded ETA entrepreneurs who need to (at least partially) their acquisitions with their own money and this in light of a set amount of bank leverage.

#### 4.5.6. Preferred business scenario

In Section 4.5.2., we found that 'professionalization and improvement potential' are considered the second most important investment criterion (see TABLE 4.14.).

From our descriptive statistics in this Section, as illustrated here below in TABLE 4.28., the vast majority of the ETA entrepreneurs (almost 85%) equally likes to be actively involved in the company and to add value by improving and professionalizing their acquired company. These numbers do not surprise as an experienced manager is most likely convinced that he or she could contribute to a further improvement of the acquired company by bringing his/her vast expertise to the table. A turnaround scenario is clearly not preferred (only 7% of the respondents). The latter, given its high risk profile, is not desirable for most ETA entrepreneurs as they in general contribute a significant part of their net worth to the transaction and at all times do not want to jeopardize this investment by getting involved in risky turnaround efforts.

Table 4.28. Preferred Business Scenario

Variable	%	#
What is your preferred scenario?	100%	162
A relatively well-ran and optimised company and keep on running it as such.	8.64%	14
A company with a limited improvement and professionalisation potential.	24.07%	39
A company with a large improvement and professionalisation potential but requiring extensive involvement.	60.49%	98
A company that needs a turnaround.	6.79%	11

In the case of search funds (Morissette & Hines (2015), Kelly (2017)) and, to a lesser extent MBI's (Robbie & Wright, 1996), the managers typically make few radical changes, in particular in the beginning, opting instead to learn the business ("a second due diligence process") and gain management experience. After becoming comfortable operating the business, they begin to make changes to improve and further grow the business.

Prior studies on LBOs, acknowledge that LBOs create value through significant managerial improvements (Kaplan & Stromberg, 2009). MBI's also rank "some turnaround potential" as an important criterion (Robbie & Wright, 1996).

Gompers et al. (2020) show that VCs are not passive investors and actively add value to their portfolio companies. For example, VCs take an active role in customer introductions and operational guidance, in addition to providing help with hiring and strategy. For example, Hellmann & Puri (2002) find that VCs are important to the professionalization of startups. Kaplan & Strömberg (2004) find that VCs expect to add value when they make their investment decision.

Although no data exist on post-ETA performance and involvement, except on search funds, we can expect that the arrival of a senior experienced investor/manager in a small SME, could contribute significantly to the improvement and professionalization of the acquired company. Undoubtedly more than in the case of relatively unexperienced search fund searchers, who often compensate for this by keeping the seller involved for a transition period (Kelly, 2017) and tapping into the knowledge of the investors (Kolarova et al., 2020).

In order to analyze whether the nascent ETA entrepreneurs who are still looking have a different view on their preferred business scenario than the ETA entrepreneurs who already acquired a company, we

performed 1. a Two Sample t-test, assuming the different business scenario's as ordinal variables<sup>48</sup>, (test-statistic: -1.2400 and  $p$ -value = 0.2167) and 2. a Fischer-exact test, assuming the different business scenario's as categorical variables ( $p=0.6759$ ), both test indicating that there are no significant difference between the two groups. Even the means between the two groups are very similar (mean in group not yet = 2.609 and mean in group yes = 2.766).

#### 4.5.7. Valuation

A couple of studies have also explored the valuation of family firm buyouts (Astrachan & Jaskiewicz, 2008) (Granata & Chirico, 2010) (Zellweger & Astrachan, 2008) (Niedermeyer, Jaskiewicz, & Klein, 2010). Most of these studies emphasize the seller's perspective. It is generally assumed that a family's perception of price for the business will be higher than a market-based valuation would justify due to the emotional value attached by family sellers and due to the discount given to a family company due to its (perceived) unprofessionalism and inefficiency. As such, there is often disagreement between family firm buyers, and family firm sellers over an appropriate selling price (Scholes et al., 2007).

The bargaining power of prospective buyers may depend on information asymmetries with the seller, as well as on the level of bidder competition, the buyer's expertise, the time pressure of the seller (Ahlers et al., 2016). The study made by Ahlers et al. built a real option framework for the valuation of family firm buyouts. They stress on the flexibilities buyers may have to act in the post-buyout period independent of family-firm-specific considerations. A family exit may affect firm value both as an upside and/or downside driver. For instance, as an upside driver, buyers may find ample growth opportunities in family firms because family members often tend to focus on the preservation on their wealth, rather than to invest in potentially risky expansion or growth. It is clear that an ETA entrepreneur may be confronted with this as the price expectations of the seller will be often too high. On the other hand, an ETA entrepreneur could also experience a possible undervaluation as the real potential of the company is often untapped.

In the decision criteria of VCs (Gompers et al., 2020), the company valuation was only ranked as the fifth most important criterion, but third in importance for later-stage deals. This is consistent with Gompers et al. (2016) as late stage VCs are similar than PE funds in that they see business factors and valuation as highly important.

For ETA transactions, which are also later stage deals, valuation levels are very important (40% important, 11% very important, only 7% unimportant, see Section 4.5.2.1. TABLE 4.15.) as a (nascent) ETA manager typically does only have limited resources and does a once-of-a-lifetime investment. However, ranking all the IC in TABLE 4.14., valuation multiples are in importance only the 14<sup>th</sup> on a total of 18 IC. The ETA entrepreneur seems to rightfully worry first about other IC, adhering to the saying "First decide whether you want the carpet before you start negotiating the price of it". They probably equally assume that the valuation multiples are principally determined by the market and therefore relatively standard.

This valuation result is arguably consistent with Hsu (Hsu D. H., 2004) who shows that high quality VC firms are sometimes able to win deals despite submitting term sheets at a lower valuation. Their offers are three times more likely to be accepted and they can acquire the start-up equity at a 10-14% discount. In the case of an ETA transaction, it is not always the valuation multiple (i.e. the price) only that is the only criterion to

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<sup>48</sup> Different business scenario's are recoded as ordinal variables values, whereby the four scenario's have each a value between 1 (well-ran) and 4 (turnaround). The higher the value, ranging from 1-4, the more important the respondents give to this investment criterion. The mean is calculated as the sum of the values divided by the number of values.

win the transaction. Other factors also play a role in the decision of the seller to sell “his/her baby” to a potential acquirer. Providing a safe haven for the company and its employees can be sometimes a non-monetary reason to sell his/her company to a trustworthy and reliable party who can offer this, even if this party does not pay the highest price.

We have asked the respondents on their expected valuation, expressed in terms of EBITDA multiple. According to Gompers et al. (2020) this valuation method, i.e. the method using IRRs and MOICs to evaluate investments, is by far the most used by VCs (Gompers et al., 2020) and PEs (Gompers et al., 2016). They infrequently use a DCF or NPV analysis (only used by 21% of late-stage VCs). Nascent ETA entrepreneurs who look at similar targets than late-stage VCs or PE investors, use a similar valuation method, as most of them using an excel based model calculating the IRRs and MOICs based on estimated market multiples derived from comparable M&A transactions in the market. In the Vlerick Buyout Academy, we provide the attendees with such a basic LBO model in excel format.

The Belgian M&A market is a mature market with many players in different segments. Belgium is within the top 10 in Europe in penetration of PE investment in % of GDP (0.34%) (Rudden, 2021). Therefore different data sources on valuation multiples exist.

Vlerick Business School publishes every year the M&A monitor describing the state of the Belgian M&A market. It provides among others the latest average EBITDA multiples paid for companies, in different size segments and in different industries. As ETA transactions are usually smaller transactions, the average EBITDA multiples paid for a company in the course of 2019 with a typical enterprise value under €1 million is 5.1 times and between €1million-€5million is 5.4 times (Centre for Mergers, Acquisitions and Buyouts, Vlerick Business School, 2020).

Comparing these figures with the descriptive statistics provided by our respondents, as illustrated here below in TABLE 4.29., we can conclude that the vast majority of our respondents have realistic valuation expectations. When we asked the (nascent) ETA entrepreneurs on which valuation, expressed in EBITDA multiple, they expect to pay for their acquisition, almost 60% of the respondents expect to pay between 4-5x and another nearly 28% expect to pay between 5-6x EBITDA.

*Table 4.29. Expected valuation*

Variable	Still looking		Already acquired	
	%	#	%	#
What is the EBITDA multiple you expect to pay?	100%	115	100%	47
Below 4 x	17.39%	20	10.64%	5
Between 4-5 x	51.30%	59	59.57%	28
Between 5-6 x	22.61%	26	27.66%	13
Between 6-7 x	6.09%	7	2.13%	1
Between 7-8 x	2.00%	2	0.00%	0
Above 8 x	0.87%	1	0.00%	0

These expected multiples are in line with the multiples expected and paid in the world of search funds, whether in the US or elsewhere. A reasonable valuation is an important IC (Kelly, 2017). Kelly (2020), using the Stanford GSB data on US search funds, sees a median purchase price/EBITDA multiple of 5.3x, while Kolarova et al. (2020) sees a similar 5.6x multiple. Ruback et al. (2016) are even talking about multiples between 3x-5x EBITDA for companies having an EBITDA between \$750k-\$2m, albeit that their data are a bit older. The fact that the multiples in our study are slightly lower than the search fund multiples can be explained by the fact that in principle the larger the company, the higher the multiple that one needs to pay

for it (Vlerick M&A Monitor (2021), Bain Annual PE Report (2021)). We already explained that the targets of search funds are slightly larger than the target of self-funded (nascent) ETA entrepreneurs in our database. Hence, the slightly higher multiple.

A caveat when citing and comparing multiples is that these tend to evolve during time. Recently, given the vast supply of investors and funds to be invested, these multiples are showing an upward trend. For example, according to the Vlerick yearly M&A monitor, the multiples of deals below €5 million have been gradually increasing between 2013 and 2019 from 4.4x to 5.4x. A similar upward trend could be observed in the GSB data, showing a purchase multiple of 5.4x (Kelly, 2017) in 2016 and already a 6x multiple in 2020 (Kelly, 2020).

Further comparing these valuations with other asset classes makes no sense as the underlying dynamics (such as size, profitability, growth profile,..) are very different. For VCs the company's valuation was only the fifth most-cited factor in decisions about which deals to pursue. VCs, in particular early stage investors, will often use other valuation methods as they do not always value companies based on EBITDA multiples, as there is often little or negative EBITDA (Gompers et al, 2020) (Gompers P. et al., 2021). PEs, given the sheer size of their funds, are often targeting much larger companies, often valued at much higher multiples due to their size, market position and stability. For example, the average EBITDA multiple paid by PE companies in the US market is 11.4x and in Europe 12.6x (Bain, 2021). The multiples can clearly not be compared to the multiples in the ETA space.

In order to analyze whether the nascent ETA entrepreneurs who are still looking have a different view on expected valuation than their counterparts who already acquired a company, we performed 1.) a two sample t-test, assuming the different valuation levels as ordinal variables<sup>49</sup>, giving us a test-statistic of 0.3208 and a *p*-value of 0.7488 and 2.) a Fischer-exact test, assuming the different valuation levels as categorical variables, providing us with a *p*=0.6646, both tests clearly indicating that there are no significant difference between the two groups. Even the means between the two groups are very similar (mean in group not yet = 2.261 and mean in group yes = 2.213). The mean in group yes of 2.2 means that the average valuation multiple is between 4-5x (ordinal variable with value = 2) and 5-6x (ordinal variable with value = 3), but closer to 4-5x than to 5-6x, representing a multiple of around 5.2x.

#### **4.5.8. Preferred shareholding situation**

Entrepreneurs highly value the autonomy, independence and control related to entrepreneurship (Amit et al. (2001), Douglas & Shepherd (2002), Schwienbacher (2008); Souitaris et al. (2020)). At the same time, entrepreneurs rarely control all resources required to build company value and may, therefore, need to attract resources, such as human, social, and financial capital, from other parties like co-founders or investors (Salancik & Pfeffer, 1978). However, attracting those resources typically comes at the cost of ownership stakes and decision-making control (Wasserman, 2017). This leaves the entrepreneur with an important tradeoff between value creation, stemming from resource attraction, and retaining control, i.e., the so-called “control dilemma” (Wasserman, 2017). To date, however, we do not know much about when and which entrepreneurs desire to retain control over the company's equity and which entrepreneurs are willing to give up control. In Chapter 6 we try to link this desire for control with the social identity of the entrepreneur. Here, we discuss the preferred shareholder situation in the context of IC.

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<sup>49</sup> The variables of the expected EBITDA multiple are recoded as ordinal variables values, whereby the lowest level number has the value 1 and the highest the value 6. The mean is calculated as the sum of the values divided by the number of values.

The descriptive statistics cover some questions regarding the preferred shareholder situation of the (nascent) ETA entrepreneur and the possible choice of acquiring a company together with a partner. TABLE 4.30 here below provides us with the results of these questions. It is clear that most ETA entrepreneurs are prepared to share their shareholding with others and do not necessary at all times need to have 100% of the shares. Although the majority of ETA entrepreneurs, prefers to have a majority (63% of still looking and 54% of already acquired), the vast majority remains flexible and pragmatic and prepared to invest alongside an investment partner a PE firm or a high net worth individual/BA.

Table 4.30. Preferred shareholder situation and partner choice

Variable	Still looking		Already acquired	
	%	#	%	#
Do/did you want to have 100% of the shares at all times?	100.00%	110	100.00%	44
Yes	9.09%	10	22.73%	10
No	90.91%	100	77.27%	34
Do/did you want to have the majority of the shares at all times?	100.00%	112	100.00%	46
Yes	63.39%	71	54.35%	25
No	36.61%	41	45.65%	21
Are/were you currently looking at potential targets with someone else, an investment partner?	100.00%	115	100.00%	47
Yes	34.78%	40	63.83%	30
No	65.22%	75	36.17%	17
Could you envisage to look at potential targets with someone else, an investment partner?	100.00%	115	100.00%	47
Yes	94.78%	109	85.11%	40
No	5.22%	6	14.89%	7
Could you envisage to look at potential - larger - targets with the support of a private equity partner as a majority investment partner?	100.00%	115	100.00%	47
Yes	71.30%	82	70.21%	33
No	28.70%	33	29.79%	14
Could you envisage to look at potential - larger - targets with the support of a high net worth individual/business angel as a majority investment partner?	100.00%	114	100.00%	47
Yes	77.19%	88	80.85%	38
No	22.81%	26	19.15%	9

Given that the dependent variable is categorical, and even dichotomous (Yes or No), we performed a Pearson's Chi-squared  $\chi^2$  test<sup>50</sup>, as illustrated in TABLE 4.31. here below, in order to analyze whether there is a significant difference between respondents who already purchased a company and the ones that are still looking.

<sup>50</sup> We checked whether the chi-square goodness-of-fit test is appropriate when the following three conditions are met: 1. The sampling method is simple random sampling. There is no relations between the subjects in each group. This is the case here. 2. The variable under study is categorical. This is the case here. 3. The expected value of the number of sample observations in each level of the variable is at least 5. Two categories do (barely) not meet the latter criterium. We therefore performed a Fischer exact test, showing a *p* a little greater dan 0.05, leading to a "marginally significant" difference.

Table 4.31. Preferred shareholder situation and partner choice - Pearson  $\chi^2$  test

	Test-statistic	Df	p-value
Do/did you want to have 100% of the shares at all times?	5.172	1	0.02296*
Do/did you want to have the majority of the shares at all times?	1.119	1	0.2902
Are/were you currently looking at potential targets with an investment partner?	11.47	1	0.00071***
Could you envisage to look at potential targets with an investment	4.232	1	0.03966*
Could you envisage to look at potential (larger) targets with the	0.019	1	0.8895
Could you envisage to look at potential (larger) targets with the	0.269	1	0.6089

Although results should be interpreted with caution as some groups only carry low numbers of respondents, some significant relationship do appear. Firstly, regarding the requirement to own 100% of the shares, there is a significant difference between respondents who acquired a company and those who did not yet. Individuals who ended up acquiring their company, did significantly more prefer to be a 100% shareholder at all times than the ones who are still looking. Secondly, regarding actually partnering-up with another like-minded co-investor/partner in order to make the acquisition, individuals who already acquired their company were significantly more looking with another partner than the ones who were still looking to acquire. Finally, individuals who already acquired their company could significantly more envisage to combine forces with a partner, than individuals who are still looking.

#### 4.5.9. Preferred seller of the target company

Table 4.32. Preferred seller of the target company

Variable	%	#
Who is the preferred seller of the target company?	100.00%	162
Family owned - succession issue	70.37%	114
Family owned - no succession issue	17.28%	28
Investor (wealthy individual, private equity, ...) owned	1.85%	3
Corporate spin-off	7.41%	12
Other	3.09%	5

TABLE 4.32. provides the descriptive statistics regarding the preferred seller of the company. We are not aware that similar questions have been asked in a similar context.

More than 74% of the respondents who did not yet acquire (87 on 118) and more than 64% of the individuals who already acquired their company (30 on 47), prefers to acquire their company from a family and this in a succession context.

Dennis & Laseca (2016) confirms our findings as they mention in their characteristics of ideal targets that the ideal context is a company where the owner is seeking liquidity and wants to retire from the daily operations and where no succession plan is in place. Kelly (2017) mentions that in the ideal world the seller should be a motivated seller for non-business reasons. In a more recent study on search funds Kelly (2020) equally observes that more than one third of the sellers are 60 years or older and more than 50% older than 55 years, i.e. retirement age. Ruback et al. (2016) state that the clearest and most reliable indicator that an owner is committed to selling is an external factor, such as retirement or poor health that is compelling the sale.

On the other hand, we see from US and European statistics that many business are ran by owners/mangers who are reaching retirement age and need a management transition within the next years. For example,

Dennis & Laseca (2016), state that 51% of the owners in the US of companies with revenues between \$5-\$50 million have reached the age of 55 where a transition of management will be needed in the next ten years.

We therefore think that, in this regard, the (nascent) ETA entrepreneurs in our data sample have the right expectations for the preferred seller of their targeted companies. In our introductory chapter (Section 1.4.1.4.), we situate ETA in the context of the literature on family succession and firm continuation, as the vast majority of the ETA transactions originates through entrepreneurial exits and often triggered by family succession issues.

Given that the dependent variable is categorical, we performed a Pearson's Chi-squared  $\chi^2$  test (test-statistic = 3.465, Df = 4,  $p$ -value = 0.4832) in order to conclude that there is no significant difference between respondents who already purchased a company and the ones that are still looking.

## **4.6. Discussion**

### **4.6.1. Comparison with previous findings**

#### ***4.6.1.1. Comparison with (previous) literature on IC in general***

The academic literature on IC is abundant, almost every country and every asset or sub-asset class has its own dedicated article describing its IC. Descriptive statistics is by far the most used method in the research on IC.

After extensive research to uncover a single study that covers all possible investment criteria of one type of investor, let alone across different types of investors, it is clear that no such comprehensive study exist. In fact, more recent academic work has added new variables while leaving previous criteria behind. Moreover, there seems no consensus among the different academic studies and even between venture capitalists and private equity professionals themselves about the relative weight of specific evaluation criteria. Finally, decision-making criteria and their relative importance also vary between the different stages of the evaluation process (Hall & Hofer (1993), Fried & Hisrich (1994), Boocock & Woods (1997), Petty & Gruber (2011).

Therefore, the most important conclusion from this academic research overview is that not all criteria are equally significant depending on different circumstances. Significance varies depending on time, geographic location, development stage of a venture, stage in the evaluation process and possibly even fund raising status of the investor in a given time. Therefore, one should always ask what, when, and why a particular investment criterion is important, as well as how it applies in a particular region at a particular time.

This chapter provides an updated and systematic comprehensive literature review of academic research performed on IC used in the different sub-asset classes of private equity investments. In fact, our literature review provides the description of IC on two axes: per investor type and per main IC group.

*Per investor type.* The investor type classification in our study is based on a recent article of Block et al. (2019), analyzing the IC of the different types of investors (Family Offices, Business Angels, Venture Capital Funds, Growth Equity Funds, Leveraged Buyout funds), while slightly adapted and complemented by adding MBI's and ETA as two additional investor types. The vast majority of the literature on IC has been covering the IC of VCs and BAs. Other asset classes have not been covered as much or are even hardly researched. Besides some limited research on comparing the IC of VCs with BAs and the IC of VCs with PE, very few comparative studies exist covering the IC of more than one investor type at the same time. The recent study of Block et



al. (2019) is the only research covering so many different investor types. As far as we know, nothing academic has been written yet on the IC of ETA.

*Per main IC group.* Grouping the different IC in groups that make logically and practically sense -, we use the - slightly modified and adapted - categorization of Granz et al. (2020) in their recent systematic literature review on IC of the main IC groups for one investor type, i.e. the management team, the business, the financial traction and adding ourselves three other additional IC themes discussed in the academic literature: different criteria in different stages, geography and other. By grouping these IC, we were able to systematize the existing literature in a logic and comprehensive way. Although the literature review of Granz et al. (2020) did include 54 articles on IC of VCS and BAs published between 1974 and 2017, we were able to complement this overview with some interesting additional articles written on IC, covering for example other geographies or other sub-asset classes, as well as some more recent articles, not in the least the groundbreaking and encompassing article of Gompers et al. (2020) on the IC of VCs.

We can conclude from our literature review that the IC regarding the management team are the most important for VCs, BAs, while the business is regarded as the most important for PE investors, MBI investors, FOs, GEFS and definitely ETA investors. The financial traction IC are in particular important for PE investors and ETA investors as they need good financial numbers in order to obtain leverage from a bank.

We therefore contribute to the literature by providing a relative exhaustive and comprehensive overview of the literature on IC across different investor types and across different IC groups while covering for the first time in a systematic way the IC of an ETA entrepreneur.

#### **4.6.1.2. Comparison of ETA IC with literature on IC in general**

The combination of the description of IC on these two axes (investor type and main IC group), provides us in this chapter with a very comprehensive and systematic academic literature overview of IC, which will allow us to compare these different IC with the IC used in ETA.

The analysis in this chapter will try to answer the “what” question, describing a typical ETA target, based on the investment or decision criteria the (nascent) ETA entrepreneurs use to select their ETA targets. In the same spirit, we equally discuss the ideal ETA company characteristics, as well as their relative importance, while comparing those with IC in other investment areas, such as private equity, business angel investments or venture capital.

By analyzing the differences and similarities between the IC of the different sub-asset classes and the IC of ETA transactions, we were able to answer the first part of our research question by developing a framework of reference, situating the literature on IC according to its relevancy for ETA.

According to our analysis, the IC of search funds and MBIs are in the first place the most relevant and comparable with the IC of our self-funded ETA transactions. Search funds are a specific type of ETA and therefore very good comparable with self-funded ETA transactions. MBIs are equally quite similar as they are situated in a mature market, do take on leverage to finance the acquisition and last but not least always do include an equity contribution of the MBI investor, who is going to manage the investment post-transaction.

Furthermore, the IC of PE firms, who are equally investing in mature companies, include leverage and an equity contribution of the existing management, are relevant and comparable with the IC of ETA transactions.

The IC of BAs and FOs, who equally both invest their own money and equally often prefer mature industries are to a lesser degree also relevant and comparable with the IC of ETA transactions.

Finally, the IC of VCs and GEFs, are the least relevant for the IC of the ETA transactions, as these asset classes usually invest in other type of companies, their place in their cycle of existence and other industries.

#### **4.6.1.3. Comparison of ETA IC with literature on ETA IC**

After a very thorough analysis, we did not find any academic research on IC specifically focused on ETA, maybe with the exception of some sporadic mentioning in the search funds literature (Morrissette & Hines, 2015), in syllabus (i.e. for student use) type of documents (Dennis & Laseca (2016), Kelly (2017) and in the search fund statistics (Yoder & Kelly, (2018), Kelly (2020), Kolarova et al., (2020)).

IC of ETA have clearly never been analyzed in the academic literature before. This chapter therefore makes the first systematic and academically substantiated analysis of investment criteria used in an ETA context. The main systematic comparison will be made between search fund IC and the IC of a seasoned experienced self-funded (nascent) ETA entrepreneur.

Besides the typical IC, the chapter also covers other IC related topics, sometimes specific to ETA, which were sporadically and certainly not systematically covered in the existing academic literature such as location of the target (geography), ideal size of company (profitability, employment, turnover), preferred type of industry, relevance of experience in the industry, preferred deal scenario, valuation expectations, preferred shareholding situation (majority v. minority, with/without partner), preferred business scenario or preferred seller.

By establishing a ranking and priority among the IC of an ETA entrepreneur, comparing where possible those IC with IC in other sub-asset classes, we answered the second part of our research question.

In our study, we found that, out of a list of 18 IC, the top three investment criteria for the (nascent) ETA entrepreneur, according to our t-statistic analysis, are in order of importance: 1. "Potential market growth" 2. "Professionalization and improvement" and 3. "Stable demand and recurring customers". Not surprisingly, these criteria find a strong echo in the literature on search funds and MBI candidates.

The "professionalization and improvement" criterion is a bit less pronounced in the search fund literature as this can be explained by the fact the, contrary to the search fund entrepreneurs who are mostly in their early thirties post-MBA, our data sample contains experienced managers in their late 40s, who probably feel more comfortable in their management skills and experience to improve and professionalize the company they acquire. For them, purchasing a company requiring extensive involvement in order to realize a large improvement and professionalization potential. Hence, a similar improvement potential IC can be observed among the MBI candidates, equally often experienced managers.

According to our final optimized model of our logistic regression analysis, the three IC, "sales & turnover", "potential market growth" and "particular or stable technology" are the most important variables to determine whether an ETA entrepreneur acquires a company or is still looking, as they show very low  $p$ -values and even lower than in the model without moderator. This followed by "industry", "industry experience" and "previous financial trackrecord". The  $p$ -values of the multivariable regression seem to confirm this. The other IC play clearly a less important predictive role. However, in our regression analysis, this criterion does not have a strong predictive value.

In the case of ETA, the track record of the management team and the team in place is not important as the (nascent) ETA entrepreneur is going to run the business him/herself and replace the management largely, if not wholly, as opposed to VCs, PE investors or BAs. For the latter the track record of the management team is very important, while for ETA entrepreneurs IC around the business (such as sales growth, recurrent customers and competitive strength) and the financial traction (previous financial trackrecord, cash flow,...) are very important. In particular as the good financial parameters are important to obtain leverage form the banks.

Location is equally an important IC as the ETA entrepreneur has to run the business on a daily basis and will therefore need to live relatively close to his/her company. Almost one third of the nascent ETA entrepreneurs is even prepared to move residence. This result is indeed confirmed by the logistic regression.

Technological innovation, in our survey even qualified as “stable or particular” is not a very important IC as the experienced ETA entrepreneurs invest rather in low-tech services or manufacturing businesses, driven by a stable (i.e. not subject to obsolescence) technology. However, in our regression analysis, this stability of technology is an important IC to determine whether an ETA entrepreneur acquires a company or is still looking.

Turnaround potential and exit opportunities are not considered important IC for the ETA entrepreneur, as he did not want to risk his/her own equity investment by getting involved in a risky turnaround situation and he/she is an investor for the long term with no exit pressure from external investors.

The ideal target for the ETA entrepreneur has a turnover between €2-10 million, an EBITDA between €300k -€1 million and between 5-50 employees. However, the seasoned experienced ETA entrepreneur in this study, who funds his/her own search and does not have a fund structure providing him/her with funds to invest, as opposed to the typical search fund investor, looks at smaller targets as he/she has to contribute a large proportion of the equity him/herself.

The majority is expecting a valuation between 4-5x EBITDA, a valuation that is realistic given the current market circumstances and in line with expected multiples in the search fund space.

Surprisingly, less than one third of the ETA entrepreneurs find it important that the target company is active in an industry where he/she has previous work experience. Normally, in these industries he/she should possess the most knowledge and have an established (deal flow) network. On the other hand, the ETA entrepreneur likes to remain in the same sector where he/she worked before and possesses some industry experience. He/she also looks at more traditional businesses (such as B2B services or production business) than his search fund counterpart who recently mainly focuses more on technology and healthcare businesses.

Although the majority of ETA entrepreneurs, prefers to have a majority, the vast majority remains flexible and pragmatic and prepared to invest alongside an investment partner, a PE firm or a high net worth individual/BA, in particular in case of a larger target.

The ETA entrepreneur prepares to purchase his company from a family with succession issues.

Finally, this chapter did equally attempt to shed the light on the differences of IC between the nascent ETA entrepreneurs (who are still looking to acquire their company) and the ETA managers (the ones who actually acquired their company), answering the last part of our research question. Such an analysis has not been performed before.

We could observe significant differences in IC, whereby individuals who are still looking to acquire a company found the IC location, stable technology, industry and industry experience and potential market growth significantly more important than people who already acquired their company. Moreover, regarding the view on the ideal staff size, the requirement to own 100% of the shares and the preference to partner-up with another investor, significant differences were observed.

As this was the first academic study on the IC of the ETA entrepreneur, our analysis does make a contribution to the knowledge of the 'what' question in an ETA environment.

#### **4.6.2. Limitations**

*Post-hoc methodology.* In our research and in most of the research on VCs and BAs (Shepherd & Zacharakis, 1999), we have used post hoc methodologies to investigate ETA entrepreneurs' investment criteria. These retrospective methodology can be dangerous due to the post hoc rationalization biases and the lack of introspection among informants (Zacharakis & Meyer, 1998), as people do not always have the full understanding of their decision-making process and cannot always precisely recount their cognitive processes in retrospect. Thus, their self-reported data as gathered by post hoc methodologies do not always reflect the actual decision-making process (Zacharakis & Meyer, 2000). These post hoc limitations can be overcome by focusing on real-time research methodologies (Granz et al., 2020) such as simultaneous verbal protocols and conjoint analysis. Simultaneous verbal protocols aim to gather self-reported data through "think aloud protocols" (Sandberg et al., 1989) and can provide detailed information of how ETA entrepreneurs analyze their business plans, on which criteria they focus on to make their investment decisions. This information helps scholars absorb investors' actual and stated decision policies (Zacharakis & Meyer, 1998). Conjoint analysis, on the other hand, enables the entrepreneurial research field to disaggregate the decision process into its core structure based on various profiles, which are investigated in real time. This type of analysis also helps to uncover early-stage investors' decision theories "in-use" (Shepherd & Zacharakis, 1999). Applying these two additional research methods will undoubtedly further advance the research in ETA entrepreneurs' decision criteria.

*Limited to survey data gathering.* We did limit ourselves exclusively to a survey research method. Other authors, such as Gompers et al. (2020) combined their survey with additional interviews, asking the respondents for more detailed questions in order to provide clarification and more richness on the topics and, potentially, to provide some direction for future research. This shortcoming is to a certain degree mitigated here as the author possesses an experience of over 25 years in the research topic and on the way consulted on a regular basis other practitioners for ad hoc feedback.

*Excluding non-academic publications.* In our literature body, with the exception on the data on search funds (although they were still produced by an academic research institute (Stanford GSB or IESE), we have mainly focused on published academic studies to guarantee a high quality review. As the discussion on IC is a very practice oriented research subject, other significant findings from working papers or non-academic publications (e.g. practitioner's books, trade association studies,.. etc.) may have been neglected. On the other hand we did not adopt any specific cut-off criteria such as an impact factor, for example the Thomson Reuters "Journal Citation Reports (JCR) Impact Factor" to account for the particularly practice-oriented research field and to avoid possible publication bias.

*Exclusive academic data sample.* Another potential risk for bias is that our population of (nascent) ETA entrepreneurs may not be representative of the broader world of ETA investors, as they all have an "academic" link with Vlerick Business School and followed or the Buyout Academy or attended the Buy-Your-

Own-Company Conference, both organized by Vlerick Business School. However, Vlerick is the largest and highest ranked business school in Belgium (affiliated with the University of Louvain and the University of Ghent) and well represented in the business world. However, certain acts of ETA, in particular in relatively “unsophisticated” industries or sectors, such as the take-over of a restaurant or bar will not be covered by our data sample. Most of the research, in particular the research on search funds suffers from the same limitation in this respect, if not more.

*No longitudinal perspective.* Decision making on the basis of IC is a complex and multi-stage process which requires in depth analysis from different perspective like deal origination, deal structuring and due diligence. Certain studies have pointed out that research has to move from a single stage, single set of criteria to the more complex and realistic perspective of a multi-stage, multi-criteria and multi-person decision. This research is limited to the analysis of IC at only one point in a given time.

*Generalization bias.* The purpose of setting IC is to create a framework for the search process and for evaluating investment opportunities. However, the IC do not resonate equally with each entrepreneur or investor. Every (nascent) ETA entrepreneur should customize their target IC based on their own skills and deficiencies, interests and personal preferences. Investment decisions are often iterative and complex (White & Dumay, 2020). Our study does not allow for such individualization of the IC.

*Hindsight bias.* Zacharakis et al. (2001) show in their research an “availability bias” in VC decision-making; VCs rely on how well the current decision matches past successful or failed investments. The natural tendency for people to recall past successes rather than failures may mean that VCs will make the same mistakes again. VCs can take simple steps to reduce the effect of overconfidence, including counterfactual thinking (i.e., imaging scenarios where current assumptions might not hold), formally recording how past decisions were made at the time of the decision (versus trying to recall how that decision was made from memory), and using actuarial decision aids that decompose decisions into core components. Reducing overconfidence may lead to stronger decisions. This bias does hardly exist in case of the (nascent) ETA entrepreneur as he does not have “a past in investing”. Although a significant part of the (nascent) ETA entrepreneurs have already been involved (see descriptive statistics in Chapter 3) with a start-up (33%), a majority shareholding investment (12% for the nascent, 22% for the ETA managers) or a minority shareholding (30% for the nascent, 37% for the ETA managers), their decision making process as occasional investor can be hardly compared with the one of the VCs as they invest as full time professionals in a multitude of transactions over the years.

#### **4.6.3. Implications for practice**

It is important for researchers to test criteria before making recommendations to entrepreneurs, venture capitalists or public policy makers on the use of evaluation criteria. Basic questions become crucial: ask what, when and why a particular criterion is important, as well as how it applies in a particular region at a particular time.

Having a defined set of criteria provides a framework of ideal circumstances, not absolute restrictions. No potential acquisition will meet all the IC, requiring tradeoffs between the incremental risk being assumed and the potential reward.

Different constituencies could be able to benefit from the results of this research.

*Policymakers.* Based on our own experience in Belgium and other academic research, for example Mason et al. (Mason & Harrison, 2002) for the UK, there is no shortage of finance available. As business angel and ETA

investing (“informal venture capital”) is gaining popularity, there are constraints on the BA and ETA entrepreneurs’ ability to invest. They do not see enough deals that meet their investment criteria, the majority of the investment proposals that they receive are of poor quality, and they are often unable to negotiate acceptable investment terms and conditions with sellers. The implication is that there is a need for further interventions by policy-makers to remove these barriers so that more small firms can take advantage of the substantial pool of angel finance and ETA investors that is available. Policy makers such as the government (e.g. PMV in Belgium) would be able to facilitate the development and prosperity of the ETA industry as a whole by issuing rules and regulations that streamline the evaluation process.

*ETA entrepreneurs “to better screen and select”.* This analysis should allow them “to better screen potential deals”, i.e. improving the investment process for the ETA entrepreneur. The three staged investment process often begins with deal screening. First, (nascent) ETA entrepreneurs screen the tens of proposals they receive to assess which of these deserves further consideration. Those deals that survive the initial stage are then subjected to extensive (and sometimes expensive) due diligence. Finally, the ETA entrepreneur and the seller negotiate terms of the investment. Considering the amount of time (and money) that due diligence and negotiation of terms may take, it is imperative that ETA entrepreneurs minimize their efforts during screening so that only those deals with the most potential proceed to the next stage. Yet, at the same time, the screening process should also be careful not to eliminate gazelles prematurely. ETA entrepreneurs are often in a quandary. How can they efficiently screen venture proposals without unduly rejecting high potential investments? A thorough knowledge and understanding of the used IC could help.

*ETA entrepreneurs “to do better deals”.* The success rate of venture capital-backed ventures is significantly higher than the success rate of new ventures generally (Dorsey, 1979; Davis and Stetson, 1984). ETA backed companies exhibit less survival risk than new venture creation, but with at least comparable returns and substantially less variance. ETA’s system wealth generation even equals or exceeds that of VC-backed ventures (Hunt & Fund, 2012). A better understanding of the IC used could lead to a better understanding of the reasons for this success and lead to an improvement in the success rate of new ETA ventures. In fact, a thorough understanding of the right ETA investment criteria would help the entrepreneurs to become wiser and more thorough in evaluating proposals, without limiting themselves to standard academic concepts which may not keep pace with fast-evolving business models. A key challenge facing the ETA entrepreneur is to know “when to take the train”, lest they never leave the station by waiting for opportunities that fit all the IC perfectly (Kelly, 2017). Having predefined IC can help when an opportunity falls outside these IC, there is a reason to assess carefully what risks are increased and what corresponding rewards may be gained.

*ETA entrepreneurs: “to obtain easier and better financing”.* Finally, ETA investment criteria are of enormous importance to ETA entrepreneurs seeking deal financing. Such entrepreneurs require a significant infusion of capital in order to execute the transaction. Potential partners, such as the banks, therefore also want to be informed well of the criteria the ETA entrepreneurs use for evaluation. This could help them to influence their own decision making process. A lack of insight by applicants for capital affected the nature of the bank decision making.

*ETA entrepreneurs: “to obtain the right investment partner”.* Regarding the preferred shareholding of an ETA entrepreneur, our study show that the majority of the ETA entrepreneurs is open to invest alongside an investment partner (a complementary ETA investor, a VC, a BA, a PE firm, a high net worth individual...) and this for different reasons such as bringing complimentary knowledge and skills on board or simply due to lack of personal finances. This study gives an overview of these investment criteria, comparing them with the decision criteria applied by VCs, PEs or BAs and should allow the ETA entrepreneur with a better and more profound understanding of which criteria potential co-investment partners such as BAs or PEs focus on

enabling to better tailor their pitches when seeking external equity financing. In this kind of self-presentation ETA entrepreneurs seeking additional funds from PE investors should emphasize their business and financials. Conversely, entrepreneurs seeking funds from BAs and high networth individuals, should focus on their own managerial capabilities and track record. Establishing IC up front helps align the ETA entrepreneur's and the investment partner's expectations for the general nature of the investment opportunities that are likely to emerge from the search effort (Kelly, 2017).

#### **4.6.4. Avenues for Future Research**

*Measuring performance and the impact of the ETA entrepreneur on performance.* Given that the performance of the search fund investments is accurately measured by the Stanford GSB and IESE data (in terms of IRR's and MOICs), it would be very interesting to measure similar performance criteria of the ETA transactions executed in our database (N=50). Or in case they would not be exited yet (which in the case of seasoned and experienced ETA investors and their longer term horizon is probably less the case than in the search fund originated deals), the evolution in the performance could be measured according to different parameters. We then would be able to answer the pressing question: What is the impact of the ETA entrepreneur on the performance of the acquired business? The impact of his/her post-investment involvement.

*Understanding the relation between IC used and performance.* Further research could then compare the performance of the ETAs with the investment criteria applied in their investment process. Future research needs to check whether the ETA's who were successful would have investment criteria similar to BAs, VCs and PEs and whether this could help to predict performances, given product and market characteristics of the new venture.

*Alternative database and research method.* A wide range of literature on VCs', BAs', PEs' investment criteria exist. Given that this is the first academic research on the investment criteria of (Belgian) ETA entrepreneurs, only describing a limited number of investment criteria, often formulated in more general way, a more thorough analysis of investment criteria of ETA entrepreneurs may supply us with further insight in how ETA entrepreneurs evaluate their potential deals. In this study, we have selected the Vlerick Academy and Conference participants, who all have rather similar profiles than ourselves, as our main source of data and we used a survey as the only research method. Accordingly, we suggest more intensive research activities in the ETA cosmos relying on other data bases, even geographical, and based on other research methods such as a conjoint analyses. As a theoretical starting point for methods best suited to answer the proposed research question, Granz et al. (2020) refer to the work by Hsu et al. (2014).

*Valuation methods used.* Gompers et al. equally include the valuation methods in their study of the IC of VC's (2020) and PEs (2016). For example, they concluded that VC and PE investors primarily rely on IRRs and MOICs to evaluate their investments. They infrequently use NPV methods. It would be interesting to know which valuation methods ETA entrepreneurs use when evaluating their acquisition target. Gompers et al. equally include the required IRRs and MOICs in their study of the IC of VC's (2020) and PEs (2016). For example, they concluded that later stage VCs require 28-29%, while PE investors require 20-25%. It would be good to understand what the return requirements are of an ETA entrepreneur, in particular in light of his/her large personal equity contribution.

*Analysis of ETA entrepreneurs outside Belgium.* Expand the geographical scope of the research to investigate the variability of results on the ETA entrepreneurs' investment criteria across further countries, using cross-country datasets, which can be influenced by endogenous factors such as different legal, regulatory, industrial and cultural settings.

*The investment partner selection.* Regarding the preferred shareholding of an ETA entrepreneur, our study shows that the majority of the ETA entrepreneurs is open to invest alongside an investment partner (a complementary ETA investor, a VC, a BA, a PE firm, a high net worth individual...) partner, although with a slight preference to retain a majority shareholding. Further research could investigate how ETA entrepreneurs evaluate and select their preferred investment partner.

*Linking my own research.* Making the link with the first part (Chapter 3) as the typology of the (nascent) ETA entrepreneur could influence the process of search and evaluation (investment criteria). For example, the affinity of an ETA entrepreneur's previous experience with a certain industry and a particular deal in that industry can equally strongly influence his/her interest in the transaction. Another interesting observation that could be made by linking the two parts of my research, is the link between backgrounds of the ETA entrepreneur and their attitudes towards their search and screening process. For example, managers/consultants, having currently low job satisfaction levels, will they lower their selection and screening criteria in order to make a quicker acquisition. In the academic teaching of ETA's, this is called the phenomenon of "the entrepreneur in heat" (i.e. the entrepreneur is too enthusiastic and falls in love with the target, not seeing anymore the downsides). In the world of VCs, this entrepreneurial passion, as opposed to preparedness, does not help funding decisions (Chen, Yao, & Kotha, 2009). Also, making the link with the last part of thesis (Chapter 5) on the social identity of the ETA entrepreneur. It could be worthwhile to analyze whether there is a relationship between the acquirer's social identity and his/her choice for a particular company or in other words whether the ETA entrepreneur's social founder identity influences the choice of his/her IC.

*IC and pattern recognition.* Investigating whether the recognition of new business opportunities, through the existence of IC, involves a pattern recognition, i.e. the cognitive process through which individuals identify meaningful patterns in complex arrays of events or trends (Baron & Ensley, 2006). Basic research on pattern recognition indicates that cognitive frameworks acquired through experience (e.g. prototypes) play a central role in this process, in line with our analysis on work experience, management experience, entrepreneurial experience etc. in chapter 3. Such frameworks could provide (nascent) ETA entrepreneurs with a basis for noticing connections between seemingly independent events or trends regarding the business they want to invest in (e.g. technology shifts, consolidation play,...). The IC for a target company could emerge from the perception of such patterns. Further analysis could be performed in order to better understand whether this pattern recognition is a key component of opportunity recognition.

As the academic research on ETA is still in its infancy and this is the first academic research on IC in the context of ETA, there are certainly plenty of ideas to advance the knowledge in this academic area.





## Chapter 5. Nascent ETA Entrepreneurship and Founder Social Identities

### 5.1. Introduction

The purpose of this research is to provide a better understanding of the phenomenon of Entrepreneurship Through Acquisition (“ETA”) phenomenon and the individuals, the (nascent) ETA entrepreneurs, involved.

An ETA transaction as opposed to a “normal” buyout is defined here as a smaller and more entrepreneurial version of the classical leveraged management buy-in. The ETA entrepreneur, who actually acquired and invested in a company is called the ETA manager, as opposed to a nascent ETA entrepreneur<sup>51</sup>, who is still looking to acquire a business and has not acquired a company yet (See Chapter 1 for further definitions).

The third part of the thesis will try to answer the question what makes (nascent) ETA entrepreneurs more or less likely to become active ETA entrepreneurs. To address this question, we theorize that founder social identities affect the nascent-active gap.

It will provide us with a better view on who of the nascent ETA candidates makes real steps to an ETA transaction and acquires a company for him/herself.

Although entrepreneurship is often defined in terms of new venture creation and start-ups (Gartner W. , 1988) (Parker & Gartner, 2004), ETA transactions occur for the purpose of implementing entrepreneurially motivated strategies and this within the parameters of a pre-existing business platform. In general, an ETA transaction, is driven by a strong entrepreneurial motivation, given that risk capital (i.e. the overwhelming part of the funds and assets of the ETA candidate) is used to make an acquisition for which transformational strategies will be implemented that expand and enhance the acquired business system (Hunt & Fund, 2012).

A pragmatic definition of entrepreneurship as defined by Benz (Benz, 2009) defines an entrepreneur as someone who is a self-employed business owner. An ETA manager resorts undoubtedly under this definition as the emphasis on the ownership aspect of entrepreneurship is also clearly present in ETA transactions.

Recently, we therefore see that several scholars, often preceded by the practitioners writing books on entrepreneurship, have included ETA in their analysis of entrepreneurship and consider ETA as “undoubtedly a true act of entrepreneurship” (Hunt & Fund, 2012). For example among others: Kelly et al., 1986; Cooper & Dunkelberg, 1986; Parker & van Praag, 2006; Hunt & Fund, 2012; Parker & van Praag, 2012; Bastié et al., 2013; Rocha et al., 2015; Morissette & Hines, 2015; Dennis & Laseca, 2016; Ruback & Yudkoff, 2016; Meuleman & Vanoorbeek, 2018). An ETA entrepreneur is for these scholars as much an entrepreneur as the start-up entrepreneur. Only the mode of entry differs.

Although there are indeed important differences between ETA transactions and new venture creation, the common threads are more important and more numerous, particularly pertaining to opportunity identification and exploitation.

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<sup>51</sup> Nascent entrepreneur is a “person currently taking explicit steps to start a new business”(Reynolds & White, 1997, p.40). In the ETA environment, this definition becomes a “person currently taking explicit steps to acquire a business for himself”.

In the mind of the ETA entrepreneur, when he acquires his/her company, he/she sees him/herself as the “founder” of a new entrepreneurial venture. The moment the ETA entrepreneur acquires his/her company, this is a “start-up” in his/her mind and the beginning of a new journey for him/her as entrepreneur. A start-up in which he/she will invest right from the beginning a considerable part of his/her own net worth and this with the purpose to further develop and professionalize this company, supported by his/her experience and expertise. Therefore the purpose of this chapter is to look at this ETA phenomenon for the first time through the theoretical glasses of the Social Identity Theory and the Founder identity literature, answering the question what makes (nascent) ETA entrepreneurs more or less likely to become active ETA entrepreneurs.

The research question in this chapter is therefore twofold: Firstly, what is the founder social identity of the (nascent) ETA entrepreneur? Secondly, which founder social identity influences the (nascent) ETA entrepreneurs to become an active ETA entrepreneur or ETA manager?

Our chapter is organized as follows. First, we review the literature on Social Identity in the context of entrepreneurship and Founder Identity. In particular, the three founder identities of Fauchart & Gruber (2011) and the 15-item scale measuring founder identity (Sieger et al., 2016) support the theoretical framework of our research and are discussed in detail. Secondly, based on these theoretical foundations, we develop our hypotheses regarding the nascent-active gap for nascent ETA entrepreneurs. Next, we explain our research methodology, including the data collection and the validation of the chosen variables. Finally, we present the results obtained and explain the main conclusions, implications for practice, limitations and future areas for further research.

### **5.1.1. Contribution to the literature**

Starting from the theoretical framework presented, our study contributes to the literature in two ways.

First, it provides us for the first time in the literature with an understanding of the founder social identity of the (nascent) ETA entrepreneur, as we measure for the first time the founder social identity of the (nascent) ETA entrepreneur, adding to the limited literature on ETA. This study enables us to examine the influence of the entrepreneur’s social identity as a founder or - for the first time here - as an acquirer of a company. Contrary to most other studies performed on founder social identity and its relationship with entrepreneurship, is that our observations were obtained in a real world setting, involving more seasoned and experienced entrepreneurs, and not in a student environment.

Secondly, our theorizing and empirical findings advance the literature on entrepreneurial entry, in particular the so-called nascent-active gap, and this for the first time in the context of ETA transaction, by analyzing which founder social identity influences the (nascent) ETA entrepreneurs to become an active ETA entrepreneur.

## **5.2. Literature review. Founder Identity literature.**

### **5.2.1. Introduction**

In traditional conceptualizations of entrepreneurship, entrepreneurial behavior tends to be equated with economic rationality and utility maximalization (Pan et al., 2019).

Recent entrepreneurship research has increasingly moved beyond its earlier theoretical presumption that all or most entrepreneurs are primarily driven by narrow economic goals, such as value appropriation.

Scholars acknowledge the wide range of motivations, aspirations and meanings that serve as the basis for entrepreneurs' behavior. Therefore applying a social cognitive perspective towards efforts to understand key aspects of entrepreneurialism makes sense (Hmieleski & Baron, 2009). The diversity in entrepreneurial behavior reflects the heterogeneity of the roles and identities entrepreneurs apply (Gruber & MacMillan, 2017).

One of the most remarkable characteristics of entrepreneurship is that it provides individuals with the freedom to pursue their own goals, dreams and desires in a new firm creation or in the acquisition of their own company as we will argue in the case of an ETA transaction. Indeed, Ruback et al. (2016) state that buying a business can also give you the same professional independence and personal fulfillment than starting one.

Over the past decades, a new and growing body of literature has placed more emphasis on identity-based perspectives of entrepreneurs (Mmbaga et al., 2020).

The existing literature on the social identity theory and the founding identity theory both emphasize that behaviors are, to a significant extent, the expression of one's identity and offer a theoretical explanation as to why different individuals behave in different ways in firm creation. It allows us to move beyond traditional views, dominating the existing literature, embedded in economic rationality and to explain why some entrepreneurial behaviors may also focus on others in the social space (Gruber & MacMillan, 2017).

For a recent and quasi-exhaustive overview of the literature on identity in entrepreneurship, see (Mmbaga et al., 2020).

These theoretical insights then will be used as a platform from which to analyze and describe the ETA candidate's self-conceptions, how they affect their newly acquired firms and as a factor that explains the transition from nascent to active ETA ownership.

### **5.2.2. Social Identity and Founder Identity**

Identity theory offers the possibility of establishing a theoretical link between the entrepreneur's identity and his/her behaviors in new firm creation because individuals strive to behave in ways that are consistent with the meanings inherent in their identity (Tajfel & Turner (1979), Stets & Burke (2000)).

Over time, a number of different identity theories have been developed, with social identity theory and role identity theory being the most prominent theories of the human self (Stets & Burke, 2000) and predominant in entrepreneurship and management research, particularly studies of entrepreneurial behavior (Mathias & Williams, 2017). Although both theories have been developed independently in the psychology and sociology disciplines, given the complementary nature of founders' social and role identities (Gruber & MacMillan (2017), Fauchart & Gruber (2011), Powell & Baker (2014), Powell & Baker (2017)), considerable overlap exists between the two theories (Murnieks, McMullen, & Cardon, 2019). In more recent writings, scholars have therefore been integrating both theories in an attempt to establish a view of the self that is more fully integrated (Gruber & MacMillan, 2017) (Deaux & Martin, 2003), including work in entrepreneurship (Powell & Baker (2014), Powell & Baker (2017), Alsos et al. (2016)).

### **5.2.2.1. Social Identity Theory**

The concept of “Social Identity” was introduced by Tajfel (Tajfel (1972), Tajfel (1978), Tajfel & Turner (1979), Brewer & Gardner (1996), Stets & Burke (2000)), which refers to a person’s knowledge that he or she belongs to certain social groups and which involved emotional and value significance because of that group membership. For example peer groups at the workplace (Obschonka et al., 2012). Social identity theory, which originates in the discipline of psychology, deals with the structure and function of identity as it relates to an individual’s social relationships and, in particular, to his or her membership in groups of social categories (Hogg & Terry, 2000). Group membership refers to a collective sense of “us” (through values, emotions, self-esteem) versus “them” and self-identification refers to an individual sense of “me” versus “you” (Miles, 2012). The social groups that entrepreneurs belong to and identify with can be extensive: religious, family, (online) community, ethnic, capitalist, employer, institutional, academic, social class, and workplace peers among many others (Mmbaga et al., 2020). An individual’s social identification is thus able to provide a partial answer to the fundamental human question: “Who am I, what is my place in society?” as a person’s social identity serves as a system of social orientation and plays an instrumental role in establishing self-worth (Turner et al., 1987). The self-categorization of individuals can vary in terms of level of inclusiveness, ranging from the category of self as a unique entity, where the person acts in terms of his individual goals and ambitions, rather than as a member of a social group (Brewer & Gardner, 1996) to the other end of the spectrum, where individuals act in terms of social motivations associated with concern of impersonal others (Harb & Smith (2008), Soto-Simeone & Kautonen (2020)). By examining an individual’s social identity, scholars are able to understand and predict behavioral choices and actions (Tajfel & Turner (1979), Gioia (1998)). Social identification leads individuals to behave and act in ways that are consistent with their identities (Hogg & Terry, 2000).

While there are a number of studies emphasizing that identity is a powerful predictor of entrepreneur’s intentions (indirectly via perceived control), decisions and actions (Murnieks & Mosakowski (2007), Shepherd & Haynie (2009), Cardon et al. (2009), Hoang & Gimeno (2010), Conger et al. (2012), Navis & Glynn (2011), certain research studies have addressed social identity in the entrepreneurship context (Farmer et al. (2011), Frank et al. (2006), Fauchart & Gruber (2011), Powell & Baker (2014), Powell & Baker (2017), Brandle et al. (2018), Alsos et al. (2016), Obschonka et al. (2012), Sieger et al. (2016), Gruber & MacMillan (2017), Pan et al. (2019), Chasserio et al. (2014), Murnieks et al. (2019)).

The present research builds on literature that takes into account the fact that entrepreneurial activities are infused with meaning because they are an expression of an individual’s identity or concept of self (Cardon et al., 2009) (Hoang & Gimeno, 2010) (Shepherd & Haynie, 2009) (Hogg & Terry, 2000).

Social identity theory has indeed offered an important lens to improve the understanding of founders as enterprising individuals, the venture creation process and its outcomes (Sieger et al., 2016)(Estrada de la Cruz, Verdu Jover, & Gomez Gras, 2018) (Alsos, Clausen, Hytti, & Solvoll, 2016) (Soto-Simeone & Kautonen, 2020 for senior entrepreneurship). It helps to explain the rich heterogeneity of founders’ motivations as well as the ties between these motivations and the social structures in which founders are embedded and that their efforts shape.

Social identity theory has the unique advantage that it allows extending the scope of research on entrepreneurial behavior, from the traditional types of founders who start ventures because of their economic self-interest, to include behaviors that are focused on advancing the life of others in the social space, i.e. founders who engage in entrepreneurship because of their concern for known others or unknown

others (Gruber & MacMillan, 2017) (Pan, Gruber, & Binder, 2019) (Berbegal-Mirabent, Mas-Machuca, & Guix, 2019) (Fauchart & Gruber, 2011).

### **5.2.2.2. (Role) Identity Theory**

Another theory, although developed independently, (role) identity theory (Mead, 1934) (Stryker, 1980) takes a more sociological perspective on identity and focuses on role-related relationships and behaviors of individuals (Stets & Burke, 2000). All identities begin as social roles. Within society, each person is involved in multiple sets of social relationships in which they occupy positions and play roles. Roles are social positions that carry expectations for behavior and action (Jain, George, & Maltarich, 2009). Identity theory examines how individuals construct identities based on the roles (different “hats”) they play and how they engage in role choice behaviors to guide their actions under varying circumstances (Mead, 1934) (Stryker, 1980) (Stryker, 2007). These roles include behaviors and meaning associated with certain social categories such as “entrepreneur”. For example, new firm creation (Cardon, Wincent, Singh, & Drnovsek, 2009) (Wry & York, 2017 for social enterprise creation) and evaluation and selection of opportunities (Mathias & Williams, 2017).

Recent research suggest that we should not assume a single role identity. Entrepreneurs can assume and navigate many role identities and, depending on the role identity assumed, entrepreneurs will think differently about opportunities and make different decisions with regard to them (Alsos, Clausen, Hytti, & Solvoll, 2016). For example, drawing on a taxonomy of entrepreneurial activities based on Gartner et al. (1999), Cardon et al. (2009) distinguished three role identities in entrepreneurship: an inventor role identity, a founder role identity, and a developer role identity. Analyzing founder entrepreneurs, Mathias & Williams (2017), inspired by extant literature, distinguish three work role identities: entrepreneur, manager, investor. Farmer et al. (2011) suggest that it is not just the current identity, but also the aspirational role identity as an entrepreneur that predicts entrepreneurial behavior.

For example, identity theory has therefore provided a useful lens to account for a multiplicity of potential role identities entrepreneurs possess within the context of their ventures (Mmbaga, Mathias, Williams, & Cardon, 2020); for example, possessing an “inventor” (Cardon, Wincent, Singh, & Drnovsek, 2009), “innovator” (Hoang & Gimeno, 2010), “developer” (Cardon, Wincent, Singh, & Drnovsek, 2009), “manager” (Mathias & Williams, 2017), “entrepreneurial” (Murnieks & Mosakowski, 2007), “business owner” (Demetry, 2017) or “founder” (Ahsan, Zheng, DeNoble, & Musteen, 2018) (Hoang & Gimeno, 2010) role identity, as well as to understand entrepreneurial passion (Cardon, Wincent, Singh, & Drnovsek, 2009) (Cardon, Post, & Forster, 2016) (Oo, Allison, Sahaym, & Juasrikul, 2019), social enterprise creation (Stryker & Burke, 2000) (Stryker, 2000) (Wry & York, 2017) (Pan, Gruber, & Binder, 2019) or to understand how entrepreneurs think about – and select - opportunities (Mathias & Williams, 2017).

### **5.2.2.3. Founder identity**

Founder identity theory research has drawn from social identity theory and role identity theory.

Recent insights have highlighted the significance of founder identity for shaping the entrepreneurial process. This emerging stream has uncovered many role and social identities that are associated with being a founder, the so-called founder identity, i.e. their sense of “who I am” and “who I want to be” as a founder (Farmer, Yao, & Kung-Mcintyre, 2011) (Murnieks & Mosakowski, 2007) (Powell & Baker, 2014) (Powell & Baker, 2017) (Brändle et al., 2018) (O'Neil, Ucbasaran, & York, 2020).

In their early stages, startups (or here ETA transactions) are strongly driven and shaped by the characteristics and vision of their founders, which should prompt us to investigate the social identity of those founders

(Brändle et al., 2018). Founder's identity has indeed a strong influence on an emerging organization (Barney, et al., 1998) (Whetten & Mackey, 2002), as organizational decisions are often made by single person (the founder) and because emerging firms are typically small entities that are yet to be shaped.

Founders' identities, strongly influence the founder's behavior (Cardon et al., 2009) (Farmer et al., 2011) (Hoang & Gimeno, 2010), the meanings the founder's derive from their work (Shepherd & Haynie, 2009) and the characteristics and strategies of the firms they build (Whetten & Mackey, 2002)(Fauchart & Gruber, 2011) (Powell & Baker, 2014), their decision making and investment criteria (Franke et al., 2006), as well as the performance of the business they founded (Estrada de la Cruz, Verdu Jover, & Gomez Gras, 2018) (Estrada-Cruz et al., 2019).

Hoang and Gimeno (2010) argue that potential founders must complete a role transition to pursue founding activities. Through the construct of founder role identity, they delineate how identity centrality and complexity affects transition success, i.e. individual's ability to exit a work role in order to undertake founding activities.

Powel & Baker (2014) expanded the identity theory's notion of identity-driven role choice behaviors to explain how social identities drive individual founders' role creation behaviors. By studying how and why firms vary in their strategic responses to the same adversity, they concluded that differences in the structure of founder identity – the set of identities that is chronically salient to a founder in his/her day-to-day work – drive patterned differences in firm's strategic responses. The founders, in fact, use their firms as vehicles to defend who they are or to become who they want to be. A particular role identity (e.g. a self-description obtained from entrepreneurs such as "environmentalist" or "domestic manufacturer" (cf. p.1411) used to identify entrepreneurs' identities) shows that a particular role identity may constrain behaviors and actions that would be prescribed to an individual by his or her social identity. Founders' role identities are a complement and expression of their social identities.

In a subsequent article, Powell and Baker (2017) have extended the founder identity research to multi-founder nascent ventures in order to understand how multiple founders work through the identity processes that may shape their joint organizing efforts (collective identity), including how they come to a working consensus around how to move forward.

The model of Farmer et al. (2011) links the entrepreneur role and self-perceptions, entrepreneur identity aspiration and nascent entrepreneurial behaviors. The stronger the congruence between self-perceptions and perceived perceptions of the entrepreneurial role, the stronger the entrepreneur identity aspiration. Ultimately, a strongly desired self-view as an entrepreneur will lead the individuals to construct the entrepreneur identity by achieving entrepreneurial goals such as opportunity discovery and exploitation. This facilitative effect of entrepreneur identity aspiration will be stronger for individuals with prior entrepreneurial experience as they would have a more complex and realistic view on what being an entrepreneur entails and the entrepreneur role.

Aspiring to a founder identity can also generate the motivation to leave a job and transition to venture creation. Farmer & Yao (2011) contributed to our understanding of what moves entrepreneurial "dreamers" to action. In research on nascent entrepreneurship, "dreamers" are individuals who express intent to start a business but have taken no concrete steps toward becoming an entrepreneur. At the very earliest stages of entrepreneurial activity, Davidsson & Honig (2003) empirically examine individual factors leading to both opportunity discovery and exploitation. For example, being a member of a business network such as a

member of the Chamber of Commerce, Rotary or Lions were good predictors that determine successful firm emergence.

The research of Davidsson et al. (2003) and Van Gelderen et al. (2006) which focuses on the pre-start-up phase, i.e. “on the efforts that eventually result in termination before the emergence of the firm” and not only on the entrepreneurs that actually started a new business, is certainly relevant academic literature as in the case of ETA transactions, most of the analysis in this thesis is more focused on aspiring ETA entrepreneurs wanting to do ETA transactions, the so-called nascent ETA entrepreneurs, than on actually ETA managers who did ETA managers mainly due to lack of sufficient data (only 50 data points).

### **5.2.3. Three Founder identities of Fauchart & Gruber**

While social identity theory is attractive for many reasons, its usefulness for research on entrepreneurship depends on the ability to explain entrepreneurship phenomena such as the study of the activities and behaviors undertaken during the firm creation and start-up process (Alsos et al., 2016) (Gartner, 1988) (Davidsson P. , 2008).

The study by Fauchart & Gruber (2011) takes on a different angle, moving away from conceptualizing entrepreneurs’ social identity as a single identity (Mathias & Williams, 2017), explicitly focusing on the different social identities of entrepreneurs and how these identities affect new firm creation in distinct ways. They employ social identity theory to examine founders’ social identities (the notion of founder identity) and how they affect their firm-related behaviors and actions and the effect it may have on an emerging organization or a business start-up. Since firm creation is an inherently social activity (Whetten & Mackey, 2002), entrepreneurs’ behavior is shaped by how they perceive themselves in relation to others, demonstrating the relevance of identity-centric explanations in entrepreneurship research (Fauchart & Gruber, 2011).

The typology of founder social identities made by Fauchart & Gruber (2011) seems to offer a particularly promising point of departure for research on entrepreneurial behavior (Gruber & MacMillan, 2017).

Several articles in recent academic literature which are referring to Fauchart & Gruber’s framework (e.g. (Sieber et al., 2016) (Harlow & Chadha, 2019); (Gruber & MacMillan, 2017), (Estrada-Cruz et al., 2019), (Braun, 2019)...) confirm the importance of their research as one of the main conceptual articles describing variations in social identities of entrepreneurs and exploring between-entrepreneur social identities (Mmbaga, 2020). Mmbaga et al. do see the research of Fauchart & Gruber as “a prominent example” where the differences in social motivations are highlighted by comparing different entrepreneurs.

Drawing on the social identity theory, Fauchart & Gruber (2011) have come up with three primary types of founder identities which systematically shape key decisions in the creation of new firms, thereby “imprinting” the start-ups with the founders’ distinct self-concepts. In other words, they derived a novel typology that provides a multidimensional conceptualization of firm founders and tries to explain how three distinctive types of social identities led founders to create different sorts of firms.

They conducted an in-depth exploratory study of 49 firm founders in the production of sports equipment (skis, snowboards, snowscooters, bicycles, scooters,..), located in the Alpine region, using an inductive methodological approach (Glaser & Strauss, 2006).

Specifically, they identify heterogeneity in founders’ social identities by examining variation in the three social identity dimensions (Brewer & Gardner, 1996): (1) in their motivation for starting a venture (2) in how



they evaluate themselves as founders (the standards the founder sets for himself) and (3) in their frame of reference (the relevant others, the environment where the business of the founder responds to) when deciding on their behaviors and actions.

These three social identities dimensions have each three constructs, one per primary identity type (see Table 5.1., (Fauchart & Gruber, 2011)).

For the basic social motivation to start a new firm, there were three distinct types of motivations (constructs) that they captured: (i) personal self-interest, (ii) mutual concern for the interests and outcomes of known others, (iii) advancing a cause for unknown others.

For the basis for self-evaluation, there were three distinct bases (constructs): (i) being a competent professional, (ii) being true to similar others, (iii) contributing to make the world a better place.

For the frame of reference, there were three distinct frames of reference (constructs) (see TABLE 5.1.): (i) competitors as the primary frame of reference, (ii) a specific group as the primary frame of reference, (iii) society-at-large as the primary frame of reference.

Table 5.1. Three social identities with constructs

<b>Identity Dimensions</b>			
<b>Identity Dimensions</b>	<b>Variance in Meanings</b>		
<i>Basic social motivation (as firm founder)</i>	<i>Self-interest</i> firm creation enables the individual to pursue his self-interest (making money, creating personal wealth, building a business that will be inherited by the next generation)	<i>Support and be supported by a community</i> firm creation is indiscernible from the individual's involvement in a community (firm both supports and is supported by the community because of mutually beneficial relationships)	<i>Advancing a cause</i> Firm creation supports the political vision of the individual and the ambition to advance a particular cause (social, environmental, etc.)
<i>Basis of self-evaluation (as firm founder)</i>	<i>Professionalism</i> Business-related competences as the basis for self evaluation: being professional is perceived as critical	<i>Authenticity</i> Authenticity as the basis for self-evaluation: bringing something truly useful to the community is perceived as critical (based on intimate knowledge of and care for the needs of fellow community members)	<i>Responsible behavior</i> Responsibility as the basis for self evaluation: contributing to a better world is perceived as critical (truly responsible people do act)
<i>Frame of reference/ relevant others (as firm founder)</i>	<i>Competitors</i> -Competing firms as the primary frame of reference -Being distinct from other firms seen as core to the entrepreneurial process	<i>Community benefiting from product</i> -Social group as the primary frame of reference -Offering products (services) that support the community seen as core to the entrepreneurial	<i>Society</i> -Society as the primary frame of reference -Demonstrating that alternative social practices are feasible and leading by example seen as core to the entrepreneurial process

Source: Fauchart & Gruber (2011)

Based upon these social identity dimensions and their constructs, they made a typology of founders which could usually be classified as belonging to one of the three "pure" types of founder identity: 1.) Darwinian (5.2.3.1.), 2.) Communitarian (5.2.3.2.) and 3.) Missionary (5.2.3.3.), whereby 4.) hybrid identities (5.2.3.4.) contain elements of one or more of the three pure types.

### **5.2.3.1. Darwinians**

Founders with a Darwinian identity are focused on establishing strong and profitable firms, as well as on the competition with other firms. They are driven by their economic personal self-interest (“the homo economicus”). The “classic business person” whose main goal is to establish a strong, successful profitable business and focuses on assuring the firm’s success (Van Praag, 1999) and this by managing their firm according to solid business principles (“business school approach”). They evaluate themselves by taking competitors and other entrepreneurs as their frame of reference and attempt to differentiate from these competitors/rivals whereby the best firms will prevail. Generating profit is an important measure for business success, as they want to create a strong business (Alsos et al., 2016) and create value for their investors (Estrada-Cruz et al., 2019). Profitability is achieved by being cost-effective and outsourcing the production or through mass-production (van Oostrum, 2017). Innovations they want to keep for themselves by patenting them. The market in which Darwinian founders started their businesses, does not necessarily reflect the identity of the founder. They could have started their business in a different market if they could have made more money there. In fact, they could switch and engage in new ventures in completely new areas of business if they see more profits and improved opportunities for accomplishment (Khazami et al., 2020). They even believe that disengagement from the market, they are active in, is a strength, as it makes it easier for them to keep exploring other more profitable markets (van Oostrum, 2017). A Darwinian embodies the traditional seeker of rent (Gruber & MacMillan, 2017) in order to accumulate personal wealth. The founder self-definition of “I” (self).

### **5.2.3.2. Communitarians**

Founders with a Communitarian identity view their firms as social objects that support and are supported by a particular community (a group of people who share related ideas, norms, beliefs) because of mutually beneficial relationships. They are active within a certain community and experience something that can be improved within that community. Communitarian identity is strongly committed to the products or activities developed by the firm and to its ability to contribute to the community through these products (Soto-Simeone & Kautonen, 2020). They only recognize that there is a potential for a new market when they have made a new product for captive use (for example through prior personal involvement such as a hobby or leisure interest)<sup>52</sup> and others start asking about it (van Oostrum, 2017). It makes no sense for them to change the industry. As a result, the customers they serve have the same needs as the founder (Fauchart & Gruber, 2011). The ultimate goal of communitarian identity is thus to contribute to its closest community through new product development, for example by designing authentic products (as opposed to standardized off-the-shelf products). The process also involves a collective creative activity prior to venture creation within the user community. Authenticity (an authentic identity) (Lewis, 2013) (Soto-Simeone & Kautonen, 2020) is the core asset that they can bring to their venture, allowing a strong identification between the firm (the founder) and the community members. Goals of sales growth, market share and profit take second place. Fellow community members – “similar known others” – serve as their primary point of reference in the social space (a strong sense of “we-ness” or solidarity) and they value reciprocal support. The Communitarian entrepreneur argues that his/her product or service is unique (instead of a standardized product) and high-quality, because they have first-hand insights and feedback from the customers (van Oostrum, 2017). They prefer to develop the product itself and do not mind when others want to use their innovation. The

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<sup>52</sup> This meaning is closely related to the concept of “entrepreneurial user” suggested by Shah & Tripsas (2007). In their definition they introduced users as entrepreneurs who come across an idea through their use and then share it with their community (Khazami et al., 2020).

Communitarian embodies the entrepreneur who seeks to aid the community (Gruber & MacMillan, 2017). The founder self-definition of “personal We” (personal others).

#### **5.2.3.3. Missionaries**

Founders with a Missionary identity believe that firms can be powerful agents of change in society and see their firms as political platforms that can advance a particular cause for the benefit of society at large, generally of a social or environmental nature. Missionary identity is motivated by the desire to advance such a greater cause and its fundamental social goal to act responsibly. They live by the principle that their activities can positively affect the well-being of others and seek to act in a responsible, transparent and empathetic manner to allow them to pursue their political vision and to make the world “a better place”. The society is their frame of reference, as they want to set an example and want to positively influence the society. The market the Missionary founder is active in, suits the political view of the founder. They pursue their social goals and aim to adapt to the market, seeking creative solutions or alternative practices having a universal scope and applying their innovative capacity. With their products and services, they want to challenge the status-quo and show that it is feasible to change, for example the consumer behavior. Their products should be easily accessible and adoptable by others. They do not only offer products but also see their whole firm in the way in which business is conducted as a role model for society. For example, the suppliers they work with should share their vision. They also focus on job creation in order to create value for their employees (Estrada-Cruz et al., 2019). The Missionary embodies the entrepreneur who seeks to aid the society at large (Gruber & MacMillan, 2017). The founder self-definition of “impersonal We” (impersonal others) (Pan et al., 2019). The social entrepreneur (Miller et al., 2012) (Bacq & Janssen, 2011) is closely related to the Missionary, as they both aim to address social issues by the means of their businesses. However, the Missionary founder not only focuses on social issues, but also on sustainable issues (van Oostrum, 2017). The Missionary identity need to distinguish themselves from and deny closeness to profit-seeking identities like the Darwinians (Jones et al., 2008). Hence the basis of his/her identity is not only “who I am”, but also equally “who I am not” (Alsos et al., 2016). Missionaries are therefore often at the forefront of social, political and environmental progress (Ignjatovich, 2017).

#### **5.2.3.4. Hybrids**

Other founders would belong to a group of founders with a “hybrid” identity combining elements of the pure types. Just like all palette colors combine the three primary colors yellow, red, and blue, one may think of all entrepreneurs as being characterized by smaller or larger concentrations of the three primary social identities (Gruber & MacMillan, 2017:7). One of them can be dominant, or any two or even all three can define the entrepreneur’s hybrid social identity (Soto-Simeone & Kautonen, 2020). Identities should therefore not be seen as mutually exclusive and leading to distinct behaviors (Alsos et al., 2016). For example: the founder has a background that combines business experience with community experience. Or external pressures drive the founder to make concessions to appeal to investors, who typically demand high levels of financial performance. Or social entrepreneurship that is characterized by concern for others and thus could comprise founders with both a Communitarian identity and a Missionary identity. Wry & York (2017) differentiate the mixed-commercial entrepreneur and the mixed-social welfare entrepreneur, as well as a balanced entrepreneur, whereby each of these types will be motivated to pursue social and financial aims in their ventures. Hand et al. (2020) dropped even the Missionary dimension of founders’ social identity, as in

the UK, at least based on their data<sup>53</sup>, this identity did not appear to be distinct from the Communitarian construct.

Fauchart & Gruber's (2011) analysis indicates that founders with hybrid identities evolve in many different and – from an identity perspective – hard-to-predict directions. However, such individuals with hybrid identities may be fairly common in most industry settings and they will become even more prevalent in coming years, given the increasing demands placed on traditional business firms to internalize social and environmental responsibility (Scherer & Palazzo, 2007) (Hemmingway, 2005). For example in the study of Fauchart & Gruber (2011) over 20% of founders were hybrid entrepreneurs, exhibiting traits of at least two primary social identities and thus received pressure from at least two distinct logics. Powell & Baker (2017), coded out of 243 coded identities 47 as hybrid Communitarian and Missionary. Sieger et al. (2016) found evidence that the frequency of different social identity “blends” vary across industry and geographic contexts. Alsos et al. (2016) show in their correlation matrix that Darwinian, Communitarian and Missionary identities are positively and significantly correlated, suggesting that many founders have hybrid identities. Khazami et al. (2020) recognize that these hybrid identities are difficult to test and therefore focus on one type of identity at the time without excluding the influence of other potential identities.

Through their typology, Fauchart & Gruber (2011) show that founders with different social identities behave and act in ways that are consistent with their identities and thereby imprint their self-concepts on key dimensions of their start-up firms. They create their new firms in ways that are congruent with their distinct self-conceptions. This typology affects the three initial strategic decisions that are widely considered to define a business and to have important effects on emerging organizations, as founders with different identities differ systematically across the set of core entrepreneurial strategic decisions in new firm creation such as 1.) markets segments served, 2.) customer needs addressed and 3.) capabilities and resources deployed to produce the firm's products and/or services (Abell, 1980). These decisions determine many subsequent ones and tend to become permanent as they cannot be reversed easily. See Table 5.2. (Fauchart & Gruber, 2011). For example, founders who start their firms primarily because of concern for others may select competitive strategies and market strategies that differ from those of founders who pursue only their economic self-interest.

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<sup>53</sup> The GUESSSS data (see further under the chapter 4.2. data).

Table 5.2. Founder Identity Types and Core Strategic Decisions in New Firm Creation

Founder Identity Types and Core Strategic Decisions in New Firm Creation			
Decisions	Darwinians	Communitarians	Missionaries
Market segment(s) served	<ul style="list-style-type: none"> <li>-Produce for the average consumer or for quickly growing segments (the criteria of likelihood and value drive the choice of market served)</li> <li>-Tend to serve additional segments over time/extend applications to new segments to achieve firm growth</li> </ul>	<ul style="list-style-type: none"> <li>-“Our customers are like us” (the criterion of similarity drives the choice of market served)</li> <li>-Stick to initial segment addressed because it is the only place perceived as legitimate</li> </ul>	<ul style="list-style-type: none"> <li>-Produce for those consumers where they expect the greatest social impact; ultimately society is their audience</li> <li>-May serve additional segments, if this allows the firm to leverage its socio-political mission</li> </ul>
Customer needs addressed	<ul style="list-style-type: none"> <li>-Tend to address known dimensions of merit (e.g., safety, ease-of-use)</li> <li>-Derived from market analysis</li> </ul>	<ul style="list-style-type: none"> <li>-Tend to address novel kinds of customer needs</li> <li>-Derived from own needs</li> </ul>	<ul style="list-style-type: none"> <li>-Tend to address new social practices (e.g., new modes of consumption or production)</li> <li>-Derived from what the founder would like the world to become</li> </ul>
Capabilities and resources deployed	<ul style="list-style-type: none"> <li>-Focus on cost-effective and mass-production methods (which are necessary to reach profitability)</li> <li>-International sourcing of production capabilities (if needed)</li> <li>-Value intellectual property rights protection/help in achieving business goals</li> </ul>	<ul style="list-style-type: none"> <li>-Tend to use highly individualized and artisanal production methods (products often considered works of art)</li> <li>-Reliance on personal capabilities</li> <li>-Reluctance to use intellectual property rights protection within community/would run counter to sharing values</li> </ul>	<ul style="list-style-type: none"> <li>-Focus on socially responsible production methods</li> <li>-Sourcing from suppliers that match strict criteria (according to mission)</li> <li>-Demonstration of firm capabilities to diffuse the exemplary model</li> </ul>

Source: Fauchart & Gruber (2011)

In the meantime, several recent studies have adopted the typology of Fauchart & Gruber.

Alsos et al. (2016) and Estrada-Cruz et al. (2019) examined if social identity theory and the Fauchart & Gruber typology can be related to causal and effectual behavior among founders. Alsos et al. found that a Darwinian and Communitarian identity have a statistically significant and positive relationship with, respectively a causal and an effectual behavior, while a Missionary has only such a relationship with a causal behavior, while Estrada De La Cruz et al. concluded that Darwinian, Communitarian and Missionary identities combine both logics in responding to the uncertainty of the business environment and are all three positively and significantly related to causal and effectual logic, albeit with different degrees of relationship and influenced by several moderators linked to cultural dimensions.

Powell and Baker (2017) have extended the founder identity research to multi-founder nascent ventures in order to understand how multiple founders work through the identity processes that may shape their joint organizing efforts (collective identity), applying the Fauchart & Gruber typology in their analysis of individual social identities. Although the vast majority of the ETA transactions are one-man shows, this research could be interesting to get a better view on the ETA transactions which are done by more than one person.

Luu & Nguyen (2020) further enriches the understanding of the three types of founders by supporting their contingent effects on the links between passion and innovation strategies.

Using the three types of founder identity, Brändle et al. (2018) and Hand et al. (2020) demonstrate in recent articles that their perceived entrepreneurial self-efficacy has various implications for nascent entrepreneurs and that entrepreneurs' social identity, which is related to the type of opportunity they pursue might (partially, Hand et al., 2020) explain different levels of entrepreneurial self-efficacy. Brändle et al. show that (nascent) Darwinians and Communitarians are more likely to feel competent in terms of their entrepreneurial skills (entrepreneurial self-efficacy), while (nascent) missionary entrepreneurs do not demonstrate high levels of perceived entrepreneurial self-efficacy. They confirmed that one should consider the social identity

of the entrepreneur to better understand the different levels of perceived self-efficacy, especially among nascent entrepreneurs. Hand et al. (2020) put this in perspective by showing that other variables such as prior experience, education or perceived controllability play a more central role in determining the level of entrepreneurial self-efficacy than the founder's social identity, being a Darwinian, a Communitarian or a Missionary, having only peripheral influences.

Gruber reiterates in a recent article that a concept of entrepreneurial behavior on the purely rent-seeking entrepreneur ignores the increasing, and increasingly important, number of entrepreneurs who start enterprises for more than pure economic rent generation (Gruber & MacMillan, 2017). This contemporary conceptualization of entrepreneurial behavior reaches out to major phenomena in entrepreneurship such as social entrepreneurship, sustainable entrepreneurship, cultural entrepreneurship.

Gruber & MacMillan (2017) employ Cardon et al.'s (2009) distinction between inventor, founder and developer role identities to illustrate behavioural variation in the creation of Darwinian, Communitarian or Missionary types of ventures.

Estrada-Cruz et al. (2017) argue that Darwinian, Missionary and to a lesser extent Communitarian identities are positively oriented to business performance, even though the firm's founder has different goals, whereby the use of effectuation (Sarasvathy, 2008) has a positive mediating effect on this relationship. Although performance in entrepreneurship will be measured differently depending on the founder social identities (Gruber & MacMillan, 2017). For example, Darwinians consider financial performance of their ventures as their focal success measure, while Communitarians will find the number of supporters in a community or Missionaries the numbers of followers in the society at large equally important. In a more recent article, Estrada-Cruz et al. (2019) analyses the relationship between the three social identities and their impact through growth parameters such as sales growth, market share, profits and job creation on the three primary stakeholders: investors, customers and employees. Darwinians focus more on profits to create value for investors, while Missionaries focus more on job creation to create value for employees.

Fauchart et al. (2019) found that new ventures of Darwinians financially outperform those from Communitarians and Missionaries. While Darwinians and Missionaries do not differ in their levels of exploration, they both are more inclined to engage in exploration than Communitarians. With regard to exploitation, Darwinians are more exploitative than both Communitarians and Missionaries and the latter are more exploitative than the former.

Soto-Simeone & Kautonen (2020) use the social identity theory and Fauchart & Gruber's typology in the context of senior entrepreneurship, highlighting the relevance of non-monetary self-rewards (pursuit of autonomy, wanting to feel active and valuable concern for known others ("Communitarians")) for senior entrepreneurs who start a business.

The popularity of the founder identity typology of Fauchart & Gruber in recent literature demonstrates their importance for the study of entrepreneurship. In conclusion, these findings have a number of fundamental implications for thinking about firm creation processes (including the early stage of opportunity identification), firm creation outcomes, firm founders as enterprising individuals, firm strategies and firm performances (Estrada-Cruz, 2017). Gruber & MacMillan (2017) suggest different avenues for further research using the typology of Fauchart & Gruber (2011).

When combined, this emerging body of work indicates that a social identity lens can be fruitful in helping us to improve our understanding of founders, i.e. acquirers in the ETA context, and their behaviors and actions in new firm creation (or acquisition in the ETA context) and development.

Whereas Darwinian ETA acquirers follow the traditional pattern of engaging in behaviors that will, in the end, maximize their private returns, Communitarian and Missionary ETA acquirers behave in ways that reflect their concern for others.

#### **5.2.4. The 15-item Founder Social Identity scale of Sieger, Gruber, Fauchart & Zellweger**

As stated above, an increasing number of scholars have turned to the identity concept to understand the founders as enterprising individuals.

Since the founder's social identity is an attribute that cannot be measured directly (it is latent and psychologically abstract), we must use a scale (Sieger et al., 2016) (Estrada-Cruz et al. 2017).

In a recent article (Sieger et al., 2016), therefore developed and validated a 15-item scale for measuring these founder social identities (Table 5.3.). This scale allows identifying founder's social identities and relating them to processes and outcomes in entrepreneurship.

The scale benefitted from the rigorous qualitative study that has drawn on social identity theory to systematically assess, investigate and describe the salient social identities of founders (Fauchart & Gruber, 2011). The developed scale could capture the typology of the three founders' social identities (labelled Darwinian, Communitarian and Missionary identities).

The validity of the scale went through a series of analyses following established scale development procedures according to the highest academic standards (Hinkin, 1995) (Hinkin, 2005) (Edwards, 2001) and this in different steps (1. item generation: 1.1. content domain 1.2. sources of item generation, 2. Item selection, 3.3. item list characteristics) (Sieger et al., 2016).

Afterwards, the scale has been externally validated (submitted to experts in order to evaluate their content and face validity) and pilot tested. Thereafter, the scale was extensively tested in multiple regions and countries across several continents.

The scale is available online in 16 languages. (<http://www.cfb.unisg.ch/scale>) in the following languages: Danish, Dutch, English, Estonian, French, German, Hebrew, Hungarian, Italian, Japanese, Polish, Portuguese, Romanian, Russian, Slovenian, and Spanish.

Beyond developing a scale that is both timely and important for entrepreneurship research, this feature of this scale validation effort is noteworthy in its own right, as the authors were able to offer a particular robust validation procedure and have the opportunity to advance research on the social identity of founders at the same time.

Table 5.3. 15-item scale for measuring founder social identities

Identity	Construct	Item	Item text
DAR	I	A2	<i>I will create my firm in order... to advance my career in the business world.</i>
		B1	<i>As a firm founder, it will be very important to me...to operate my firm on the basis of solid management practices.</i>
	II	B2	<i>As a firm founder, it will be very important to me...to have thoroughly analyzed the financial prospects of my business.</i>
III	C1	C1	<i>When managing my firm, it will be very important to me...to have a strong focus on what my firm can achieve vis-à-vis the competition.</i>
		C2	<i>When managing my firm, it will be very important to me...to establish a strong competitive advantage and significantly outperform other firms in my domain.</i>
COM	IV	A3	<i>I will create my firm in order...to solve a specific problem for a group of people that I strongly identify with (e.g., friends, colleagues, club, community).</i>
		A4	<i>I will create my firm in order...to play a proactive role in shaping the activities of a group of people that I strongly identify with.</i>
	V	B3	<i>As a firm founder, it will be very important to me...to provide a product/service that is useful to a group of people that I strongly identify with (e.g., friends, colleagues, club, community).</i>
	VI	C3	<i>When managing my firm, it will be very important to me...to have a strong focus on a group of people that I strongly identify with (e.g., friends, colleagues, club, community).</i>
C4		<i>When managing my firm, it will be very important to me...to support and advance a group of people that I strongly identify with.</i>	
MIS	VII	A6	<i>I will create my firm in order...to play a proactive role in changing how the world operates.</i>
		B5	<i>As a firm founder, it will be very important to me...to be a highly responsible citizen of our world.</i>
	VIII	B6	<i>As a firm founder, it will be very important to me...to make the world a "better place" (e.g., by pursuing social justice, protecting the environment).</i>
		IX	C5
	C6		<i>When managing my firm, it will be very important to me...to convince others that private firms are indeed able to address the type of societal challenges that my firm addresses (e.g., social justice, environmental protection).</i>

DAR = Darwinians, COM = Communitarians, MIS = Missionaries

Source: Sieger et al., 2016

The validated scale of Sieger et al. has been used several times in the academic literature to measure founder social identities. For example: Braun (2019), Luu & Nguyen (2020), van Oostrum (2017), Brändle et al. (2018), Estrada-de la Cruz et al. (2018), Estrada-de la Cruz et al. (2019), Hand et al. (2020), Ignjatovich (2017) and this in different geographies (starting in the Alpine region and followed by efforts in 13 additional countries).

Although all the relevant literature mainly focuses on founders of start-ups and to a much lesser extent to acquirers of existing firms, ETA candidates should be equally considered as "founders" and entrepreneurs as an ETA transaction has a strong ex-ante entrepreneurial intent (Hunt & Fund, 2012) and is equally a way to become an entrepreneur (Parker & van Praag, 2012). As an ETA manager indeed acquires a target for him/herself, he/she can be considered to be "founding" a new venture, i.e. his/her own venture, since he/she becomes the main shareholder of this newly acquired company and this for the foreseeable future.

ETA candidates, similar to founders, have equally the freedom to pursue the types of opportunities that match their own preferences and choose the way in which they want to exploit these opportunities and pursue the goals they have set for themselves. Similar to founders, they can "imprint" a lot of themselves into their enterprising activities, therefore acquired firms via an ETA transaction become important reflections of the meanings that ETA candidates associate with entrepreneurship. The firms they start-up or respectively purchase, become important reflections of the meanings that founders or (nascent) ETA entrepreneurs associate with entrepreneurship. These findings have some fundamental implications for thinking about firm creation, or in the case of the ETA "acquisition" processes (including the early stage of



opportunity identification), firm creation (or “acquisition”) outcomes and firm founders as enterprising individuals.

It therefore makes sense to analyze the ETA transactions using the founding identity theory, based on the classification of founder identities made by Fauchart & Gruber (2011) and measured by the 15-item scale as developed by Sieger et al. (2016). As we see the act of performing an ETA, i.e. acquiring a company as an entrepreneur, similar to founding a company, we consequently replaced the words “found”, “founding”, “founder” in the ETA context by “acquire”, “acquiring”, “acquirer”.

We are therefore going to use these founder identity types, for the first time, in the context of an ETA transaction by using the validated 15-time scale in order to measure the ETA “founder” social identities. In our analysis we will use this (slightly modified) scale to analyze the social identities of the (nascent) ETA entrepreneurs and the role of this identity in the entrepreneurial buyout process, in particular the nascent-active transition.

Our study therefore contributes to the literature by using the Founding Identity Theory and its typology of entrepreneurs for the first time in the context of ETA.

### **5.3. Development of Hypotheses**

According to the foregoing, Social Identity Theory helps to understand founders as enterprising individuals and explain heterogeneity of business behaviour in the process of setting up a new business, or in this case acquiring a business.

For the first time, we will make an attempt to measure the social identity of a nascent ETA entrepreneur, based on the typology of Fauchart & Gruber (2011), using the scale of Sieger et al. (2016). As Sieger et al. suggest in their “avenues for future research”, they encourage to linking the social identity perspective with existing concepts in entrepreneurship, such as ETA and to make additional scale development efforts to capture identities in specific contexts, such as the ETA context.

In any case, before relating the founder’s (or rather acquirer’s here) social identities to processes and outcomes in entrepreneurship, we first have to measure the identities of our data sample of nascent ETA entrepreneurs.

#### **5.3.1. Nascent ETA entrepreneurs and their Social Identity measured**

Firstly, the typical ETA entrepreneur is mainly interested in a profitable cash flow generative business based on recurrent income (Ruback et al., 2016), preferring incremental types of innovation that can readily be sold to existing customers (Sieger et al., 2016), and less in highly innovative businesses, typically characteristics of a Darwinian social identity (Sieger et al., 2016). Indeed, different studies of the investment criteria of search funds<sup>54</sup> (Dennis & Laseca, 2016) (Kelly et al., 2017) (Kolarova et al., 2020) and by extension ETA entrepreneurs confirm this “homo economicus” approach, focusing on financial investment criteria such as profit and cash-flow and seeking for competitive advantages. The ETA entrepreneur therefore fits the profile of the “classic business person” whose main goal is to establish a strong, successful profitable business and focuses on assuring the firm’s success (Van Praag, 1999) and this by managing their firm according to solid

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<sup>54</sup> Search fund are a well documented and researched version of an ETA transaction, defined and described in detail in Chapter 1 and its investment criteria discussed in Chapter 4 (section 4.2.2.10).

business principles (“business school approach”). This economic personal self-interest is equally needed to raise (and repay afterwards) the necessary acquisition debt.

Secondly, EstradaCruz et al. (2019) saw that Darwinians have a strong focus on profits to create values for investors relative to the competition. In case of an ETA transaction, the investors are the Darwinian entrepreneurs themselves. Indeed, as according to our own data, the typical ETA entrepreneur invests a significant part of his/her own net worth in the acquisition of his/her company, it is of the utmost importance that he safeguards this investment, causing more altruistic motives to be pushed to the background.

Thirdly, in case of an ETA transaction, you always acquire an existing company with an existing trackrecord. An ETA entrepreneur has therefore less freedom to create something him/herself where the mutual concern for the interests and outcomes of known others (communitarians) or advancing a cause for unknown others (missionaries) could play a large role at the time of acquisition.

Finally, following the typology empirical relevance of Fauchart & Gruber (2011) suggesting that Darwinian founders are the most common type of the three types of founders and given the testing of the Sieger scale on nascent (student) entrepreneurs across many geographies, it becomes clear that regardless of nationality, the Darwinians (the pure types and the hybrid types containing Darwinian characteristics) are by far outnumbering, often by a factor two, the other social identities (Sieger et al., 2016: table 11, p. 566). According to Sieger et al. (2016), being a business student is positively related to having a pure Darwinian identity. Most nascent ETA entrepreneurs in our survey results have equally a business study background. The Darwinian’s basis for self-evaluation (being a competent business professional) corresponds to what is taught in business schools. We do not see why these results would be different for the nascent ETA entrepreneurs.

Formally stated:

*Hypothesis 1:* The Darwinian founder social identity is the predominant social identity of the (nascent) ETA entrepreneur.

### **5.3.2. Nascent ETA entrepreneurs and the transition to active ETA entrepreneurship**

Why do some (nascent) entrepreneurs complete the transition from nascent to active entrepreneurship – meaning they complete the founding process and become actual entrepreneurs and others do not?

This question is one of the key topics in the research on entrepreneurship. In this chapter, we are going to ask this question in the context of an ETA transaction and rephrase the question as follows:

Why do some (nascent) ETA entrepreneurs complete the transition from nascent to active ETA entrepreneurship – meaning they complete the phase of looking to acquire a company and become actual ETA entrepreneurs by purchasing a company for themselves and others do not?

A growing stream of research has indeed been analysing the nascent-active gap. We refer to a previous chapter of this thesis where we give an overview of the literature on nascent entrepreneurship and entrepreneurial entry. In this previous chapter we explore whether financial, human and cultural capital have an impact on entrepreneurial entry through the ETA route and therefore who is more likely to attempt transitions into ETA entrepreneurship.

Furthermore, studies have indicated that individual-level characteristics such as founder role identity (Hoang & Gimeno, 2010) as well as external factors such as social support are equally relevant drivers (Davidsson & Honig, 2003).

However, we still lack an in-depth understanding of the nascent-active gap in entrepreneurship (Brixy et al., 2012). This might be because the existing research tends to fall short in acknowledging founder-centric explanations, which is particularly regrettable because scholars, for example Delmar & Davidsson (2006) who put the individual on centre stage, are aware that the founder is essential in explaining the transition from nascent to active status. Alsos et al. (2016) equally assumes that the entrepreneurial identity (i.e. sense of self) strongly affects their behavior in how they go about seeking to create and exploit the opportunity.

We therefore follow Braun (2019) in his novel approach, introducing “founder social identity” as a factor that explains the transition from nascent to active entrepreneurship, equally suggesting in his multi-country study that GDP growth is a corresponding contingency factor. Or in his words when nascent entrepreneurs “go the whole nine yards” and become active entrepreneurs. In fact, one’s identity is important to develop own values and beliefs and because a person seeks to behave and act in accordance to a meaning adherent to his or her identity. Therefore corresponding research can make predictions about behavioral choices and human actions and “establish a key theoretical link between the entrepreneur’s identity and his/her behaviors in new firm creation” (Gruber & MacMillan (2017:272), Khazami et al. (2020:10)), or in the case of ETA, the purchasing of a company. Darwinians, Communitarians, Missionaries, and Hybrids will therefore see different opportunities for “value” creation in a given industry context (Gruber & MacMillan, 2017).

Our model is equally based on Fauchart & Gruber’s (2011) typology, who identified three main types of founder social identities: “Darwinian”, “Communitarian” and “Missionary” and how these identities affect the transition from nascent to active entrepreneurship in distinctive ways (Braun, 2019) and this in the context of ETA transactions.

Based on these arguments, we find sufficient reason to propose the following three hypotheses:

#### **5.3.2.1. Nascent Darwinians and the transition to active ETA Entrepreneurship**

The basic social motivation of Darwinians is pursuing primarily financial self-interest. They evaluate themselves on the basis of professionalism and their main frame of reference are their competitors (Sieger et al., 2016) and other Darwinians (Khazami et al, 2020). Given their pursuit of only “professional” approaches and their strong profit and growth orientations, lead them often to discard some market segments, some types of production processes and more radical innovations (Fauchart & Gruber, 2011). An ETA target is very often not professionally run, very often active in a low growth environment and in most cases not innovative (Ruback et al., 2016). All characteristics attractive for a Darwinian to create (financial) value for him/herself by applying a professional “business school-like” management and solid management practices.

Braun (2019) concluded that the nascent-active transition is unaffected when nascent (student) entrepreneurs have a Darwinian founder social identity. Our research subjects, however, contrary to Braun’s, are no students but rather middle-aged successful and experienced would-be entrepreneurs who have often already accumulated some wealth and are often benefitting from generous salary packages, they strongly believe in the monetary reward of investing in an ETA transaction, as shown by Ruback et al. (2016) in their HBR article, emphasizing the monetary rewards (on the long run) of an ETA investment versus a “normal” professional career. Given their personal money at stake and the necessary acquisition debt, (nascent) ETA entrepreneurs will have a list of strict financial criteria (Kelly, 2017; Dennis & Laseca, 2016) when evaluating

a transaction and will perform a thorough financial due diligence before they make their decision, as rent-seeking Darwinians would do.

Ignjatovich (2017) found that Darwinian identity promotes a positive perception of the economic value and feasibility aspect of business planning success, the latter defined as the development and presentation of a business plan that leads to a third party investment into the venture. The business plan and its presentation are often the entrepreneur's first and best chance of acquiring financial funding (Mason & Stark, 2004). Although in his research, a third party is defined as a venture capitalist, one could argue that bankers use very similar criteria to approve a loan for an acquisition. A Darwinian will therefore receive an easier approval for his/her acquisition debt, necessary in a typical ETA transaction, from his/her bank, compared with his/her Communitarian and Missionary counterparts. Hence, increasing his/her chances to be able to make the step in acquiring a company and become an active ETA entrepreneur.

Given that the Darwinian founder is foremost a seeker of rent, the prospective gains from a relatively low risk (low write-off ratio) and strongly profitable (providing high IRR's) (Yoder & Kelly, 2018, p.9) entrepreneurial venture (Sørensen & Philips, 2011) (Sørensen, 2000) will outweigh the possible loss of present and future income from his/her current employment. Van Oostrum (2017) states that the primary motivation for the Darwinian founder to start a business is for his/her own economic assurance, the aim at earning money and create a comfortable living. An ETA is a way to accomplish these monetary goals (Ruback et al. 2016).

Formally stated:

Hypothesis 2: When nascent ETA entrepreneurs have a Darwinian founder social identity, they are more likely to actually become active ETA entrepreneurs in a given period of time compared to when they do not have this identity.

### **5.3.2.2. Nascent Communitarians and the transition to active ETA Entrepreneurship**

Communitarians' basic social motivation is to support and be supported by their personal group with equal beliefs and interests. Their basis of self-evaluation is their authenticity in terms of alignment of interests to and the usefulness for their community, and their basic frame of reference is their social community with regards to whether their product or service supports it. (Fauchart & Gruber, 2011). Their findings equally suggest that the identity-based affinity to a particular start-up opportunity may explain why some founders do not take alternative, perhaps financially more attractive opportunities into account when they create new firms (Gruber, MacMillan, & Thompson, 2008). Role and personal identities can be linked to commercial logic as well as social welfare, explaining why social and financial aims sometimes become intertwined in the creation of new ventures (Wry & York, 2017).

Or in the other direction, when there is more social support available to validate a particular role identity, the more likely a role transition will be completed (Hoang & Gimeno, 2010). The context in which Communitarians are embedded may actually push them toward new firm creation (instead of existing firm acquisition) as they seek to help members of their specific community (Shah & Tripsas, 2007). To change an existing company so that it supports and is supported by a particular community, is much more difficult than starting a business which does this from the beginning. For example, authenticity, one of the core values of a Communitarian (Soto-Simeone & Kautonen, 2020) is more difficult to imprint in an existing company than in a new start-up. An entrepreneur who has social orientations, such as Communitarians, sees business creation as a vehicle to accommodate social goals, and use these as criteria to assess their venture's performance (Choi & Gray, 2008). This explains the results of Braun (2019), indicating that entrepreneurs

with a Communitarian founder social identity, make it more likely that they complete the founding process. In case of the acquisition of an existing company instead of the founding of a new one, these result could be fundamentally different.

For Communitarians, goals of sales growth, market share and profit take second place. Fellow community members – “similar known others” – serve as their primary point of reference in the social space (a strong sense of “we-ness” or solidarity) and they value reciprocal support. In case of an ETA transaction, however, the financial criteria, i.e. profit and cash-flow, are extremely important given that any ETA acquisition needs the necessary support of a bank. The solidarity with the community therefore will never have the highest priority.

Formally stated:

Hypothesis 3: When nascent ETA entrepreneurs have a Communitarian founder social identity, they are less likely to actually become active ETA entrepreneurs in a given period of time compared to when they do not have this identity.

### **5.3.2.3. Nascent Missionaries and the transition to active ETA Entrepreneurship**

It is clear that entrepreneurship is an economic as well as a societal phenomenon (Steyaert & Katz, 2004), being part of how our societies, communities and worlds are created, taking into account, besides economic criteria, social, cultural, political and ecological realities. Missionaries’ basic social motivation is to address a specific social, environmental, or political cause such as solving injustice across the world, enhancing environmental protection, or preventing political crises. Their basis of self-evaluation is whether they have contributed to make the world a better place and their frame of reference is the society as a whole (Fauchart & Gruber, 2011). Fauchart & Gruber (2011) estimated that in most industries, founders with missionary identities are the rarest, because of the inherent tension between pursuing a political mission and ensuring a firm’s survival.

A tension that should be equally, probably even stronger, encountered in the case of ETA transactions. Firstly, in case of ETA, financial criteria, i.e. profit and cash-flow, are extremely important given that any ETA acquisition needs the necessary support of a bank. Improving the world will be always subordinated to this given situation, as the bank will in priority require the necessary cash-flows to meet the repayment schedules. For example, social entrepreneurs assumedly taking on the missionary mantle (Gruber, MacMillan, & Thompson, 2008), is overwhelmingly a nonprofit sector phenomenon (Taylor, Hobbs, & Nilsson, 2000) (Peredo & McLean, 2006) and therefore does not fit the small LBO concept, which an ETA transaction in fact represents.

Secondly, although Choi & Gray (2008) found that many entrepreneurs saw business creation as a vehicle to accommodate social and environmental goals, and use these as criteria to assess their venture’s performance, ETA entrepreneurs always acquire an existing company with its own history. Entrepreneurs fit the mold of “compassionate missionary” when their primary goal is to address social problems and social aims in their venture creation will be prioritized when their role and personal identities can be linked with the social welfare logic (Wry & York, 2017). In case of an existing company, often in a traditional industry (Ruback et al., 2016), it is very unlikely, even nearly impossible, that such companies will already address these social problems and social aims. As a missionary, it is therefore easier to start a company from scratch in order to benefit the society at large, which is in line with the findings of Braun (2019) who found that nascent entrepreneurs, having a predominant Missionary founder social identity, make it more likely that they complete the founding process, rather than acquire an existing company through an ETA.

Formally stated,

Hypothesis 4: When nascent entrepreneurs have a Missionary founder social identity, they are less likely to actually become active entrepreneurs in a given period of time compared to when they do not have this identity.

## **5.4. Research methodology**

### **5.4.1. Introduction**

This short methodology chapter is there to give a general overview of the used research methodology in this chapter and this specifically applicable to its underlying research questions: What is the social identity of the (nascent) ETA entrepreneurs? And how does these identities influence the nascent-active gap in the context of ETA transactions?

In order to obtain the required information on this topic, a research design has been developed providing a framework for the collection and analysis of these data.

### **5.4.2. Methodology**

In the research on social identities in the context of entrepreneurship, in particular the research using the typology of Fauchart & Gruber (2011), the number of quantitative studies (Luu & Nguyen (2020), Estradacruz et al. (2017), Estradacruz et al. (2018), Estradacruz et al. (2019), Brändle et al. (2018), van Oostrum (2017), Ignjatovich (2017), Alsos et al. (2016), Braun (2019) and qualitative studies (Fauchart & Gruber (2011), Gruber & MacMillan (2017), Wry & York (2017), Powell & Baker (2014), Powell & Baker (2017), Pan et al. (2019), Hand et al. (2020), Soto-Simeone et al. (2020)) roughly keep each other in balance.

It therefore makes sense to analyze the ETA transactions using the founding identity theory, based on the classification of founder identities made by Fauchart & Gruber (2011) and measured by the 15-item scale as developed by Sieger et al. (2016). As we see the act of performing an ETA, i.e. acquiring a company as an entrepreneur, similar to founding a company, we consequently replaced in the scale the words “found”, “founding”, “founder” in the ETA context by “acquire”, “acquiring”, “acquirer”.

Given our Vlerick database, leading to the availability of sufficient data (See Chapter 2), a cross sectional design (survey research) via a questionnaire seemed to be the most appropriate research data collection method, using Qualtrics® software for our survey and a Likert-type scale ranging from 1 to 7 points (where 1 = “not at all important” and 7 = “extremely important”) to capture the evaluations.

In this chapter we focus on measuring the social identity of (nascent) ETA entrepreneurs - as founders – according to the typology and scale measurement (15-item scale) in the literature, leading to a systematic classification of founder social identities (Darwinians, Communitarians and Missionaries) (Sieger et al., 2016) (Fauchart & Gruber, 2011).

The research question in this chapter is therefore twofold: Firstly, what is the founder social identity of the (nascent) ETA entrepreneur. Secondly, which founder social identity influences the (nascent) ETA entrepreneurs to become an active ETA entrepreneur or ETA manager.

After a healthy response rate and the availability of sufficient valid data (see Chapter 2), we therefore decided to measure the social identities and perform a quantitative analysis by using a logistic regression analysis.

Once the raw data from the survey were collected and analyzed, a set of hypotheses have been developed and tested regarding the social identity of the (nascent) ETA entrepreneurs and the statistical relations (univariable and multivariable logistic regression) have been computed by the R software.

### **5.4.3. Data**

#### **5.4.3.1. The database**

Most of the scholars used the data from the GUESSS project (Global University Entrepreneurial Spirit Students Survey), one of the largest entrepreneurship research projects in the world directed since 2003 by the University of St. Gallen and the University of Bern. For example, Sieger et al. (2014), Sieger et al. (2016), Estrada de la Cruz et al. (2017), Brandle et al. (2018), Sieger & Monsen (2015), Braun (2019), Hand et al. (2020), Estrada de la Cruz et al. (2019),. The project ([www.GUESSSsurvey.org](http://www.GUESSSsurvey.org)) used data from eight consecutive data-collection waves through high-quality online surveys. Its goal is to study university students' entrepreneurial intentions and activities across the globe. The latest data collection took place in the fall term 2018 where 3,000 universities in 54 countries participated and more than 208,000 completed responses were collected. The GUESSS data have been used for numerous publications in leading academic journals<sup>55</sup>. Other scholars used other databases. For example, Ignjatovich (2017) and van Oostrum (2017) use equally a student database consisting of students enrolled at the University of Twente.

Importantly, all these data sets mentioned here above include nascent (student) entrepreneurs, meaning students who have already embarked on an entrepreneurial career (who answered yes on the question: "Are you currently trying to start your own business/to become self-employed?"). In fact, the ETA subjects used in our data analysis can be equally qualified as nascent ETA entrepreneurs.

In our study, however, we explicitly do not focus on students (as in the GUESSS of University or the University of Twente databases) or even recent MBA graduates (via search fund data). This study rather intends to focus exclusively on ETA cases involving more seasoned and senior managers (average age of 46 years), using the database of attendants at Vlerick Business School conferences and different courses on ETA. See Chapter 2 on methodology and data. From this perspective, we equally made a modest contribution to the relatively recent literature on senior (i.e. +50 years of age) entrepreneurship (Soto-Simeone & Kautonen, 2020).

#### **5.4.3.2. Measuring the social identity**

The 15 -items of the scale of Sieger et al. were presented in three blocks that captured one main social identity dimension each, i.e. Darwinians, Communitarians, Missionaries.

Each social identity has on its turn three dimensions or constructs defined along the lines of basic social motivation (indicated as A), the basis for self-evaluation (indicated as B) and the frame of reference (indicated as C), leading to nine constructs (indicated with roman numerals I to IX).

Each construct is on its turn defined by at least one and maximum two items. Every social identity is therefore measured with 5 items. See Table 5.3. (original questions Sieger scale) and 5.4. (Sieger scale with questions slightly tweaked in ETA context) here below which provides an overview of the different constructs and items

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<sup>55</sup> For a full overview of all the academic publications based on the GUESSS database, see <http://www.GUESSSsurvey.org/publications/publications/academic-journals.html>

per social identity. E.g. Construct A has five items that measure basic social motivations with items A1 for the Darwinians, A3 and A4 for the Communitarians, and A6 for the Missionaries.

In order to situate the questions in the scale in the context of ETA, some of the questions are slightly and deliberately tweaked. The word “founder” is replaced by “acquirer” and the word “create” is replaced by “acquire” (See Table 5.4. here below for an overview of the (slightly modified) questions in our survey and Section 5.2.4. for further explanation of the scale).

As in Sieger et al., we equally used a 7-point Likert scale including a neutral mid-point as suggested by the literature (Hinkin, 2005), asking the respondents to state their degree of importance they attach to each of the items in the scale, ranging from 1 = not at all important to 7 = extremely important. The use of Likert-type scales is recommended when “asking respondents to indicate their level of agreement with a declarative statement or the degree to which what is expressed in the statement is true of a belief, attitude, or characteristic of the respondent” (Netemeyer et al., 2003, p.100). We use the response anchors as suggested by Wade (2006) : from 1 = Not at all important, 2= Low importance, 3 = Slightly important, 4 = Neutral, 5 = Moderately important, 6 = Very Important, 7 = Extremely important.

Table 5.4. Adapted version of the questions of the Sieger scale

Identity	Construct	Item	Item intro	Item text
DAR	I	A2	I will acquire my company in order to....	...to advance my career in the business world
	II	B1	As a firm acquirer, it will be very important to me...	...to operate my firm on the basis of solid management practices
		B2	As a firm acquirer, it will be very important to me...	...to have thoroughly analyzed the financial prospects of my business
	III	C1	When managing my firm, it will be very important to me...	...to have a strong focus on what my firm can achieve vis-à-vis the competition
C2		When managing my firm, it will be very important to me...	...to establish a strong competitive advantage and significantly outperform other firms in my domain	
COM	IV	A3	I will acquire my company in order to....	...to solve a specific problem for a group of people that I strongly identify with (e.g. friends, colleagues, club, community)
		A4	I will acquire my company in order to....	...to play a proactive role in shaping the activities of a group of people that I strongly identify with
	V	B3	As a firm acquirer, it will be very important to me...	...to provide a product/service that is useful to a group of people that I strongly identify with (e.g. friends, colleagues, club, community)
	VI	C3	When managing my firm, it will be very important to me...	...to have a strong focus on a group of people (e.g. friends, colleagues, club, community)
C4		When managing my firm, it will be very important to me...	...to support and advance a group of people that I strongly identify with	
MIS	VII	A6	I will acquire my company in order to....	...to play a proactive role in changing how the world operates
	VIII	B5	As a firm acquirer, it will be very important to me...	...to be a highly responsible citizen of the world
		B6	As a firm acquirer, it will be very important to me...	...to make the world "a better place" (e.g. by pursuing social justice, protecting the environment)
	IX	C5	When managing my firm, it will be very important to me...	...to have a strong focus on what the firm is able to achieve for society-at-large
		C6	When managing my firm, it will be very important to me...	...to convince others that private firms are indeed able to address the type of societal challenges that my firm addresses

DAR = Darwinians, COM = Communitarians, MIS = Missionaries

Source: author

According to Sieger et al.’s scale, respondents were regarded as having a “pure” identity when their agreement to all five items of the three constructs that collapse to one main identity type was at 5 or higher (on the 1-7 scale), with no such agreement to other identity types.

For example, a “pure” Darwinian” ticked at least “5” for items A2,B1,B2,C1 and C2, but less than “5” for at least an item that belongs to the “Communitarian” identity and for at least one “Missionary” item. For example, a “pure” “Communitarian” ticked at least “5” for items A3,A4,B3,C3 and C4, but less than “5” for at least an item that belongs to the “Darwinian” identity and for at least one “Missionary” item. For example, a “pure” “Missionary” ticked at least “5” for items A6,B5,B6,C5 and C6, but less than “5” for at least an item that belongs to the “Darwinian” identity and for at least one “Communitarian” item.

Hybrids are respondents who exhibit the corresponding “>5” agreement for all items that belong to the same identity type for at least two identity types. For instance, a respondent who ticked at least “5” for all Darwinian items (A2,B1,B2,C1 and C2) and for all Communitarian items (A3,A4,B3,C3 and C4) is considered as having a hybrid identity (i.e. hybrid Darwinian-Communitarian). A respondent who ticked at least “5” for all Communitarian items (A3,A4,B3,C3 and C4) and for all Missionary items (A6,B5,B6,C5 and C6) is



considered as having a hybrid identity (i.e. hybrid Communitarian-Missionary). It is therefore equally possible that respondents have more than one hybrid identity at the same time.

After the measurements have been performed as explained here above, respondents who do not meet these thresholds described here above, are founders or acquirers here, who do not exhibit a pure identity nor a clear hybrid identity. This category of founders/acquirers remain unidentified or “identity-less”. For example, a respondent who never ticks at least “5” for all items that belong to the same identity, will not have a pronounced founder social identity. Alternatively, applying lower thresholds for the hybrid identities would produce “sketchier” hybrid identities, increasing the share of hybrids, is not recommendable (Sieger et al., 2016).

The logic of these calculation methods has been adopted from Fauchart & Gruber (2011).

#### **5.4.3.3. Data robustness check and further data cleaning**

Furthermore, in line with Sieger et al. (2016), we performed, specifically for this chapter, a further data cleaning (see Chapter 2 for a description of the initial data cleaning) in order to check for obviously unreliable and doubtful answers.

As the questions regarding social identity were at the end of the lengthy survey (Meade & Craig, 2012) and the respondent was possibly experiencing a certain “survey tiredness”, this in combination with the social identity concept which could be relatively abstract (and hence less interesting) for most of the respondents, we have tried to identify some “careless responses”, also referred to as insufficient effort responding (Meade & Craig, 2012) (Ward & Meade, 2017) in our survey data.

Agreeing with all five statements to the same degree is very unlikely (Fauchart & Gruber, 2011). Rather, such a pattern signals that our items have not been answered with adequate care (Sieger et al., 2016). Therefore similar to Sieger et al. (who removed by this way around 1,5% of its respondents), we checked whether respondents gave the same answer to all six items in one of the three blocks. Respondents with identical scores on all items for all A-questions *or* for all B-questions *or* for all C questions were therefore removed, which resulted in 139 respondents still present in the data (139 in total: 39 acquired a company yet and 100 not yet).

We double checked this by examining the response time (Meade & Craig, 2012) in our Qualtrics dataset, allowing for at least 500 seconds to complete the questionnaire. Typically this approach posits a nonlinear relationship between response time and response quality such that very fast responses are assumed to be careless in nature. All the respondents in the final cleaned list needed at least 500 seconds (the average respondent needing 1082 seconds, excluding outliers) and are therefore accepted.

#### **5.4.3.4. Reliability**

After data collection, we validated the measurement instruments with reliability and dimensionality analysis (Anderson & Gerbin, 1988). An outcome can be considered reliable if it is independent from the sample and reproducible under the same conditions (Merriam, 1995). We therefore analysed what the Sieger scale calls the entrepreneur’s frame of reference, considering the three types of identity described above. In order to test the reliability of our scales, we use the Cronbach’s Alpha ( $\alpha$ ) test, which measures the internal consistency between items will be used (Estrada Cruz et al. (2019), Brändle et al. (2018), Hand et al. (2020)). The Cronbach Alpha’s on all five items for the Darwinian social identity is 0.56, for the communitarian social identity 0.84 and 0.90 for the missionary social identity. Although the  $\alpha$  for the Darwinians is at the lower side and borderline, the different items remain within the range of acceptance and indicate an acceptable

level of reliability (Nunally, 1978). A Cronbach's Alpha of over 0.5 indicate that the items are internally consistent (Cronbach, 1951).

#### **5.4.4. Variables**

##### **5.4.4.1. Dependent variable**

To measure active ETA entrepreneurship, we utilized a dichotomous variable, i.e. whether an individual has a acquired a company or not, answering the binary question: "Did you end up acquiring your company?". As explained in the previous sections, of the 139 filtered data, nascent and actual ETA entrepreneurs, 100 answered "not yet" and 39 answered "yes" on this question. In his research on the nascent-active gap of start-up founders, Braun (2019) equally uses a dichotomous variable based on the response to a very similar question "Are you already running your own business/are you already self-employed?". He coded the variable as "1" if respondents said "Yes" and "0" ("No") otherwise. We did the same in our study.

##### **5.4.4.2. Independent variable**

Our models used social identities in their three formative dimensions (Darwinians, Communitarians, Missionaries) as independent variables, as these dimensions together determine a founder's social identity. Since the founder's social identity is an attribute that cannot be measured directly, as it is latent and psychologically abstract, we must develop and us a scale (Estrada-Cruz et al., 2019). For the measurement of founder social identities, we used the recently validated measure of Sieger et al. (2016), as explained in Section 5.2.4. Some of the questions are slightly tweaked in order to situate them in the context of ETA. The word "founder" is replaced by "acquirer" and the word "create" is replaced by "acquire" (for an overview see Table 5.4.). All questions are asked based upon a Likert-scale as used by Sieger et al. (2016).

As the main purpose of the study is on the three primary founder social identities (Darwinians, Communitarians and Missionaries), we follow the classification and operationalization of Sieger et al. (2016) and refer to so-called "pure" and "hybrid" founder social identity in our empirical analysis based on the same methods. For more detail see Section 5.4.3.2.

Our focus on the three primary identities led to three different binary dummy variables that indicate whether the respondents have a pure Darwinian, Communitarian, or Missionary founder social identity ("1") or not ("0").

##### **5.4.4.3. Control variables**

We include the following control variables, in line with the previous literature on social founder identities:

*Age.* In line with similar studies investigating social identities in the context of entrepreneurship, we equally use age (years) as a control variable (Luu & Nguyen (2020), Brändle et al. (2018), Sieger & Monsen (2015), Sieger et al. (2016), Zellweger et al. (2011), Braun (2019)). We keep age (continuous variable) the same throughout our analysis as this variable is not of our primary concern in the experimental outcome.

*Entrepreneurial experience.* We equally include entrepreneurial activities undertaken as control variable on the grounds that they might raise the chances of repeating another entrepreneurial activity such as an ETA transaction (cfr. (Brändle et al. (2018) with perceived self-efficacy). Entrepreneurial activity was measured as being involved into previous start-up ventures or previously have made an acquisition of a majority or minority shareholding in a company. Nascent ETA entrepreneurs with previous entrepreneurial experience are coded as 1 ("1" if one of the three underlying variables has "1", i.e. start-up/minority/majority) and first-

time entrepreneurs as 0 (if all three variables are 0 then 0). Although Sieger et al. initially excluded the serial and portfolio entrepreneurs from their database, a robustness check through a preliminary and confirmatory factor analysis of the scale including the latter, lead to very similar results, with only very minor changes in factor loadings and fit indices. We therefore decided to leave these entrepreneurs in our database and use entrepreneurial experience as a control variable. This is in line with recent similar studies investigating social identities in the context of entrepreneurship (Brändle et al. (2018), Alsos et al. (2016), Braun (2019)).

*Education.* We equally include business education as a control variable by using a dummy variable (study economics (“1”) or not (“0”)), in line with the literature (Sieger et al. (2014), Brändle et al. (2018), Alsos et al. (2016), Sieger & Monsen (2015), Braun (2019)).

As our database is derived from one single country (Belgium), we do not need to include the control variables that for example Sieger et al. (2016), Braun (2019) and EstradaCruz (2019) needed in order to cope with a multi-country data base (e.g. GUESSS database comprises of 17 countries) such as individual-level cultural perceptions and macroeconomic variables or absolute levels of GDP per capita for each country. In order to prevent the potentially confounding influence of cultural backgrounds and to have a homogenous sample without cross-cultural biases, Sieger et al. excluded nationals whose nationality was not Swiss, Lichtensteinian or Austrian (i.e. Alpine region). In our exclusively Belgian database, we will not have the risk of cross cultural biases.

## 5.5. Results

### 5.5.1. Descriptive statistics

In addition to the descriptive statistics provided here in Table 5.5., ranked per founder social identity, we also provide the non-cleaned descriptive statistics in Appendix 5, ranked per item and in more detail (showing the Likert-scale outcome).

Table 5.5. indicates clearly that our respondents (N=139) are in the strongest agreement with the questions confirming the Darwinian identity. Our (nascent) ETA entrepreneurs do consider it paramount to operate their businesses based on solid management practices and thorough financial analysis, with a strong focus on its competitive strength.

*Table 5.5. Descriptive statistics: results of answers on questions of scale*

Identity	Construct	Item	Item	Mean (stdv)	Median (IQR)	Min	Max
DAR	I	A2	I will acquire my company in order to advance my career in the business world	4.88±1.54	5.00 (4.00,6.00)	1.00	7.00
		B1	As a firm acquirer, it will be very important to me to operate my firm on the basis of solid management practices	5.89±0.69	6.00 (6.00,6.00)	4.00	7.00
	B2	B2	As a firm acquirer, it will be very important to me to have thoroughly analyzed the financial prospects of my business	5.94±0.85	6.00 (6.00,6.00)	3.00	7.00
		C1	When managing my firm, it will be very important to me to have a strong focus on what my firm can achieve vis-à-vis the competition	5.79±0.74	6.00 (5.00,6.00)	3.00	7.00
	C2	C2	When managing my firm, it will be very important to me to establish a strong competitive advantage and significantly outperform other firms in my domain	5.83±0.85	6.00 (5.00,6.00)	3.00	7.00
		COM	IV	A3	I will acquire my company in order to solve a specific problem for a group of people that I strongly identify with (e.g. friends, colleagues, club, community)	3.01±1.58	3.00 (2.00,4.00)
A4	I will acquire my company in order to play a proactive role in shaping the activities of a group of people that I strongly identify with			4.19±1.78	4.00 (3.00,6.00)	1.00	7.00
B3	B3		As a firm acquirer, it will be very important to me to provide a product/service that is useful to a group of people that I strongly identify with	4.20±1.60	4.00 (3.00,5.00)	1.00	7.00
	C3		When managing my firm, it will be very important to me to have a strong focus on a group of people that I strongly identify with	3.99±1.41	4.00 (3.00,5.00)	1.00	6.00
C4	C4		When managing my firm, it will be very important to me to support and advance a group of people that I strongly identify with	4.09±1.46	4.00 (3.00,5.00)	1.00	7.00
	MIS		VII	A6	I will acquire my company in order to play a proactive role in changing how the world operates	4.27±1.78	5.00 (3.00,6.00)
B5		As a firm acquirer, it will be very important to me to be a highly responsible citizen of the world		4.55±1.38	5.00 (4.00,5.50)	1.00	7.00
B6		B6	As a firm acquirer, it will be very important to me to make the world "a better place" (e.g. by pursuing social justice, protecting the environment)	4.31±1.56	4.00 (3.00,6.00)	1.00	7.00
		C5	C5	When managing my firm, it will be very important to me to have a strong focus on what the firm is able to achieve for society-at-large	4.40±1.38	5.00 (4.00,5.00)	1.00
C6			When managing my firm, it will be very important to me to convince others that private firms are indeed able to address the type of societal challenges that my firm addresses	4.16±1.50	4.00 (3.00,5.00)	1.00	7.00

DAR = Darwinians, COM = Communitarians, MIS = Missionaries

Source: Hans Vanoorbeek

## 5.5.2. Inferential statistics

### 5.5.2.1. Nascent ETA entrepreneurs and their Founder Social Identity measured

After measuring the cleaned data (see Section 5.4.3.3.) according to the methods explained in Section 5.4.3.2., our data sample is reduced from 170 valid responses to 139 valid cleaned data points (whereof 100 acquired not yet a company and 39 already did). These numbers are just acceptable as Sieger et al. (2016) excludes countries with less than 150 responses, given the recommendation that there should be at least 10 cases for each item in the instrument being used (Hinkin, 2005). For example, Braun (2019) had 150 data points per country for his similar analysis of the nascent-active gap. EstradaCruz (2019) analysed 179 valid responses in their study.

The results of the founder social identity measurement of the (nascent) ETA entrepreneur is illustrated in table 5.6 here below.

Table 5.6. Social Identities of the nascent ETA entrepreneur

N=139	Social Identities of the nascent EBO entrepreneur		%
Pure Darwinian	63		45,3%
Pure Communitarian	4		2,9%
Pure Missionary	15		10,8%
Hybrid Darwinian-Communitarian	4		2,9%
Hybrid Darwinian-Missionary	11		7,9%
Hybrid Communitarian-Missionary	3		2,2%
Hybrid Darwinian-Communitarian-Missionary	5		3,6%
<hr/>			
Total pures	82		59,0%
Total hybrids	23		16,5%
Total pures & hybrids	105		75,5%
Total "identity-less"	34		24,5%

Source: Hans Vanoorbeek

In line with Fauchart & Gruber (2011) and Sieger et al. (2016), who already indicated that Darwinians are the most common type of founders in general, there is here a strong evidence that a Darwinian social identity is equally the most common social identity among (nascent) ETA entrepreneurs. Indeed, more than 45% of the respondents do have the pure Darwinians social identity and almost another 15% have hybrid social identities including partially the Darwinian. Within the different categories of hybrid identities, the partially Darwinian hybrid entities are indeed 87% of the total hybrid identities.

We therefore accept Hypothesis 1.

These results are also confirming Sieger et al.'s view that at the time of their scale development and initial results "we have strongly reason to believe that in a sample of more mature founders, the identified shares would be even greater" (Sieger et al., 2016:566).

In order to further illustrate the applicability of their scale, Sieger et al. (2016) have tested their scale in several countries across the globe, showing that their scale is able to identify both pure and hybrid founder social identities in different geographies, indicating the widespread importance and empirical relevance of the three pure and the hybrid social identities that they sought to measure with their scale. Table 5.7. provides an overview of these results.

Table 5.7. Founder social identity types and hybrids across countries

Founder social identity types and hybrid identities across countries.

	AR	BRA	GER	ITA	NED	ESP	EST	HUN	RUS	POL	MEX	AAR
Pure Darwinians	17.3	21.2	14.0	16.8	18.6	16.0	21.1	16.9	17.8	22.8	14.0	19.2
Pure Communitarians	9.2	2.3	8.3	6.2	8.0	4.0	4.1	6.5	2.1	2.0	0.6	8.8
Pure Missionaries	13.1	5.3	11.1	12.4	7.8	8.4	8.8	6.3	8.9	6.1	7.0	8.0
Total pures	39.6	28.8	33.4	35.4	34.4	28.3	34.0	29.7	28.8	31.0	21.7	36.0
D/C hybrids	5.3	7.2	3.1	4.9	2.7	6.4	2.7	8.0	5.2	5.1	5.1	6.4
D/M hybrids	3.5	12.1	5.1	10.0	4.5	9.9	3.4	6.7	7.1	10.9	15.3	6.4
C/M hybrids	4.9	5.5	11.4	11.6	11.9	7.6	6.8	8.0	5.2	4.3	5.7	8.0
D/C/M hybrids	11.3	26.9	4.9	14.9	10.0	22.2	12.2	18.7	18.7	20.0	45.2	28.0
Total hybrids	25.1	51.8	24.6	41.4	29.1	46.1	25.2	41.4	36.1	40.3	71.3	48.8
Total pures & hybrids	64.7	80.6	58.0	76.8	63.5	74.5	59.2	71.1	64.9	71.3	93.0	84.8

Note: Numbers are percent of total sample in the respective countries. AR = Alpine region, AAR = Anglo-American region. For the identification of pure and hybrid identities please refer to footnotes 17 and 23.

Source: Sieger et al., 2016

As the sample of Sieger et al. analysis consist of fairly young entrepreneurs (i.e. the GUESSS database analysing student’s entrepreneurial intentions), a significant share of these entrepreneurs is likely still in search of their “identity”. On the other hand, our study of more mature seasoned and experienced nascent entrepreneurs, shows indeed a much more pronounced identity identification: 59% of the respondents do have a “pure” identity and another 16.5% do have a hybrid identity. These numbers are significantly higher than in Sieger et al.’s multi-geographic study. For example, none of the geographies in Sieger et al.’s analysis comes close to our 45% of Darwinian identification and the relative percentage of “identity-less” entrepreneurs is equally substantially lower in our sample (24.5%) compared with most other geographies.

### 5.5.2.2. Nascent ETA entrepreneurs and the transition to active ETA entrepreneurship

#### 5.5.2.2.1. Correlation table of the variables

The distribution and Spearman<sup>56</sup> correlations of the most important independent variables are visualized in the figure below Figure 5.1. Spearman correlations are chosen instead of Pearson correlations as a Pearson coefficient works with a linear relationship between the two variables whereas the Spearman Coefficient works with monotonic relationships as well.

One of the advantage of the R computing software is that such an overview table is quite easily generated and provides us with a true visualization of the relationships, allowing for a better comprehension of the relations under investigation. The table reads as follows:

- On the diagonal, the distribution of each independent variable is shown.
- Above the diagonal the Spearman correlation coefficient is shown, with larger font size when the coefficient is higher. Asterisks represent the  $p$ -values of the Spearman correlation coefficient (\*\* $< 0.001$ , \*\*  $< 0.01$ , \* $<0.05$ ). Figure 5.1. indicates that two results are statistically significant, i.e. Darwinian-Missionary  $-0.32^{***}$  at the  $p<0.001$  level and entrepreneurial experience and age  $0.21^*$  at the  $p<0.05$  level.
- Below the diagonal, a scatter plot visualizes the bivariate relationship between 2 variables.

<sup>56</sup> Spearman correlation is the non-parametric version of the (linear) Pearson product-moment correlation. The Pearson coefficient can evaluate only a linear relationship (a change in one variable is associated with a proportional change (constant rate) in the other variable) between the two variables whereas the Spearman Coefficient works with a monotonic (variables tend to change together, but not necessarily at a constant rate) relationship.

Figure 5.1. Visual representation of Spearman correlations

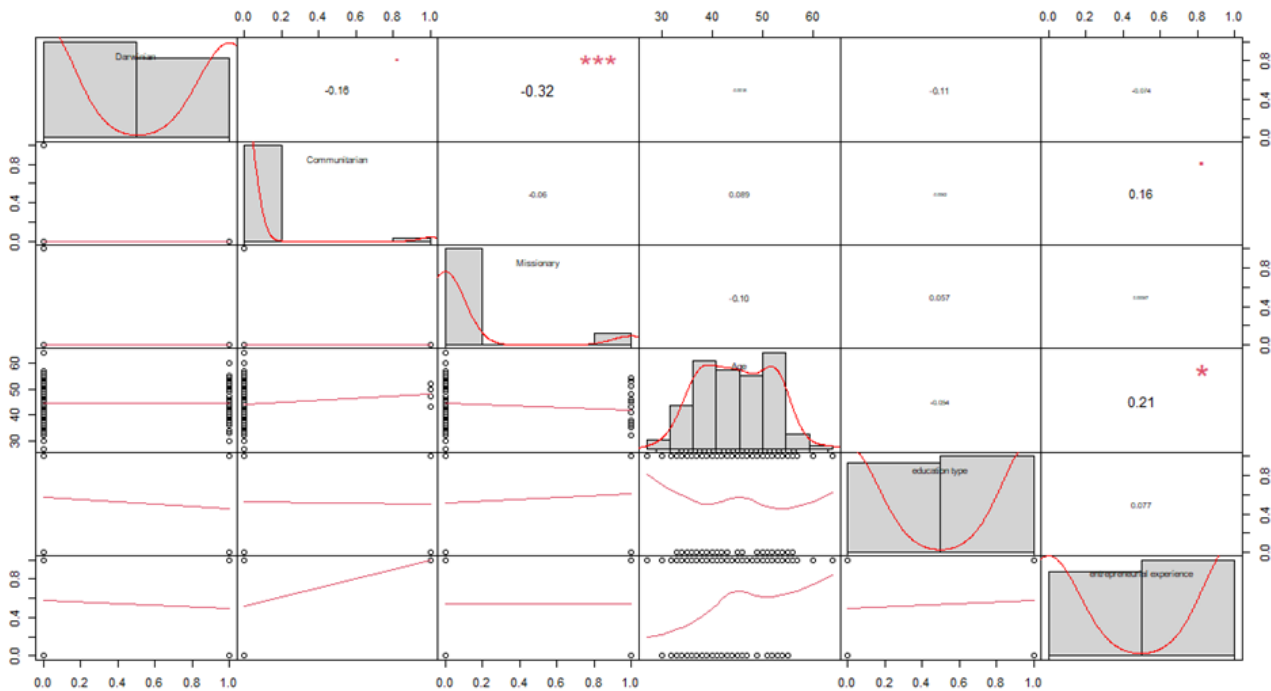


Table 5.8. provides in another format an additional overview of the pairwise Spearman correlation coefficients of the independent variables\*, whereby -1 and +1 indicates a perfectly negative/positive correlation and 0 indicates the absence of any correlation. The correlation table indicates that the correlation coefficients between all the variables are rather small, showing a weak or no correlation between the independent variables, and thus significantly reducing the risk of multicollinearity.

Table 5.8. Spearman correlations between variables

	Darwinian	Communitarian	Missionary	Age	Education type	Entrepreneurial experience
Darwinian	1.00	-0.16	-0.32***	0.00	-0.11	-0.07
Communitarian	-0.16	1.00	-0.06	0.09	-0.01	0.16
Missionary	-0.32	-0.06	1.00	-0.10	0.06	0.00
Age	0.00	0.09	-0.10	1.00	-0.05	0.21*
education type	-0.11	-0.01	0.06	-0.05	1.00	0.08
entrepreneurial experience	-0.07	0.16	0.00	0.21	0.08	1.00

### 5.5.2.2.2. Logistic regression

#### 5.5.2.2.2.1. Univariable models

The table below Table 5.9. (summary of six separate models) shows the results of the univariable logistic regression model, showing the relationship between one dichotomous dependent variable (“Acquired a company or not? Not yet/yes”) (0,1) and one independent variable at the time. The three independent variable are the social identities: Darwinian (0,1), Communitarian (0,1) or Missionary (0,1). The control variables are age (continuous variable), entrepreneurial experience (start-up/majority/minority as dummy variable: 1 = one of the three variables has 1, if all are 0 = 0) and education (dummy: economics or not).

In line with the literature on founder social identity (see Section 5.2.3.), we focus in our models on the “pure” social identities and to a lesser extent on the hybrid identity and identity-less (nascent) ETA entrepreneurs.

Table 5.9. Univariable logistic regression models (summary of 6 separate models)

Acquired a company?		Not yet	Yes	OR (univariable)
Darwinian	No	59 (77.6)	17 (22.4)	-
	Yes	41 (65.1)	22 (34.9)	1.86 (0.89-3.98, p=0.103)
Communitarian	No	98 (72.6)	37 (27.4)	-
	Yes	2 (50.0)	2 (50.0)	2.65 (0.31-22.73, p=0.339)
Missionary	No	86 (69.4)	38 (30.6)	-
	Yes	14 (93.3)	1 (6.7)	0.16 (0.01-0.85, p=0.084)
Age	Mean (SD)	43.6 (7.3)	46.2 (7.9)	1.05 (1.00-1.10, p=0.066)
entrepreneurial.experience	No	48 (73.8)	17 (26.2)	-
	Yes	52 (70.3)	22 (29.7)	1.19 (0.57-2.54, p=0.640)
education.type	No	49 (73.1)	18 (26.9)	-
	Yes	51 (70.8)	21 (29.2)	1.12 (0.53-2.37, p=0.763)

Based on the OR's (odds ratio's) of the univariable regression<sup>57</sup>, no significant relationships are observed for the three variables, as all the *p*-values are >0.05. In other words, having a certain social identity, whether it be a Darwinian, Communitarian or Missionary social identity, does not have an impact on the likelihood of acquiring a company.

#### 5.5.2.2.2. Multivariable model

The table below Table 5.10. shows the results of the multivariable logistic regression model, showing the relationship between one dichotomous dependent variable ("Acquired a company or not? Not yet/yes") (0,1) and the three independent variable at the same time. The three independent variable are the social identities: Darwinian (0,1), Communitarian (0,1) or Missionary (0,1), keeping the hybrid social identities at 0. The control variables are age, entrepreneurial experience (start-up/majority/minority as dummy variable: 1 = one of the three variables has 1, if all are 0 = 0) and education (dummy: economics or not).

Table 5.10. Multivariable logistic regression model

Acquired a company?		Not yet	Yes	OR (multivariable)
Darwinian	No	59 (77.6)	17 (22.4)	-
	Yes	41 (65.1)	22 (34.9)	1.75 (0.78-4.01, p=0.178)
Communitarian	No	98 (72.6)	37 (27.4)	-
	Yes	2 (50.0)	2 (50.0)	2.75 (0.30-25.73, p=0.343)
Missionary	No	86 (69.4)	38 (30.6)	-
	Yes	14 (93.3)	1 (6.7)	0.24 (0.01-1.41, p=0.193)
Age	Mean (SD)	43.6 (7.3)	46.2 (7.9)	1.05 (0.99-1.10, p=0.103)
entrepreneurial.experience	No	48 (73.8)	17 (26.2)	-
	Yes	52 (70.3)	22 (29.7)	1.02 (0.46-2.29, p=0.952)
education.type	No	49 (73.1)	18 (26.9)	-
	Yes	51 (70.8)	21 (29.2)	1.26 (0.58-2.75, p=0.565)

Number in dataframe = 139, Number in model = 139,

Missing = 0, AIC = 168.8, C-statistic = 0.659,

H&L = 5.28 (p=0.727)

Nagelkerke *R*<sup>2</sup> = 0.10

<sup>57</sup> An odds ratio (OR) in a logistic regression is a measure of the strength of association with an exposure (constant effect of a predictor X) and the likelihood that one outcome will occur. OR > 1 means greater odds of association with the exposure and outcome. OR = 1 means there is no association between exposure and outcome. OR < 1 means there is a lower odds of association between the exposure and outcome.

Based on the OR's (odds ratio's) of the multivariable regression, no significant relationships are observed for the three variables ( $p$ -values  $>0.05$ ). In other words, having a certain social identity, does not have an impact on the likelihood of actually acquiring a company.

The goodness-of-fit statistics, measuring discrepancy between observed values and the values expected under the model in question, reveal here a good fit of the models. For example, the concordance C-statistic indicates a good discrimination of the models (Zach, 2019). The minimum value of C is 0.0 and the maximum is 1.0. C-values of 0.7 to 0.8 to show acceptable discrimination, values of 0.8 to 0.9 to indicate excellent discrimination, and values of  $\geq 0.9$  to show outstanding discrimination. In our model, we reach a C-level of 0.659 which is close to the range of acceptance. The Hosmer & Lemeshow goodness-of-fit test equally indicates a good fit for logistic regression models as it determines if the differences between observed and expected proportions are significant, indicating model lack of fit. A  $p$ -value greater than 0.05 indicate a well-fitted model (Hilbe, 2016), which is the case in our analysis ( $p=0.727$ ). Nagelkerke  $R^2$  is an adapted Cox & Snell test, giving power of explanation of the model, evaluating the goodness of fit of the logistic model, the higher  $r$ -squared indicates a better fit for the model. Here the Nagelkerke  $R^2$  parameter is rather low (0.10), in line with the fact that there are no significant relationships between the variables.

We can therefore conclude that based on the univariable (Section 5.5.2.2.2.1.) and multivariable (Section 5.5.2.2.2.2.) logistic regression models, we do not observe any significant relationship between one of the social identities and the likelihood to actually become an active ETA entrepreneur in a given time period compared to when they do not have this identity.

The results of our analysis therefore do not allow us to accept Hypothesis 2, Hypothesis 3 and Hypothesis 4.

#### 5.5.2.2.2.3. Robustness checks

In order to test the robustness of our model, we have performed different actions.

Firstly, in the previous analyses (section 5.5.2.4.1. and section 5.5.2.4.2.), the social identities were included as dummy variables (1,0). In order to perform an additional robustness check of these models and in order to confirm that the same results are obtained, we are going to run the models (univariable and multivariable), using a different coding by creating a new categorical variable "social.identity" with 4 subcategories: Darwinian, Communitarian, Missionary and No pure identity (i.e. defined as having a hybrid identity or no identity), with 'Darwinian' as reference category (as it fits with the main hypothesis). Such a model allows a more easy and alternative comparison between – in this case- Darwinian and the other identities.



Table 5.11. Univariable and Multivariable logistic model with social identity as a categorical value

Acquired a company?		Not yet (# and %)	Yes (# and %)	OR (univariable)	OR (multivariable)
Social.identity	Darwinian	41 (65.1)	22 (34.9)	-	-
	Communitarian	2 (50.0)	2 (50.0)	1.86 (0.21-16.41, <i>p</i> =0.547)	1.58 (0.17-14.50, <i>p</i> =0.668)
	Missionary	14 (93.3)	1 (6.7)	0.13 (0.01-0.73, <i>p</i> =0.059)	0.14 (0.01-0.78, <i>p</i> =0.066)
	No pure identity	43 (75.4)	14 (24.6)	0.61 (0.27-1.33, <i>p</i> =0.218)	0.57 (0.25-1.28, <i>p</i> =0.178)
Age	Mean (SD)	43.6 (7.3)	46.2 (7.9)	1.05 (1.00-1.10, <i>p</i> =0.066)	1.05 (0.99-1.10, <i>p</i> =0.103)
entrepreneurial.experience	No	48 (73.8)	17 (26.2)	-	-
	Yes	52 (70.3)	22 (29.7)	1.19 (0.57-2.54, <i>p</i> =0.640)	1.02 (0.46-2.29, <i>p</i> =0.952)
education.type	No	49 (73.1)	18 (26.9)	-	-
	Yes	51 (70.8)	21 (29.2)	1.12 (0.53-2.37, <i>p</i> =0.763)	1.26 (0.58-2.75, <i>p</i> =0.565)

Number in dataframe = 139,

Number in model = 139, Missing = 0, AIC = 168.8, C-statistic = 0.659,

H&L = 5.28 (*p*=0.727)

Nagelkerke *R*<sup>2</sup> = 0.10

Similar results were obtained with the adjusted models and no significant relationship was detected between social identity and the likelihood to actually become an active ETA entrepreneur, the so-called nascent-active gap. However, a tendency can be observed that Missionary social identity types seem less likely to acquire a company than Darwinian social identity types (*p*=0.066). Given our first hypothesis and the arguments leading to this hypothesis, this does not come as a surprise.

Secondly, we decided to use an additional linear regression as a robustness check of the logistic regression performed here above. In a recently published paper by R. Gomila (Gomila, 2020) it was suggested that a linear regression based on OLS<sup>58</sup> estimation can be used to assess treatment effects on binary outcomes. Gomila states that, drawing on econometric theory and established statistical findings, that linear regression is generally the best strategy to estimate causal effects of treatments on binary outcomes, as linear coefficients are directly interpretable in terms of probabilities and, when interaction terms are included - which is the case here - linear regression is safer. Although OLS estimation for binary outcomes is not commonly used in the study field here represented (business/economics), the logistic regression model (shown in section 5.5.2.4.2.), as well as the recoded variation (shown here above in section 5.5.2.5.) shown above is re-estimated using OLS linear regression.

The linear regression model, as shown in Table 5.12., gives similar results (similar non-significant *p*-values for the same independent variables, i.e. *p* below <0.05) as the logistic regression model, indicating that the achieved results of the logistic regression as mentioned in 5.5.2.4.2 are confirmed to be robust.

<sup>58</sup> OLS (Ordinary Least Squares) regression is a statistical method of analysis that estimates the relationship between one or more independent variables and a dependent variable. The method estimates the relationship by minimizing the sum of the squares of the difference between the observed and predicted values of the dependent variable configured as a straight line.

Table 5.12. Linear regression model

Acquired a company?		Unit	Value	Coefficient (univariable)	Coefficient (multivariable)
Darwinian	No	Mean (sd)	0.2 (0.4)	-	-
	Yes	Mean (sd)	0.3 (0.5)	0.13 (-0.03 to 0.28, $p=0.102$ )	0.11 (-0.05 to 0.27, $p=0.178$ )
Communitarian	No	Mean (sd)	0.3 (0.4)	-	-
	Yes	Mean (sd)	0.5 (0.6)	0.23 (-0.23 to 0.68, $p=0.325$ )	0.23 (-0.23 to 0.69, $p=0.331$ )
Missionary	No	Mean (sd)	0.3 (0.5)	-	-
	Yes	Mean (sd)	0.1 (0.3)	-0.24 (-0.48 to 0.00, $p=0.051$ )	-0.16 (-0.42 to 0.10, $p=0.221$ )
Age	[27.0,64.0]	Mean (sd)	0.3 (0.5)	0.01 (-0.00 to 0.02, $p=0.064$ )	0.01 (-0.00 to 0.02, $p=0.105$ )
entrepreneurial.experience	No	Mean (sd)	0.3 (0.4)	-	-
	Yes	Mean (sd)	0.3 (0.5)	0.04 (-0.12 to 0.19, $p=0.643$ )	0.00 (-0.15 to 0.16, $p=0.977$ )
education.type	No	Mean (sd)	0.3 (0.4)	-	-
	Yes	Mean (sd)	0.3 (0.5)	0.02 (-0.13 to 0.17, $p=0.765$ )	0.05 (-0.10 to 0.20, $p=0.535$ )

Number in dataframe = 139, Number in model = 139, Missing = 0,

Log-likelihood = -81.26, AIC = 178.5,

R-squared = 0.066, Adjusted R-squared = 0.024

## 5.6. Discussion

We examined the founder social identities of (nascent) ETA entrepreneurs by measuring them and by investigating whether they have an influence on becoming an active ETA entrepreneur.

The research question in this chapter, consisting of two separate parts, is therefore answered as follows: Firstly, the founder social identity of the (nascent) ETA entrepreneur is clearly predominantly a Darwinian social identity. Secondly, our regression analysis and subsequent robustness checks do confirm that founder social identity does not have a significant influence on the (nascent) ETA entrepreneurs, whether or not to become an active ETA entrepreneur or ETA manager.

### 5.6.1. Comparison with previous findings

Research on the social identity of firm founders and how it affects entrepreneurship is just beginning to emerge (Sieger et al., 2016).

This study performed here makes different contributions to the prior literature.

First, it provides us for the first time in the literature with an understanding of the founder social identity of the (nascent) ETA entrepreneur (the first part of the research question). Sieger et al. already hinted that their scale could provide opportunities for future scale building efforts targeted at founder social identities in specific contexts such as ETA transactions and improve the theoretical understanding of key phenomena in entrepreneurship such as ETA.

Secondly, the empirical context of our study differs from most other previous research. Contrary to most other studies performed on founder social identity and its relationship with entrepreneurship, is that our observations were obtained in a real world setting, involving more seasoned and experienced entrepreneurs,

and not in a student environment (e.g. the GUESSS database). The business proposals the students develop may not be representative of those developed by entrepreneurs seeking to invest a significant part of their own savings and net worth in their own business and taking on a substantial debt load in order to finance their acquisition. We confirmed the expectations of Sieger et al., who in their scale validation were using the GUESSS student database, that a database of more mature and seasoned entrepreneurs would show a much more pronounced identity identification.

As expected, we equally concluded that (nascent) ETA entrepreneurs have predominantly a Darwinian social identity, as most entrepreneurs do (Gruber & Fauchart, 2011). The (nascent) ETA entrepreneur has indeed a “homo economicus” approach, focusing on financial investment criteria such as profit and cash-flow and seeking for competitive advantages. This economic personal self-interest is equally needed to raise (and repay afterwards) the necessary acquisition debt and to realize an attractive return for the ETA entrepreneur on his/her own equity investment.

Moreover, this study enables us to examine the influence of the entrepreneur’s social identity as a founder or - for the first time here - as an acquirer of a company (the second part of the research question). Our analysis confirms that not all entrepreneurs have the same vision of an entrepreneurial opportunity, such as an ETA transaction. The vision of the entrepreneur affects indeed their beliefs and intentions as acquirers. The founder social identity is therefore an important factor that can help us to explain the transition from nascent to active entrepreneurship. Contrary to Braun (2019) who analysed the nascent-active gap for founders of start-ups and did find significant relationships, our study did not find a significant relationship between founder social identity and the switch from nascent into active ETA entrepreneurship.

Finally, our data sample, given their average age, equally relates to the academic research on late-career entrepreneurship (Soto-Simeone & Kautonen, 2020) (Kautonen, Kibler, & Minniti, 2017). Soto-Simeone & Kautonen (2020) did see a relative scarcity of Communitarians and a complete absence of Missionaries. Their results can equally be explained by the specific empirical context as they studied senior individuals who are unemployed or threatened with redundancy. Our senior individuals are a bit younger and are all employed, having or having experienced a prosperous career. Hence the obtained results are therefore different.

### **5.6.2. Limitations**

#### *Sample size*

Like any study, this research is not without limitations (Aguinis & Edwards, 2013). We acknowledge that our sample of 170 responses (whereof 50 actual ETA entrepreneurs) and 139 after an additional cleaning for the purpose of this chapter (see Section 5.4.3.3.) is relatively small and too small to meet the 10 respondents per item rule (Sieger et al., 2016) (which they do not attain either). However, a larger sample size is, according to our opinion, unlikely to influence already significant effects. Rather, it might be that our marginal effects might be further strengthened. Nonetheless, we welcome research with larger sample sizes in order to confirm our results.

#### *Single country data*

Our study is limited to Belgian data. Estrada de la Cruz et al. (2019) concluded in their analysis of founders who created new ventures, that cultural dimensions such as avoiding uncertainty, individualism, long term orientation and distribution of power influence decision made using effectuation. Since national culture influences entrepreneurial spirit significantly (Zahra, 2007), entrepreneurs and their decision-making frameworks are influenced by the different dimensions composing natural culture (Thomas & Mueller, 2000).

Braun (2019), who equally performs a multi-country study includes GDP growth of the respective countries as a moderator in his analysis, as well as control variables linked to the country level. A possible road for future research, would be to analyze the ETA nascent entrepreneur phenomenon through the lens of a more international data set.

#### *Team social identity*

Fauchart & Gruber (2011) developed a frame work for the individual social identity. Agreeing with Van Oostrum (2017) and Ignjatovich (2017), who were analyzing student teams, we did not include the phenomenon related to the identity creation of teams. Indeed, very often different nascent ETA entrepreneurs form a team, often with complementary skills, knowledge or even financial capabilities in order to acquire a company and possibly also with different social identities. These different social identities can lead to minority dissent (De Dreu, 2002). In fact, when multiple individual identities work together in a team, a collective identity can emerge in an entrepreneurial team, leading to team entrepreneurial passion (Cardon, Post, & Forster, 2016) (Santos & Cardon, 2019). Or in the worst case, heterogeneous teams form a social identity point of view, face frequent disagreements and heated discussions, often the result of diverging social identities and not a simple difference in opinion (Ignjatovich, 2017). Fauchart & Gruber (2011) found that homogenous founder teams are more cohesive and consistent in their actions they take during the founding process. The issue of team composition in terms of the social identity of its members and the dynamics it creates present an opportunity for further research. A separate scale based on the work of Fauchart & Gruber (2011) could be developed to measure and classify social identity on a team level, as different identities within a group may result in varying degrees of success in terms of business creation or in our case business acquisition.

#### *Context-dependency of Fauchart & Gruber*

The original typology of Fauchart & Gruber was developed in a very specific industry context (sports equipment in the alpine region). Later research (e.g. Soto-Simeone & Kautonen (2020), Hand et al. (2020) demonstrate this context-dependency of the work, as other authors do not always “find” the three pure types of social identity. E.g. Soto-Simeone did not recognize two out of the three social identity as they did not see Darwinian or Missionary social identity types. It is also not unexpected that senior individuals who start businesses in the adverse context of being unemployed or facing redundancy are driven by different social motivations than entrepreneurs operating in the youthful sports equipment industry. Our empirical context is a likely reason for the scarcity of economic self-interest as the basic social motivation driving the business. Fauchart & Gruber themselves recognized this context-dependency this as an important limitation.

#### *Hybrids underexposed*

Our analysis is based on the original typology of Fauchart & Gruber, using three social entrepreneurial identities: Darwinian, Missionary and Communitarian, and representing only one way of differentiating between different types of identity. Through its conceptual groupings we dichotomize commercial and social motives, rather than embracing complex motivations and the integration of multiples rationalities in entrepreneurship (Wry & York, 2019). In this study, we have empirically validated that they are three distinct social identities that influence entrepreneurial behavior. However, as individuals can identify simultaneously with multiple identities (the so-called hybrid identities as suggested by Fauchart & Gruber), future research should pay more attention to the implications this hybrid identity has for their behavior, as it might give further insight into the relative strength of the identities in terms of behavior. Hence further studies could be extended to include hybrid identities, who in our study of (nascent) ETA entrepreneurs consist of 17% of

the population. Further, Fauchart & Gruber's use of social identity theory provides little insight into the causes or consequences of this hybridity (Wry & York, 2019). In this regard, at least, the typology is much more descriptive than predictive. It does not give us much explanatory power to understand the origins and implications of multiple motives in entrepreneurship.

### *Longitudinal*

Further studies adopting longitudinal approaches are needed to verify results and they can also examine variations in behavior and identity over time. Existing research also suggests that the entrepreneurial identity is not stable and fix but emergent (Leitch et al., 2013). As entrepreneurs may develop their entrepreneurial identity over time (Jain, George, & Maltarich, 2009), it would be interesting to study if the changes take place within the social identities or if indeed an individual can change from one social identity category or another as the venture unfolds (Alsos et al. 2016) (Ignjatovich, 2017). For example, Braun (2019) studies the nascent-active gap in a longitudinal empirical setting, having two data sets with a time lag of two and a half year (GUESS 2013/14 and GUESS 2016). Future research could use a similar longitudinal approach while analyzing the ETA entrepreneur nascent-active gap.

### **5.6.3. Implications for practice**

Our study is particularly significant for educators in (ETA) entrepreneurship and organizations responsible for formulating development policies in this area. When we attempt to foster business spirit among nascent ETA entrepreneurs, it is not only important to teach individuals the type of abilities that a new firm requires. It is just as important to consider the individual's identity as an internal factor that acts on his or her beliefs and aspirations.

This study enables us to propose future lines of training in entrepreneurship that foster the use of Social Identity Theory in decision making. It is also useful for analyzing individual identity from a broader perspective, since social identity may be a factor in identifying opportunities that is distinct from other factors discussed in the literature, such as prior knowledge, access to information, and different cognitive capabilities (Shane & Venkataraman, 2001) (Shane S. , 2003).

This study shows the importance of acknowledging the variations in an ETA entrepreneur's aspirations related to acquire the firm of his/her dreams. These variations imply that policy makers and advisors should not assume that all entrepreneurs are mainly motivated by profits and act accordingly. Instead motivational structures are varied, and consequently, the behaviors that are the most rational vary depending on the identity of the entrepreneur, including his/her motives. Failure to take this into account may lead to inadequate advice and incitements directed towards entrepreneurs and hence poorer results from the initiatives.

Further entrepreneurial training programs focus mostly on assisting entrepreneurs to develop their business ideas and related business plans. However, given that the entrepreneurial identity is such a key element in the entrepreneurial process, the training programs would benefit from placing more focus on assisting the potential ETA entrepreneurs in entrepreneurial identity work, searching for their authentic entrepreneurial identity (Lewis, 2013) in unison with the idea and business development (Alsos et al. 2016).

### **5.6.4. Areas for further research**

Although we argued earlier, why we preferred to use the framework of Fauchart & Gruber (2011) to analyze the variations in social identities of entrepreneurs, other frameworks could equally contribute to the

research on identity in entrepreneurship. Mmbaga et al. (2020) do review 180 articles on research of identity in entrepreneurship and do provide a visual bibliometric map of identity in entrepreneurship articles. They describe different thematic patterns of identity in entrepreneurship, divided in distinctions, variations, constructions, intersections, each covering different themes (Mmbaga, 2020:7). The (nascent) ETA entrepreneur and his/her identity could equally be analyzed through the lens of these different conversations and themes.

As already suggested here above, while elaborating of the limitations of the underlying study, further similar research could be performed based on a larger sample size, a longitudinal or a multi-country approach.

Furthermore, a more detailed study on the different hybrid forms of the founder social identities (i.e. 16.6% of the total sample here) or even on the “identity-less” entrepreneurs (i.e. 24.5% of the total sample here) in the (nascent) ETA entrepreneur context could be warranted.

Moreover, with the exception of some academic research on search funds (Kelly & Heston, 2022) (IESE, 2020), no academic research has been undertaken on the performance of non-search fund, i.e. self-funded search, ETA transactions. Estrada de la Cruz et al. (2018) drew on the three types of entrepreneurial identities as identified by Fauchart & Gruber (2011) and examined how these social identities influence the entrepreneur’s way of managing his/her firm and its consequences for business performance. A similar study could be made on the impact of the social identities on the performance of a company post-ETA.

Hmieleski et al. study the relationships of the dark triad personality characteristics (i.e. narcissism, psychopathy and machiavellianism) with entrepreneurial intentions and motives (Hmieleski & Lerner, 2016). For example, they found that narcissism is positively related to entrepreneurial intentions. A similar analysis could be made on the entrepreneurial motives of ETA managers.

We encourage further research that further develops the scale of Sieger et al. (2016) and its applicability on the ETA phenomenon. For example, many aspects of an ETA transaction have not been researched in this section and could be analysed alongside the typology of Fauchart & Gruber (2011) and using the scale of Sieger et al. (2016). A non-exhaustive list of suggestions for further research topics could be: (i) research regarding the firm creation (i.e. acquisition) processes (identification of opportunities (companies, industries), shape the boundaries of the companies, creation of corporate identity, innovativeness etc.), (ii) research regarding the outcomes (performance measuring etc.).

As ETA is hitherto a barely covered subject in the academic literature, there are still plenty of topics surrounding ETA that are still waiting for further research.



## Chapter 6. Summary & Conclusions

### 6.1. Contributions

#### 6.1.1. First dedicated research on ETA and in particular on experienced (nascent) ETA Entrepreneurs

The purpose of the thesis is to perform some groundbreaking research from a theoretical and academic point of view on a phenomenon called Entrepreneurship Through Acquisition (“ETA”), its protagonists, its characteristics and drivers.

An ETA transaction as opposed to a “normal” buyout is defined here as a smaller and more entrepreneurial version of the classical leveraged management buy-in. The buyer/investor, the *ETA entrepreneur*, purchases a relatively small company, entirely or almost entirely with his/her own funds, putting most of his/her own funds on the line, in order to become an entrepreneur and in order to hands-on manage the company and to further professionalize and enhance the development of the acquired company (own definition and Hunt & Fund, 2012:31).

An ETA transaction, however much less mentioned in the scholarly literature, is equally a true act of entrepreneurship. This type of entrepreneurship, as opposed to start-up entrepreneurship is therefore called “Entrepreneurship Through Acquisition” (ETA) (Meuleman & Vanoorbeek, 2018) (Hunt & Fund, 2012).

In fact, the vast majority of the academic literature on private equity and entrepreneurship in the widest sense of the definition is principally focused on the start-up and the venture capital scene. In the second instance, when the more mature buyouts are discussed in the literature, most scholarly research is performed on (larger) leveraged buyouts. Overall, relatively limited research has been done on the ETA transaction as such and the concept of an ETA transaction has not been clearly defined in existing research. Traditionally, an ETA transaction was considered simply a niche occurrence of small company leveraged buyouts (Hunt & Fund, 2012).

Only very few scholars have dedicated ‘exclusive’ research on the ETA topic. With the exception of the journal articles of Kelly et al. (1986) and Hunt & Fund (2012) and the non-academic guide for practitioners from Harvard Business School professors Ruback and Yudkoff (2016), no scholars have, as far as we know, exclusively dedicated a piece of academic research on the topic.

Surprisingly, as in leading US and European business schools such as Harvard, Wharton, Booth, Stanford, Columbia, INSEAD and Vlerick, the topic of “Entrepreneurship Through Acquisition” is taught in a dedicated course, albeit an elective, and overall very popular among students. Researchers were possibly deterred by the paucity of readily available data, ETA’s intersection on different areas of research and its strong intertwining with the non-academic practice.

**This research is, as far as we know, the first PhD thesis entirely dedicated to this subject**, combining a many years of practitioners’ insight with the academic research rigor and standards.

Notwithstanding the very little academic research written on ETA as such, certain attempts have been made in order to define the concept of an ETA transaction and situate this phenomenon in the jungle of MBOs, LMBOs, MBIs, VCs, LBOs and the wide world of entrepreneurship.



Therefore different aspects of the ETA transaction itself have been analyzed through different lenses in the existing academic research.

Until now, the academic research has mainly looked at the ETA phenomenon through the lens of search funds, only a small niche in the ETA space. **For the first time in the academic research, our research is primarily focused on the (nascent) ETA managers, being senior seasoned managers instead of post-MBA early-thirties ETA managers**, typically present in the historically predominant model of a search fund. These ETA entrepreneurs have generally made some substantial money in their careers and are therefore able to acquire themselves a small SME, entirely or at least as a substantial shareholder. These so-called “self-funded searchers” equally have gained significant experience and expertise in their area of business. ETA entrepreneurs should supported by their experience be able to significantly contribute to the company they acquired. ETA is a new step in their careers.

In order to analyze these (nascent) experienced ETA entrepreneurs and given the paucity of data on ETA, we have used a unique database provided by the Vlerick Buyout Academy, which I have been co-teaching over the last 8 years. As far as I am aware of, this seven-evening lasting program is the only program in the world to teach senior managers (and not students) how to perform an ETA transaction, who represent undoubtedly by far the largest category in the ETA space.

### **6.1.2. First typology of the (nascent) ETA entrepreneur and its relationship to entrepreneurial entry (Chapter 3)**

For the first time, we focus on the ETA as a way to enter entrepreneurship (“Entrepreneurial Entry”), as a path to entrepreneurial ownership. Previous findings on attempts at transitions into entrepreneurship, have always been predominantly focused on start-up entrepreneurship or at least not be exclusively focused on ETA entrepreneurship. **As opposed to previous research on entrepreneurial entry, this research focuses exclusively on the (nascent) ETA entrepreneurs.** We build further on the existing literature on entrepreneurial entry and nascent entrepreneurship.

The research also shows that nascent entrepreneurs have very similar characteristics whatever their mode of entry (see (Parker & Van Praag, 2012) and (Rocha et al., 2015)). Nascent entrepreneurs who enter entrepreneurship through a start-up or through the acquisition of a company have indeed a lot in common.

However, Block et al. (2013) see two main differences between start-ups and ETA transactions: 1. Starting a business can be considered riskier and more uncertain than an ETA transaction because the ETA business has already survived the early start-up phase in which the level of uncertainty and probability of failure are the highest 2. It can be considered more rewarding in terms of nonfinancial aspects of entrepreneurship.

Although we partially agree with these two differences, we fine-tuned these based on our research: 1. Regarding the risk between ETA transactions and start-ups. We have showed in our analysis that (nascent) ETA entrepreneurs are prepared to invest or invest substantial amounts of their own money, which represent significant percentages of their net worth and which have been mainly accumulated through savings during an almost life-long career and decades of hard work. Start-up entrepreneurs, often much younger, do not make such a (per definition risky) financial commitment. 2. Regarding the non-financial aspects of entrepreneurship, we would argue, with other scholars covering the ETA phenomenon, that ETA entrepreneurship is as entrepreneurial, rewarding and fulfilling as start-up entrepreneurship. The latter is simply well known and maybe less appealing to the imagination.

We analyzed and defined for the first time nascent entrepreneurship in the context of an ETA and focused for the first time in our research on the ETA as the sole mode of entry.

Therefore, following the same reasoning as the scholars defining nascent entrepreneurship, we equally define the concept of a “nascent ETA entrepreneur”. Nascent ETA entrepreneurs would then be *“people who are engaged in acquiring existing and established companies with the expectation of being owners or part owners of this existing firm and thereafter manage it themselves and have been active in trying to acquire the existing firm in the past twelve months”*.

To understand the impact of the three forms of capital, i.e. human, financial and social, on an individual’s pursuit of ETA entrepreneurship, we need to study the nascent ETA entrepreneurs (who are still looking to acquire a company), as well as the ETA entrepreneurs who already acquired a company, as the characteristics of the latter are relevant to understand who finally has the best chances to actually enter into ETA entrepreneurship.

Consistent with the existing research, we analysed the impact of human capital along the typical subcategories, such as education, previous work experience, previous managerial background and previous entrepreneurial experience. In addition, tailored to the ETA environment and often inspired by the research on MBI’s, we refine the human capital background by adding different ETA specific indicators such as industry experience, current employer, size of current company, managerial background, P&L responsibility and a more detailed classification of previous entrepreneurial experience (start-up, founder/co-founder, majority or minority shareholder).

While analyzing the impact of financial capital alongside the typical measurements such as household income and household wealth, we equally measured in the case of an ETA transaction, the amount of money the (nascent) entrepreneur would invest or invested in the business, expressed in thousands of euros. We also included the origin of this equity contribution. Given the own capital required for an ETA transaction by every (nascent) ETA entrepreneur, it is important to understand the financial commitment and the risk attitude of an ETA entrepreneur, both defined here as the willingness to personally invest an absolute amount and this amount expressed as a percentage of an ETA entrepreneur’s net worth. The latter parameters of financial capital have not been covered yet in the literature on entrepreneurship.

### **6.1.3. First research on the Investment Criteria of a (nascent) ETA Entrepreneur (Chapter 4)**

The second research question consist of a thorough analysis of the investment criteria (IC) considered by the nascent ETA entrepreneurs, while focusing exclusively on the experienced middle aged ETA entrepreneur.

This chapter will contribute to the literature in four ways.

Firstly, this chapter provides an updated and systematic comprehensive literature review of academic research performed on investment criteria used in the different sub-asset classes of private equity investments.

After extensive research to uncover a single study that covers all possible investment criteria of one type of investor, let alone across different types of investors, it is clear that no such comprehensive study exist. In fact, more recent academic work has added new variables while leaving previous criteria behind. Moreover, there seems no consensus among the different academic studies and even between venture capitalists and private equity professionals themselves about the relative weight of specific evaluation criteria.

Not surprisingly, and in line with our findings in the previous chapter, most of the academic research on investment or decision criteria has been written on venture capital or business angels.

Although this research has certainly some relevancy for ETA transactions, the investment criteria of private equity investments in more mature companies (LBO's, MBO's, MBI's etc.) are more comparable to the ETA entrepreneur's criteria.

We therefore have sorted the literature on investment criteria by type of investor or by studies focusing on more than one type of investor and for each type per investor, where available, per recurrent key criteria theme or IC group. This Chapter has the ambition to make a relatively exhaustive and updated attempt of such a literature review of academic research performed on investment criteria used in the different sub-asset classes of private equity investments.

In our literature review, we use on the one hand the - slightly modified and adapted - classification of Block et al. (2019) of the different types of investors (Family Offices, Business Angels, Venture Capital Funds, Growth Equity Funds, Leveraged Buyout funds), while adding MBI's and ETA entrepreneurs as two additional investor types. On the other hand, we use the - slightly modified and adapted - categorization of Granz et al. (2020) in their recent systematic literature review on IC of the main IC groups for one investor type (the management team, the business, the financial traction), adding ourselves three other IC themes in the academic literature: different criteria in different stages, geography and other.

The combination of the description of IC on these two axes (investor type and main IC group), provides us with a very comprehensive and systematic academic literature overview of IC, which will allow us to compare these different IC with the IC used in ETA transactions.

Secondly, this **chapter makes the first systematic and academically substantiated analysis of investment criteria used in an ETA context**. After a very thorough analysis, we did not find any academic research on IC specifically focused on ETA, maybe with the exception of some sporadic mentioning in the search funds literature (Morrissette & Hines, 2015), in syllabus (i.e. for student use) type of documents (Dennis & Laseca, 2016) (Kelly, A., 2017) and in the search fund statistics (Yoder & Kelly, 2018), (Kolarova et al., 2020). IC of ETA transactions have clearly never been analyzed in the academic literature before.

Furthermore, certain criteria were added or modified specifically tailoring to the ETA context and some of these are anywhere found in the existing literature. Respondents were also asked about their ideal business scenario (level on hands-on and improvement and professionalization potential, their expected valuation (EBITDA multiples), their view on shareholding (e.g. majority, minority, with or without partner etc.) and their preference on a type of seller (family, succession, industrial seller,...).

Thirdly, besides the typical investment criteria, this chapter also covers other investment criteria related topics, sometimes specific to ETA, which were sporadically and certainly not systematically covered in the existing academic literature such as location of the target (geography), ideal size of company (profitability, employment, turnover), preferred type of industry, relevance of experience in the industry, preferred deal scenario, valuation expectations, preferred shareholding situation (majority v. minority, with/without partner), preferred business scenario or preferred seller.

Fourthly and finally, this chapter will attempt to shed light on the differences of IC between the nascent ETA entrepreneurs (who are still looking to acquire their company) and the ETA entrepreneurs who actually acquired their company. Such an analysis has not been performed before.

As this was the first academic study on the investment criteria of the ETA entrepreneur, our analysis does certainly make a contribution to the knowledge of the ‘what’ question in an ETA environment describing a typical ETA target, based on the investment or decision criteria the (nascent) ETA entrepreneurs use to select their ETA targets.

#### **6.1.4. First research on social identities of ETA entrepreneurs and its relationship to the nascent-active gap (Chapter 5)**

Research on the social identity of firm founders and how it affects entrepreneurship is just beginning to emerge (Sieger et al., 2016).

The study in this thesis regarding the Social Identities makes different contributions to the prior literature.

Firstly, it provides **us for the first time in the literature with an understanding of the founder social identity of the (nascent) ETA entrepreneur**. Sieger et al. (2016) already hinted that their scale could provide opportunities for future scale building efforts targeted at founder social identities in specific contexts such as ETA transactions and improve the theoretical understanding of key phenomena in entrepreneurship such as ETA.

Secondly, the empirical context of our study differs from most other previous research. Contrary to most other studies performed on founder social identity and its relationship with entrepreneurship, is that **our observations were obtained in a real world setting, involving more seasoned and experienced entrepreneurs, and not in a student environment** (e.g. the GUESS database). The business proposals the students develop may not be representative of those developed by entrepreneurs seeking to invest a significant part of their own savings and net worth in their own business and taking on a substantial debt load in order to finance their acquisition. We confirmed the expectations of Sieger et al. (2016), who in their scale validation were using the GUESS student database, that a database of more mature and seasoned entrepreneurs would show a much more pronounced identity identification.

Moreover, this study enables us to examine the influence of the entrepreneur’s social identity as a founder or - for the first time here - as an acquirer of a company. Our analysis confirms that not all entrepreneurs have the same vision of the entrepreneurial opportunity than an ETA offers and that vision affects their beliefs and intentions as acquirers. **We advance the literature on entrepreneurial entry, in particular the so-called nascent-active gap (Braun, 2019), by analyzing which founder social identity influences the (nascent) ETA entrepreneurs to become an active ETA entrepreneur**. Their founder social identity is indeed an important factor that can help us to explain the transition from nascent to active entrepreneurship.

Fourthly and finally, our data sample, given their average age, equally **contributes to the academic research on late-career entrepreneurship** (Soto-Simeone & Kautonen, 2020) (Kautonen, Kibler, & Minniti, 2017) and its relationship with social identities of the entrepreneurs, albeit in the context of ETA.

## **6.2. Summary of research findings**

### **6.2.1. The impact of Financial, Human and Cultural Capital on becoming a (nascent) ETA Entrepreneur**

In this chapter we focus on the ETA as a way to enter entrepreneurship (“Entrepreneurial Entry”), as a path to entrepreneurial ownership, next to its more known and widespread discussed alternative, the start-up. We want to understand who is a nascent ETA entrepreneur and who of these will most likely acquire a company by examining the role of i.) human capital (e.g. education, prior work and entrepreneurial

experience), ii.) financial capital (e.g. household income and wealth) and iii.) cultural or social capital (influence from family/friends/network) on the decision to become an ETA entrepreneur.

To fully understand the impact of these three forms of capital on people's pursuit of ETA entrepreneurship and ETA entrepreneurial entry, we studied both the people at the earliest stage of the process, when they are still trying to pull their ideas and resources together, the so-called nascent entrepreneurs, as well as the people who succeeded already in acquiring their own company. And this while focusing on the middle aged and seasoned ETA entrepreneur.

Besides the descriptive statistics, which are interesting in itself, given that experienced (nascent) ETA entrepreneurs have never been subject to a dedicated and systematic survey, different logistic and linear regression models have indicated the existence of some significant relationships.

### *Human Capital*

Although no significant positive relationship between number of years "work experience" or "managerial work experience" and ETA entrepreneurial entry could be confirmed, "age", which is a moderator for experience, as a binary variable ( $\geq 50$  years) indicated a strong positive relationship with ETA entrepreneurial entry.

Although approximately one third of the respondents had some "previous entrepreneurial experience" such as a prior start-up experience or a (previous or actual) shareholding in another business, we could not confirm that these individuals had a higher likelihood of ETA entrepreneurial entry than people without such experience. On the other hand, we confirmed that individuals who are "self-employed" have a higher likelihood of ETA entrepreneurial entry than individuals who are not self-employed.

### *Financial capital*

Regarding financial capital, i.e. the amount the (nascent) ETA entrepreneur is prepared to invest, we observed that the majority of the (nascent) ETA entrepreneurs is prepared to invest between €150-450k. Our analysis, which is tailor-made to the ETA context, confirmed that the higher this "amount prepared to invest" of financial capital, the higher the likelihood of ETA entrepreneurial entry. We equally confirmed that individuals who made their "money through their previous employment career and personal savings", have a higher likelihood to acquire their own company, although the relationship seems more significant for respondents younger than 50 years.

### *Social capital*

Finally, analysing the social capital, our conclusions deviate from the majority of the existing research and agreed with Kim et al. (2006). Although almost one third of the respondents have parents with a "self-employed" background, we did not see an association between individuals with "parents who were/are business owner/self-employed" and the likeliness to acquire their own company. Given the average age of the (nascent) ETA entrepreneur and their long independent career, the influence of the parent's background has clearly faded away.

## **6.2.2. Investment Criteria of a (nascent) ETA Entrepreneur**

The analysis in this chapter tries to answer the "what" question, describing a typical ETA target, based on the investment or decision criteria the (nascent) ETA entrepreneurs use to select their ETA targets. These IC or

ideal ETA company characteristics, as well as their relative importance, are being compared with IC in other areas, such as private equity, business angel investments or venture capital.

In order to get a better understanding of the abundant academic research on IC and provide us with a solid academic foundation, this chapter provides an updated and systematic comprehensive literature review of academic research performed on IC used in the different sub-asset classes of private equity investments. In fact, our literature review provides the description of IC on two axes: per investor type and per main IC group.

The subsequent analysis in this chapter provides us with a better understanding of what the (nascent) ETA entrepreneur really is looking for in a company, although we realize that IC do not resonate equally with each entrepreneur/investor and ETA entrepreneurs should customize their target criteria based on their own skills and deficiencies, interests and personal references.

#### *Comparison IC of ETA versus other sub-asset classes and relative importance*

By analyzing the differences and similarities between the IC of the different sub-asset classes and the IC of ETA transactions, we were able to develop a framework of reference, situating the literature on IC according to its relevancy for ETA's.

According to our analysis, the IC of search funds and MBIs are in the first place the most relevant and comparable with the IC of our self-funded ETA transactions. Search funds are a specific type of ETA and therefore very comparable with self-funded ETA transactions. MBIs are equally quite similar as they are situated in a mature market, do take on leverage to finance the acquisition and last but not least always do include an equity contribution of the MBI investor, who is going to manage the investment post-transaction.

Furthermore, the IC of PE firms, who are equally investing in mature companies, include leverage and an equity contribution of the existing management, are relevant and comparable with the IC of ETA.

The IC of BAs and FOs, who equally both invest their own money and equally often prefer mature industries are to a lesser degree also relevant and comparable with the IC of ETA.

Finally, the IC of VCs and GEFs, are the least relevant for the IC of ETA, as these asset classes usually invest in other types of companies, their place in their cycle of existence and other industries.

The main systematic comparison is made between search fund IC and the IC of a seasoned experienced self-funded (nascent) ETA entrepreneur.

#### *Ideal company characteristics for an ETA entrepreneur*

In our study, we found that, out of a list of 18 IC, the top three investment criteria for the (nascent) ETA entrepreneur, according to our t-statistic analysis, are in order of importance: 1. "Potential market growth" 2. "Professionalization and improvement" and 3. "Stable demand and recurring customers". Not surprisingly, these criteria find a strong echo in the literature on search funds and MBI candidates.

Complementing our t-statistic analysis with a regression analysis, we conformed the results of the latter by indicating that IC such as "potential market growth", "particular or stable technology" and "sales turnover" are the IC variables in the model that have the strongest significant influence on whether a company gets acquired or not. This followed by "industry", "industry experience" and "previous financial trackrecord".

Location is an important investment criterion for the (nascent) ETA entrepreneur, as an ETA entrepreneur has to daily run the business and will therefore need to live relatively close to his/her company. Almost a third of the (nascent) ETA entrepreneurs is prepared to move if needed, while two thirds are not.

Regarding the ideal company characteristics, the majority of the (nascent) ETA entrepreneurs prefer a company with sales between €2-10 million, an EBITDA between €300k-1million and a staff size between 5-20 employees.

We equally asked the (nascent) ETA entrepreneurs whether they prefer to invest in industries in which they are knowledgeable and have experience due to previous work experience in that industry. Surprisingly less than one third of the respondents considers previous work experience in a certain industry important when they are looking at a target company to acquire.

The (nascent) ETA entrepreneur in our study has a rather diversified industry sector experience, whereby production and professional services are the two preponderant categories, followed by finance and trade & distribution. Not coincidentally, the (nascent) ETA entrepreneur prefers very similar industries where production, followed by trade & distribution and professional services are equally the dominant preferred industries.

The vast majority of the ETA entrepreneurs likes to be actively involved in the company and to add value by improving and professionalizing their acquired company. These numbers do not surprise as a experienced manager is most likely convinced that he or she could contribute to a further improvement of the acquired company by bringing his/her vast expertise to the table.

Regarding the expected valuation, we can conclude that the vast majority of our respondents have realistic valuation expectations. The majority of the respondents expect to pay a multiple between 4-5x EBITDA. These expected multiples are in line with the market and expected and paid in the world of search funds

It is clear that most ETA entrepreneurs are prepared to share their shareholding with others and do not necessary at all times need to have 100% of the shares. Although the majority of ETA entrepreneurs, prefers to have a majority, the vast majority remains flexible and pragmatic and prepared to invest alongside an investment partner a PE firm or a high net worth individual/BA.

Most of the respondents prefer to acquire their company from a family and this in a succession context.

#### *Differences between IC of nascent ETA entrepreneurs and actual ETA entrepreneurs*

This chapter did equally attempt to shed light on the differences of IC between the nascent ETA entrepreneurs (who are still looking to acquire their company) and the ETA entrepreneurs who actually acquired their company. Such an analysis has not been performed before. Three significant differences were found.

Regarding “Particular or stable technology” as an IC, a higher mean value for respondents who did not yet acquire a company is shown. This could possibly explain why ETA entrepreneurs who are less rigid on the technology of their ideal business, could have more chances in acquiring a company.

Regarding “Potential market growth” as an IC, a higher mean value for respondents who did not yet acquire a company versus the ones who did acquire one, could indicate that a more pragmatic view on growth potential could increase the chances to acquire a company.

Regarding the “ideal” staff size of a target company, there is a significant higher mean value for respondents who acquired a company compared to those who are still looking. Nascent ETA entrepreneurs, who are still looking, do not desire a lot of employees for several reasons. The ETA manager, who acquired a company, have already a company with a certain number of employees and have accepted this fact.

### **6.2.3. The Social identity of the (nascent) ETA entrepreneur and its relationship to the nascent-active gap and the desire for control**

The third part of our research effort provides us with a better view on who of the nascent ETA candidates makes real steps to ETA. Or in other words: what makes nascent ETA entrepreneurs more or less likely to become active ETA entrepreneurs. To address this question, we theorize that founder social identities affect the nascent-active gap.

In the mind of the ETA entrepreneur, when he acquires his/her company, he/she sees him/herself as the “founder” of a new entrepreneurial venture. The moment the ETA entrepreneur acquires his/her company, this is a “start-up” in his/her mind and the beginning of a new journey for him/her as entrepreneur. A start-up in which he will invest right from the beginning a considerable part of his/her own net worth and this with the purpose to further develop and professionalize this company, supported by his/her experience and expertise. Therefore the purpose of this research is to look at this ETA phenomenon for the first time through the theoretical glasses of the Social Identity Theory and the Founder identity literature, answering the question what makes (nascent) ETA entrepreneurs more or less likely to become active ETA entrepreneurs.

As expected, we concluded first that (nascent) ETA entrepreneurs have predominantly a Darwinian social identity, as most entrepreneurs do (Gruber & Fauchart, 2011). The (nascent) ETA entrepreneur had indeed a “homo economicus” approach, focusing on financial investment criteria such as profit and cash-flow and seeking for competitive advantages. This economic personal self-interest is equally needed to raise (and repay afterwards) the necessary acquisition debt and to realize an attractive return for him/herself on his/her own equity investment.

Secondly, we equally confirmed the expectations of Sieger et al., who in their scale validation were using the GUESS student database, that a database of more mature and seasoned entrepreneurs would show a much more pronounced identity identification.

Finally, this study enables us to examine the influence of the entrepreneur’s social identity as a founder or - for the first time here - as an acquirer of a company. Our analysis confirms that not all entrepreneurs have the same vision of the entrepreneurial opportunity than an ETA transaction offers, given their different social identities, and that vision affects their beliefs and intentions as acquirers. Their founder social identity is an important factor that can help us to explain the transition from nascent to active entrepreneurship. Contrary to Braun (2019) who analysed the nascent-active gap for founders of start-ups and did find significant relationships, our study did not found a significant relationship between founder social identity and the switch from nascent into active ETA entrepreneurship.

### **6.2.4. Implications for Theory and academic research**

As the vast majority of the literature on entrepreneurship is dedicated to the start-up, our research on ETA, an area that is relatively recent and has hardly been researched, contributes to the academic research on entrepreneurship as it sheds light on phenomena such as nascent entrepreneurship (3.2.4.1.), entrepreneurial entry (3.2.4.2.), entrepreneurial capital (3.3.) from another point of view. Underlying



theories, such as the resource based theory (3.2.3.), the human capital theory (3.3.3.), the social capital theory, the liquidity constraint theory (3.3.2.) have equally hardly been looked at through an ETA lens.

In the abundant literature on IC, this research adds an analysis of the IC in an ETA context, while in the mean time providing further research with an updated and very comprehensive and systematic academic literature overview of IC.

Contrary to LBOS, VCs, BAs and PEs which are theoretically founded in the agency theory, in the context of ETA, the agency theory and the academic literature around it, seems to have only a limited relevancy. Although a type two agency problem could in certain limited circumstances play a role, Agency Theory in general, however, does not fully explain the individual entrepreneurial motivations to perform an ETA transactions and does not discuss the role of capabilities, interests or characteristics of an ETA manager.

As ETA constitutes its own class of entrepreneurially motivated activity, ETA must therefore be conceptualized as a separate value-generation vehicle in and of itself (Hunt & Fund, 2012). Among all the different types of entrepreneurial finance techniques, ETA stands the most resolutely as equal parts entrepreneurship and finance. Agreeing with Hunt & Fund, ETA is truly boundary spanning and can therefore not be put in one theoretical framework.

Our research therefore suggests other academic theoretical foundations of ETA. According to the Theory of Planned Behavior (4.3.2.), for example, having a clearly defined set of IC is an indication of entrepreneurial intentions and subsequent behavior (Kautonen, van Gelderen, & Fink, 2015). One could equally argue based on the Social Identity Theory (4.3.3.), that the influence of the entrepreneur's social identity as a founder or - for the first time here - as an acquirer of a company, could have an influence on the type of company he/she wants to acquire and hence, the IC, he/she considers important. Furthermore, Fit theories (4.3.4.), describing an ideal compatibility (good fit) between the entrepreneur and the opportunity, leading to venture success. This fit will have an impact on the IC preferences. Finally, Investigating whether the recognition of new business opportunities, through the existence of IC, involves a pattern recognition, i.e. the cognitive process through which individuals identify meaningful patterns in complex arrays of events or trends, could also influence the choice of IC.

### **6.3. Practical Implications of current doctoral research**

The objective of this research and hopefully a lot of subsequent research on this very fascinating topic, is to get a better knowledge of the phenomenon of ETA, its characteristics and drivers. This study stresses the need for more academic research on the topic of ETA and also for policymakers and practitioners to give equal attention to startups and company transfers and to do so in a much more coordinated way.

The research performed in this study has definitely some practical use. The implications for practice are equally explained at the end of each chapter

#### **6.3.1. The typology of the (nascent) ETA entrepreneur**

The research performed in the first part of this thesis, where a typology of the (nascent) ETA entrepreneur is made ("who is a nascent ETA entrepreneur?") and the ETA transaction is researched as a way to enter entrepreneurship ("Entrepreneurial Entry") by examining the role of financial, human capital and cultural capital on the decision to become an ETA entrepreneur.

This research has definitely some practical use as the outcome of this research should help the following different constituencies:

*A recruitment agency* in their search for a successor for a company's general management. The (nascent) ETA entrepreneur could be a suitable candidate. In particular, if they provide some shareholding opportunities or performance base incentives.

*A private equity firm* which is looking for a manager to run the company it plans to acquire, a so-called MBI candidate. The (nascent) ETA entrepreneur could be a suitable candidate.

*The selling shareholders* which are looking for an appropriate successor to run the company. The (nascent) ETA entrepreneur candidate could be a suitable candidate.

*HR managers*, whose goal is to keep the best employees, should make sure that potential ETA entrepreneurs - often very talented and motivated people - have enough challenge in their current job in order for them to remain with their current employer.

*Policy makers* can raise awareness of takeover opportunities and focus on creating a better match between potential buyers and sellers in marketplaces for business transfers. In fact, if incumbent business owners do not find successors for their business, the economic value of these businesses may be lost, with negative implications for employment, entrepreneurial experience and economic growth. Policy makers should also address the takeover option and takeovers should be given the same importance as new venture start-ups in policies. Several proposals could be made to improve the business transfer environment, such as the reduction of taxes, measures to encourage timely preparation of those who want to sell their business and financial support for those who want to take-over those businesses. The aging population and recent increases in the proportion of business owners tot the working population, combined with the positive effects of both phenomena on the preference for takeover, suggest that taking over a firm will increase in importance in the future.

And last but not least *the ETA candidate him/herself*, the more the phenomenon gets analyzed, known and understood, the more mainstream it becomes. The more mainstream it becomes, the more it becomes accepted as a real act of entrepreneurship and a valuable career alternative, the easier for the constituencies involved to be open for the idea (family, friends, banks, sellers,...). It should for every would-be entrepreneur a way to fulfill his/her dream.

Ideally this and subsequent research should in fact lead to a model that could predict that certain people, for example working in a multinational or consulting environment, will be interested to perform an ETA transaction if certain conditions are met.

This research and subsequent research will also indicate that if the people who aspire ETA have certain profiles, the chance for them that an ETA transaction will happen is higher than if they did not have these profiles.

### **6.3.2. The investment criteria of a (nascent) ETA entrepreneur**

It is important for researchers to test criteria before making recommendations to entrepreneurs, venture capitalists or public policy makers on the use of evaluation criteria. Basic questions become crucial: ask what, when and why a particular criterion is important, as well as how it applies in a particular region at a particular time.

Hence, different constituencies could be able to benefit from the results of this part of the research.

Having a defined set of criteria provides a framework of ideal circumstances, not absolute restrictions. No potential acquisition will meet all the investment criteria, requiring tradeoffs between the incremental risk being assumed and the potential reward.

Different constituencies could be able to benefit from the results of this research.

*Policymakers.* As business angel and ETA investing (“informal venture capital”) is gaining popularity, there are constraints on the BA and ETA entrepreneurs’ ability to invest. The implication is that there is a need for further interventions by policy-makers to remove these barriers so that more small firms can take advantage of the substantial pool of angel finance and ETA investors that is available. Policymakers can use the investment criteria findings to develop policies that can help more small firms to take advantage of the substantial pool of angel finance and ETA investors that is available. Policy makers such as the government should be able to facilitate the development and prosperity of the ETA industry as a whole by issuing rules and regulations that streamline the evaluation process.

*ETA entrepreneurs “to better screen and select deals”.* This analysis should allow them “to better screen potential deals”, i.e. improving the investment process for the ETA entrepreneur. Considering the amount of time (and money) that due diligence and negotiation of terms may take, it is imperative that ETA entrepreneurs minimize their efforts during screening so that only those deals with the most potential proceed to the next stage. Yet, at the same time, the screening process should also be careful not to eliminate gazelles prematurely. ETA entrepreneurs are often in a quandary. How can they efficiently screen venture proposals without unduly rejecting high potential investments? A thorough knowledge and understanding of the used IC could help.

*ETA entrepreneurs “to do better deals”.* The success rate of venture capital-backed ventures is significantly higher than the success rate of new ventures generally (Dorsey, 1979; Davis and Stetson, 1984). ETA backed companies exhibit less survival risk than new venture creation, but with at least comparable returns and substantially less variance. ETA’s system wealth generation even equals or exceeds that of VC-backed ventures (Hunt & Fund, 2012). A better understanding of the IC used could lead to a better understanding of the reasons for this success and lead to an improvement in the success rate of new ETA ventures. In fact, a thorough understanding of the right ETA investment criteria would help the entrepreneurs to become wiser and more thorough in evaluating proposals, without limiting themselves to standard academic concepts which may not keep pace with fast-evolving business models. A key challenge facing the ETA entrepreneur is to know “when to take the train”, lest they never leave the station by waiting for opportunities that fit all the IC perfectly (Kelly, 2017). Having predefined IC can help when an opportunity falls outside these IC, there is a reason to assess carefully what risks are increased and what corresponding rewards may be gained.

*ETA entrepreneurs: “to obtain easier and better financing”.* Finally, ETA investment criteria are of enormous importance to ETA entrepreneurs seeking deal financing. Such entrepreneurs require a significant infusion of capital in order to execute the transaction. Potential partners, such as the banks, therefore also want to be informed well of the criteria the ETA entrepreneurs use for evaluation. This could help them to influence their own decision making process. A lack of insight by applicants for capital affected the nature of the bank decision making.

*ETA entrepreneurs: “to obtain the right investment partner”.* Regarding the preferred shareholding of an ETA entrepreneur, our study shows that the majority of the ETA entrepreneurs is open to invest alongside an

investment partner (a complementary ETA investor, a VC, a BA, a PE firm, a high net worth individual...) and this for different reasons such as bringing complimentary knowledge and skills on board or simply due to lack of personal finances. This study gives an overview of these investment criteria, comparing them with the decision criteria applied by VCs, PEs or BAs. It should therefore provide the ETA entrepreneur with a better and more profound understanding of which criteria potential co-investment partners such as BAs or PEs focus on. Hence, enabling the ETA entrepreneur to better tailor his/her pitches when seeking external equity financing. In this kind of self-presentation ETA entrepreneurs seeking additional funds from PE investors should emphasize their business and financials. Conversely, entrepreneurs seeking funds from BAs and high networth individuals, should focus on their own managerial capabilities and track record. Establishing IC up front helps align the ETA entrepreneur's and the investment partner's expectations for the general nature of the investment opportunities that are likely to emerge from the search effort (Kelly, 2017).

### **6.3.3. The Social Identity of an ETA entrepreneur**

*Educators.* The findings in this chapter are particularly useful for educators in (ETA) entrepreneurship and organizations responsible for formulating development policies in this area. When we attempt to foster business spirit among nascent ETA entrepreneurs, it is not only important to teach individuals the type of abilities that a new firm requires. It is just as important to consider the individual's identity as an internal factor that acts on his or her beliefs and aspirations. This study enables us to propose future lines of training in entrepreneurship that foster the use of Social Identity Theory in decision making, given that the entrepreneurial identity is such a key element in the entrepreneurial process. Training programs would benefit from placing more focus on assisting the potential ETA entrepreneurs in entrepreneurial identity work, searching for their authentic entrepreneurial identity (Lewis, 2013) in unison with the idea and business development (Alsos et al. 2016).

*Polymakers and advisors.* This study shows the importance of acknowledging the variations in an ETA entrepreneur's aspirations related to acquire the firm of his dreams. These variations imply that policy makers and advisors should not assume that all entrepreneurs are mainly motivated by profits and act accordingly. Instead motivational structures are varied, and consequently, the behaviors that are the most rational vary depending on the identity of the entrepreneur, including his/her motives. Failure to take this into account may lead to inadequate advice and incitements directed towards entrepreneurs and hence poorer results from the initiatives. It is indeed useful for analyzing individual identity from a broader perspective, since social identity may be a factor in identifying opportunities that is distinct from other factors discussed in the literature, such as prior knowledge, access to information, and different cognitive capabilities (Shane & Venkataraman, 2001) (Shane S. , 2003).

## **6.4. Limitations**

Notwithstanding some of the limitations which have been already explained in the different chapters, often in the specific context of the chapter's research topic, we provide here below a general overview of the main limitations of this study.

### **6.4.1. Size of the database for a quantitative study**

Although the initially researched database contained more than a thousand (see Chapter 2) data points, subsequent data cleaning combined with an acceptable response rate of 20%, lead ultimately to 170 valid data (whereof only 50 individuals who actually purchased their own company). Such a relatively small number as the basis for a quantitative study increases significantly the risk to have an overfitted model, in

particular as the survey contained many variables or to not meet the 10 respondents per item rule for our measuring scale (Sieger et al., 2016).

It would therefore be interesting to perform an additional study on this topic based on data gathered through a more general database. The challenge there, however, is to find sufficient motivated (nascent) ETA entrepreneurs in the general database who are prepared to answer a detailed survey.

However, a larger sample size is, according to our opinion, unlikely to influence already significant effects. Rather, it might be that our marginal effects might be further strengthened. Nonetheless, we welcome research with larger sample sizes in order to confirm our results.

#### **6.4.2. Single country data**

Our study is limited to Belgian data. Since national culture influences entrepreneurial spirit significantly (Zahra, 2007), entrepreneurs and their decision-making frameworks are influenced by the different dimensions composing national culture (Thomas & Mueller, 2000). Braun (2019), who equally performs a multi-country study includes GDP growth of the respective countries as a moderator in his analysis, as well as control variables linked to the country level. A possible road for future research, would be to analyze the ETA nascent entrepreneur phenomenon through the lens of a more international data set.

#### **6.4.3. No longitudinal perspective**

Further studies adopting longitudinal approaches are needed to verify results and they can also examine variations in behavior and identity over time. Existing research also suggests that the entrepreneurial identity is not stable and fixed but emergent (Leitch et al., 2013). As entrepreneurs may develop their entrepreneurial identity over time (Jain, George, & Maltarich, 2009), it would be interesting to study if the changes take place within the social identities or if indeed an individual can change from one social identity category to another as the venture unfolds (Alsos et al. 2016) (Ignjatovich, 2017). Future research could use a similar longitudinal approach while analyzing the ETA entrepreneur nascent-active gap.

Furthermore, decision making on the basis of IC is a complex and multi-stage process which requires in depth analysis from different perspectives like deal origination, deal structuring and due diligence. Certain studies have pointed out that research has to move from a single stage, single set of criteria to the more complex and realistic perspective of a multi-stage, multi-criteria and multi-person decision. This research is limited to the analysis of IC at only one point in a given time.

Hence, a similar study, taking a more longitudinal perspective, would undoubtedly further enrich our knowledge of the ETA phenomenon.

#### **6.4.4. Hindsight bias**

We did limit ourselves exclusively to a post hoc methodology: survey research method. This retrospective methodology can be dangerous due to the post hoc rationalization biases and the lack of introspection among informants (Zacharakis & Meyer, 1998), as people do not always recall the full understanding of their decision-making process and cannot always precisely recount their cognitive processes in retrospect. Surveys which ask entrepreneurs who do succeed in starting up can suffer from “hindsight” bias. Hindsight bias refers to incorrect reporting of information to survey interviewers caused by memory loss and the re-interpretation of facts as a consequence of events that occurred after start-up rather than before it (Roese & Vohs, 2012). This type of bias can also be expected in the case of ETA transactions, in particular from the individuals who

already acquired their company, and there is no reason why this bias would be lower than in the case of a start-up. These post hoc limitations can be overcome by focusing on real-time research methodologies (Granz, Henn, & Lutz, 2020) such as simultaneous verbal protocols and conjoint analysis.

Other authors, such as Gompers et al. (2020) combined their survey with additional interviews, asking the respondents for more detailed answers in order to provide clarification and more richness on the topics and, potentially, to provide some direction for future research. This shortcoming is to a certain degree mitigated here as the author possesses an experience of over 25 years in the research topic and on the way consulted on a regular basis other practitioners for ad hoc feedback.

Future research on ETA, using for example verbal protocols, formally recording how past decisions were made at the time of the decision (versus trying to recall how that decision was made from memory) or a conjoint analysis method, could help to overcome this bias.

#### **6.4.5. Academic environment and motivational bias.**

Another potential risk for bias is that our population of (nascent) ETA entrepreneurs may not be representative of the broader world of ETA investors, as they all have an “academic” link with Vlerick Business School and followed, either the Buyout Academy or attended the Buy-Your-Own-Company Conference, both organized by Vlerick Business School. However, Vlerick is the largest Business School in Belgium and well accepted and represented in the business world. However, certain acts of ETA, in particular in relatively “unsophisticated” industries or sectors, such as the take-over of a restaurant or bar will not be covered by our data sample. Most of the research, in particular the research on search funds suffers from the same limitation in this respect, if not more (as they almost only include post-MBA’s from top business schools).

Secondly, as only motivated people who were prepared to pay a fee for attending the Vlerick conference or the academy and these activities took place in an academic environment, the database of respondents will vary from the databases most other researchers used as they generally use large official and more general data bases (e.g. Helleboogh (2010) used Bel-first official database). This academic bias could therefore exist in two ways: i.) the type of people (academic) and ii.) the type of transactions/companies (more technological and complex businesses). On the other hand, the database used in this study has the advantage to target specific and very relevant data points, confirmed by a relatively high response rate.

In order to tackle these two biases, it would therefore be interesting to perform an additional and complementary study on this topic based on data gathered through a more general database.

#### **6.5. Avenues for further Research**

The existing research exclusively dedicated to ETA up to today is very limited and has been discussed and integrated – in a quite exhaustive way - in this thesis. Plenty of avenues for follow-on research do exist:

*Research on nascent entrepreneurship and entrepreneurial entry in the context of ETA.* Research on nascent entrepreneurship has grown rapidly. GEM- or PSED-type data has been the basis for well over 200 journal articles and Google Scholar counts nearly 6,000 works published in the 2009-2013 period, which use the term nascent entrepreneurship or nascent entrepreneur. Most if not all this research could be applied on the currently non existing subsegment of nascent ETA entrepreneurship or nascent ETA entrepreneur. A vast part of the research performed on nascent entrepreneurship and entrepreneurial entry, including the mode of entry, could be indeed the basis for a similar research effort on nascent ETA entrepreneurship and entrepreneurial entry via the ETA door.

*A more in-depth analysis of the ETA entrepreneur who actually acquired a company.* Another area of further research on ETA could be a more in-depth analysis of the ETA entrepreneur, the individual who actually purchased a company, his/her profile, motivations etc.

*The ETA post-acquisition: performance and the impact of the ETA entrepreneur on this performance.* It would be very interesting to analyze what happens with the ETA entrepreneur and the company he/she purchased post acquisition. For example, measuring the performance of executed ETA transactions and the impact of the ETA entrepreneur on that performance. Given that the performance of the search fund investments is accurately measured by the Stanford GSB and IESE data (in terms of IRR's and MOICs), it would be interesting to measure similar performance criteria of ETA transactions executed in our database (N=50). Or in case they would not be exited yet (which in the case of seasoned and experienced ETA investors and their longer term horizon is probably less the case than in the search fund originated deals), the evolution in the performance could be measured according to different parameters. We then would be able to answer the pressing question: What is the impact of the ETA entrepreneur on the performance of the acquired business? The impact of his/her post-investment involvement. Moreover, as did Estrada de la Cruz et al. (2018) in her research, future research could examine how these social identities influence the entrepreneur's, in this case the ETA entrepreneur's, way of managing his/her firm and its consequences for business performance.

*A focus on the company acquired through an ETA transaction as an alternative unit of analysis.* In line with the previous avenue for further research, further analysis could be done by researching the company and its characteristics such as type, previous ownership, industry, employment, profitability etc., while less focusing on the ETA manager and his/her characteristics and preferences.

*Understanding the relation between IC used and performance.* Further research could then compare the performance of the ETA transactions with the investment criteria applied in their investment process. Future research needs to check whether the ETA's who were successful would have investment criteria similar to BAs, VCs and PEs and whether this could help to predict performances, given product and market characteristics of the new venture.

*Alternative database and research method.* Given that this is the first academic research on the experienced (Belgian) ETA entrepreneurs, we suggest more intensive research activities in the ETA cosmos relying on other more general or larger data bases, a more longitudinal approach and/or based on other research methods such as a conjoint analyses or verbal protocols. We equally suggest to expand the geographical scope of the research to investigate the variability of results on the ETA research across further countries, using cross-country datasets, which can be influenced by endogenous factors such as different legal, regulatory, industrial and cultural settings.

*Valuation methods used and return expectations.* Gompers et al. equally include the valuation methods in their study of the IC of VC's (2020) and PEs (2016). It would be interesting to know which valuation methods ETA entrepreneurs use when evaluating their acquisition target. It would equally be good to understand what the return requirements are of an ETA entrepreneur, in particular in light of his/her large personal equity contribution.

*The investment partner selection.* Regarding the preferred shareholding of an ETA entrepreneur, our study shows that the majority of ETA entrepreneurs is open to invest alongside an investment partner (a complementary ETA investor, a VC, a BA, a PE firm, a high net worth individual...), although with a slight preference to retain a majority shareholding. Further research could investigate how ETA entrepreneurs evaluate and select their preferred investment partner.

*Linking my own research.* Making the link with the first part as the typology of the (nascent) ETA entrepreneur could influence the process of search and evaluation (investment criteria). For example, the link between backgrounds of the ETA entrepreneur and their attitudes towards their search and screening process. Or linking the third part with the first, as social identities will influence the characteristics of a (nascent) ETA entrepreneur and his/her view on the nascent-active gap.

In conclusion, as ETA is hitherto a barely covered subject in the academic literature and the academic research on ETA is still in its infancy, there are still plenty of topics surrounding ETA to advance the knowledge in this fascinating academic area that are still waiting for further research.

Without any doubt, there is work to be done and many areas in the ETA space are still academic wasteland.





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## Appendix 1. The Survey

### Entrepreneurship Through Acquisition - Part 1

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Start of Block: General - Part 1

Q12 GENERAL

---

Q1 1. Are or were you a candidate looking to acquire your own company?

Yes (1)

No (2)

---

*Display This Question:*

*If Q1 = No*

Q2 This means that you are an intermediary (bank, broker, corporate finance, adviser, lawyer, ...), academic or an investor (private equity fund, individual investor, family office, ...). You do not have to fill in the questionnaire. Please leave your email address if you want to receive the results of this survey.

---

End of Block: General - Part 1

---

Start of Block: General - Part 2

Q64 2. Did you end up acquiring your own company?

Yes (1)

Not yet (2)

---

*Display This Question:*

*If Q64 = Yes*

Q65 Congratulations! We wish you all the best of luck! As this questionnaire is only the first part of the PhD thesis, you will receive in the course of next year a second questionnaire with specific questions on your acquisition and the process. Nevertheless, please carry on filling in the current questionnaire, as if you were still looking to acquire your own company. Your answers are very important to us!

---

**Q66 3. Have you been attending one or more of the following Vlerick activities over the last years?**

- The Buy Your Own Company Conference (1)
  - The Entrepreneurial Buyout Academy (2)
  - None of the above (3)
- 

*Display This Question:*

*If Q64 = Not yet*

**Q67 4. During the last year, how much full time equivalent days have you spent while looking to acquire your own company?**

- Below 5 full time equivalent days (1)
  - Between 5-15 full time equivalent days (2)
  - Between 15-30 full time equivalent days (3)
  - Between 30-60 full time equivalent days (4)
  - Between 60-90 full time equivalent days (5)
  - Between 90-120 full time equivalent days (6)
  - More than 120 full time equivalent days (7)
- 

*Display This Question:*

*If Q64 = Yes*

**Q74 4. During the last year before you acquired your company, how much full time equivalent days have you spent while looking to acquire your own company?**

- Below 5 full time equivalent days (1)
  - Between 5-15 full time equivalent days (2)
  - Between 15-30 full time equivalent days (3)
  - Between 30-60 full time equivalent days (4)
  - Between 60-90 full time equivalent days (5)
  - Between 90-120 full time equivalent days (6)
  - More than 120 full time equivalent days (7)
-

*Display This Question:*

*If Q64 = Not yet*

**Q68 5. How many teasers have you looked at in the last year?**

---

---

*Display This Question:*

*If Q64 = Yes*

**Q75 5. How many teasers have you looked at in the last year before your acquired your company?**

---

---

*Display This Question:*

*If Q64 = Not yet*

**Q69 6. How many info memoranda have you looked at in the last year?**

---

---

*Display This Question:*

*If Q64 = Yes*

**Q76 6. How many info memoranda have you looked at in the last year before your acquired your company?**

---

---

*Display This Question:*

*If Q64 = Not yet*

**Q70 7. How many potential acquisition targets have you looked at in the last year without a structured process (i.e., no teaser, no info memorandum, no intermediary involved, ...)?**

---

---

*Display This Question:*

*If Q64 = Yes*

**Q77 7. How many potential acquisition targets have you looked at in the last year before your acquired your company without a structured process (i.e., no teaser, no info memorandum, no intermediary involved, ...)?**

---

---



Display This Question:

If Q64 = Not yet

Q71 8. How many Letter of Intent's or bid letters have you sent in the last year?

---

Display This Question:

If Q64 = Yes

Q78 8. How many Letter of Intent's or bid letters have you sent in the last year before your acquired your company?

---

Display This Question:

If Q64 = Not yet

Q72 9. How many targets have you studied in greater detail in the last year (plant or premises visit(s), meeting with owners,...)?

---

Display This Question:

If Q64 = Yes

Q79 9. How many targets have you studied in greater detail in the last year (plant or premises visit(s), meeting with owners,...) before your acquired your company?

---

End of Block: General - Part 2

---

Start of Block: Who are you? - Part 1

Q13 WHO ARE YOU?

---

Q14 1. What is your year of birth?

---

Q15 2. What is your gender?

Male (1)

Female (2)

---

**Q16 3. What is your highest level of education?**

- I did not complete secondary school ("middelbare school") (1)
  - Secondary school ("middelbare school") (2)
  - Bachelor degree (3)
  - Master degree (4)
  - PhD (5)
- 

**Q17 4. Type of main education:**

- Business/economics (1)
  - Sciences (including engineering) (2)
  - Social sciences (3)
  - Law (4)
  - Languages (5)
  - Other (6)
- 

**Q18 5. Number of years work experience?**

\_\_\_\_\_

---

**Q19 6. Number of years working outside of Belgium?**

\_\_\_\_\_

---

**Q20 7. Type of main industry sector experience. Please indicate one of the following:**

- Capital intensive (1)
- Agribusiness/agriculture (2)
- Production (3)
- Building (4)
- Trade & distribution (5)

- Retail/food (6)
  - Retail/non-food (7)
  - Repair/transport (8)
  - Finance (9)
  - Real estate (10)
  - Professional services (11)
  - Other (12)
- 

**Q21 8. Type of current employer. Please indicate one of the following:**

- Self-employed (I acquired my own company) (10)
- Self-employed (full time looking to acquire a company) (1)
- Self-employed (full time, mainly other activities than looking to acquire a company) (2)
- Self-employed (part time looking to acquire a company and part time other activities) (3)
- Stock quoted company (4)
- Large private company (>250 employees) (5)
- Medium sized SME (>50 and (6)
- Small SME ( (7)
- Government (8)
- Other (9)

End of Block: Who are you? - Part 1

---

Start of Block: Who are you? - Part 2

*Display This Question:*

*If Q64 = Not yet*

**Q22 9. Years of employment with current employer?**

---

---

*Display This Question:*

*If Q64 = Yes*

**Q81 9. Years of employment with my own company?**

---

*Display This Question:*

*If Q64 = Not yet*

**Q23 10. Size of the last or current company (including head office and subsidiaries) you worked for:**

- 1 employee (1)
  - >1 and (2)
  - >10 and (3)
  - >50 and (4)
  - >250 and (5)
  - >1000 employees (6)
- 

*Display This Question:*

*If Q64 = Yes*

**Q82 10. Size of the last or current company (including head office and subsidiaries) you worked for before you acquired your company:**

- 1 employee (1)
  - >1 and (2)
  - >10 and (3)
  - >50 and (4)
  - >250 and (5)
  - >1000 employees (6)
-

*Display This Question:*

*If Q64 = Not yet*

**Q24 11. Managerial background at last job. Please indicate one of the following:**

- General management (1)
  - Sales & marketing (2)
  - Production (3)
  - Finance & administration (4)
  - Other (5)
- 

*Display This Question:*

*If Q64 = Yes*

**Q83 11. Managerial background at last job before you acquired your company. Please indicate one of the following:**

- General management (1)
  - Sales & marketing (2)
  - Production (3)
  - Finance & administration (4)
  - Other (5)
- 

*Display This Question:*

*If Q24 = General management*

**Q25 How many years in general management specifically?**

\_\_\_\_\_

---

*Display This Question:*

*If Q83 = General management*

**Q84 How many years in general management specifically before you acquired your company?**

\_\_\_\_\_

---

*Display This Question:*

*If Q64 = Not yet*

**Q26 12. Level of managerial experience (expressed in end responsibility of a profit & loss statement with sales in euros) at your last job:**

- Responsible for P&L with sales of (1)
  - Responsible for P&L with sales >1 million and (2)
  - Responsible for P&L with sales >3 million and (3)
  - Responsible for P&L with sales >10 million and <30 million (4)
  - Responsible for P&L with sales >30 million and (5)
  - Responsible for P&L with sales >50 million (6)
- 

*Display This Question:*

*If Q64 = Yes*

**Q85 12. Level of managerial experience (expressed in end responsibility of a profit & loss statement with sales in euros) at your last job before you acquired your company:**

- Responsible for P&L with sales of (1)
  - Responsible for P&L with sales >1 million and (2)
  - Responsible for P&L with sales >3 million and (3)
  - Responsible for P&L with sales >10 million and <30 million (4)
  - Responsible for P&L with sales >30 million and (5)
  - Responsible for P&L with sales >50 million (6)
- 

**Q27 13. Do you have previous start-up experience?**

- Yes (1)
  - No (2)
-

*Display This Question:*

*If Q27 = Yes*

**Q28 How many companies have you already founded or co-founded as of today?**

---

**Q29 14. Do you anticipate (co-)founding a venture/start-up sometime in the future?**

Yes (1)

No (2)

---

*Display This Question:*

*If Q64 = Not yet*

**Q30 15. Have you previously acquired the majority of the shares of a company?**

Yes (1)

No (2)

---

*Display This Question:*

*If Q64 = Yes*

**Q86 15. Have you previously acquired the majority of the shares of a company before you acquired your company?**

Yes (1)

No (2)

---

*Display This Question:*

*If Q30 = Yes*

**Q73 Have you subsequently sold this majority stake in this company?**

Yes (1)

No (2)

---

*Display This Question:*

*If Q86 = Yes*

**Q87 Have you subsequently sold this majority stake in this company before you acquired your company?**

Yes (1)

No (2)

---

*Display This Question:*

*If Q64 = Not yet*

**Q31 16. Have you previously acquired a minority stake in a company (excluding shares of quoted companies)?**

Yes (1)

No (2)

---

*Display This Question:*

*If Q64 = Yes*

**Q88 16. Have you previously acquired a minority stake in a company (excluding shares of quoted companies) before you acquired your company?**

Yes (1)

No (2)

---

*Display This Question:*

*If Q31 = Yes*

**Q32 Have you subsequently sold this minority stake in this company?**

Yes (1)

No (2)

---

*Display This Question:*

*If Q88 = Yes*

**Q89 Have you subsequently sold this minority stake in this company before you acquired your company?**

Yes (1)

No (2)

---



**Q33 17. What were your parents? Please indicate one of the following:**

- Blue collar employees on payroll (1)
- White collar employees on payroll (2)
- Business owners (3)
- Professional services (e.g., doctors, lawyers, ... or the so called “vrije beroepen”) (4)
- Other (5)

End of Block: Who are you? - Part 2

---

Start of Block: Who are you? - Part 3

*Display This Question:*

*If Q64 = Not yet*

**Q34 18. How much do you want to invest in the business you want to acquire? Please indicate one of the following:**

- <100k (1)
- >100k and (2)
- >200k and (3)
- >400k and (4)
- >600k and (5)
- >800k and (6)
- >1000k and (7)
- >1200k (8)

---

*Display This Question:*

*If Q64 = Yes*

**Q90 18. How much did you want to invest in the business you want to acquire before you acquired your company? Please indicate one of the following:**

- <100k (1)
- >100k and (2)
- >200k and (3)

- >400k and (4)
- >600k and (5)
- >800k and (6)
- >1000k and (7)
- >1200k (8)

**Q35 19. A question on the origin of the equity contribution to finance your personal investment. How important is the following financing source for your equity contribution?**

	Extremely important (1)	Very important (2)	Somewhat important (3)	Not so important (4)	Not at all important (5)
Personal savings due to previous employment career (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Golden handshake from previous employer (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Re-mortgage of house (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sale of other personal financial assets (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financing from partner (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loans from friends/family (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inherited money (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Display This Question:*

*If Q64 = Not yet*

**Q36 20. The amount of equity you want to invest is what % of your current personal net worth (“Persoonlijk vermogen met aftrek van alle schulden”)? Net worth is defined as: non-financial assets (e.g., house, car, ...) + financial assets (e.g., cash, stocks, bonds, ...) - outstanding debt (e.g., mortgage debt, personal loans, ...).**

- (1)
- >20% and (2)

- >40% and (3)
- >60% and (4)
- >80% (5)

Display This Question:

If Q64 = Yes

**Q91 20. The amount of equity you invested is what % of your current personal net worth (“Persoonlijk vermogen met aftrek van alle schulden”)?** Net worth is defined as: non-financial assets (e.g., house, car, ...) + financial assets (e.g., cash, stocks, bonds, ...) - outstanding debt (e.g., mortgage debt, personal loans, ...).

- (1)
- >20% and (2)
- >40% and (3)
- >60% and (4)
- >80% (5)

**Q37 21. Please rate yourself against your peers (i.e., colleagues, competitors, similar (candidate) entrepreneurs, ...) on the following measures:**

	Much worse (1)	A little worse (2)	About the same (3)	A little better (4)	Much better (5)
Being able to solve problems (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing money (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being creative (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Getting people to agree with you (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being a leader (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Making decisions (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Who are you? - Part 3

Q38 WHAT DO YOU WANT TO BUY?

Q39 1. While searching for a suitable target company, how important do you rate each of these criteria?

	Very important (1)	Important (2)	Neutral (3)	Unimportant (4)	Very unimportant (5)
Location (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Industry (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Particular or stable technology (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sales turnover (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Potential market growth (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stable demand (recurring customers) (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competitive strength and limited exposure to import competition (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Valuation multiples (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Highly cash flow positive (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Highly leverageable (i.e., less equity needed) (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asset value (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Turnaround potential (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professionalisation & improvement potential (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Previous financial track-record (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Future investment requirements (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Company management and presence of good second tier management (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Buy and build potential (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exit opportunities (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

**Q40 2. In terms of the location of the target, where can the company be located? Please indicate one or more of the following:**

- Within my own region within a 50 km distance (1)
- Within Belgium (2)
- Within neighboring countries (3)
- Anywhere in the world (4)

---

*Display This Question:*

*If Q64 = Not yet*

**Q41 3. In terms of the location of the target, are you prepared to move your residence?**

- Yes (1)
- No (2)

---

*Display This Question:*

*If Q64 = Yes*

**Q92 3. In terms of the location of the target, were you prepared to move your residence?**

- Yes (1)
- No (2)

**End of Block: What do you want to buy? - Part 1**

---

Start of Block: What do you want to buy? - Part 2

Display This Question:

If Q64 = Not yet

Q42 4. In turnover, what is the ideal size for your target company? Please indicate one of the following:

- Sales (1)
  - Sales between 2-10 million (2)
  - Sales between 10-20 million (3)
  - Sales above 20 million (4)
- 

Display This Question:

If Q64 = Yes

Q93 4. In turnover, what was the ideal size for your target company? Please indicate one of the following:

- Sales (1)
  - Sales between 2-10 million (2)
  - Sales between 10-20 million (3)
  - Sales above 20 million (4)
- 

Display This Question:

If Q64 = Not yet

Q43 5. In profitability, what is the ideal profitability for your target company? Please indicate one of the following:

- EBITDA (1)
  - EBITDA between 300,000-1 million (2)
  - EBITDA between 1-2 million (3)
  - EBITDA above 2 million (4)
-

*Display This Question:*

*If Q64 = Yes*

**Q94 5. In profitability, what was the ideal profitability for your target company? Please indicate one of the following:**

- EBITDA (1)
  - EBITDA between 300,000-1 million (2)
  - EBITDA between 1-2 million (3)
  - EBITDA above 2 million (4)
- 

*Display This Question:*

*If Q64 = Not yet*

**Q44 6. In employment, what is the ideal size for your target company?**

- Number of employees (1)
  - Number of employees between 5-20 (2)
  - Number of employees between 20-50 (3)
  - Number of employees above 50 (4)
- 

*Display This Question:*

*If Q64 = Yes*

**Q95 6. In employment, what was the ideal size for your target company?**

- Number of employees (1)
  - Number of employees between 5-20 (2)
  - Number of employees between 20-50 (3)
  - Number of employees above 50 (4)
- 

**Q45 7. Regarding the industry, how important is it that the target company is active in an industry where you had previous work experience?**

- Very important (1)
- Important (2)

- Neutral (3)
  - Unimportant (4)
  - Very unimportant (5)
- 



**Q46 8. Regarding the industry, what is your preferred industry? Please indicate your top three in the following list:**

- \_\_\_\_\_ Capital intensive (1)
- \_\_\_\_\_ Agribusiness/agriculture (2)
- \_\_\_\_\_ Production (3)
- \_\_\_\_\_ Building (4)
- \_\_\_\_\_ Trade & distribution (5)
- \_\_\_\_\_ Retail/food (6)
- \_\_\_\_\_ Retail/non-food (7)
- \_\_\_\_\_ Repair/transport (8)
- \_\_\_\_\_ Finance (9)
- \_\_\_\_\_ Real estate (10)
- \_\_\_\_\_ Professional services (11)
- \_\_\_\_\_ Other (12)

End of Block: What do you want to buy? - Part 2

---

Start of Block: What do you want to buy? - Part 3

**Q47 9. Regarding the business, what is your preferred scenario? Please indicate one of the following:**

- A relatively well-ran and optimised company and keep on running it as such. (1)
  - A company with a limited improvement and professionalisation potential. (2)
  - A company with a large improvement and professionalisation potential but requiring extensive involvement. (3)
  - A company that needs a turnaround. (4)
- 

*Display This Question:*

*If Q64 = Not yet*

**Q48 10. Regarding valuation, what is the EBITDA multiple you expect to pay?**

- Below 4 x (1)
- Between 4-5 x (2)



- Between 5-6 x (3)
- Between 6-7 x (4)
- Between 7-8 x (5)
- Above 8 x (6)

*Display This Question:*

*If Q64 = Yes*

**Q96 10. Regarding valuation, what is the EBITDA multiple you expected to pay?**

- Below 4 x (1)
- Between 4-5 x (2)
- Between 5-6 x (3)
- Between 6-7 x (4)
- Between 7-8 x (5)
- Above 8 x (6)

*Display This Question:*

*If Q64 = Not yet*

**Q49 11. Regarding shareholding and the number of shares, do you want to have ...**

	Yes (1)	No (2)
at all times 100% of the shares? (1)	<input type="radio"/>	<input type="radio"/>
at all times the majority of the shares? (2)	<input type="radio"/>	<input type="radio"/>

*Display This Question:*

*If Q64 = Yes*

**Q97 11. Regarding shareholding and the number of shares, did you want to have ...**

	Yes (1)	No (2)
at all times 100% of the shares? (1)	<input type="radio"/>	<input type="radio"/>
at all times the majority of the shares? (2)	<input type="radio"/>	<input type="radio"/>

Display This Question:

If Q64 = Not yet

**Q50 12. Regarding shareholding and a potential co-investment partner,...**

	Yes (1)	No (2)
are you currently looking at potential targets with someone else, an investment partner with you would be partnering? (1)	<input type="radio"/>	<input type="radio"/>
could you envisage to look at potential targets with someone else, an investment partner? (2)	<input type="radio"/>	<input type="radio"/>
could you envisage to look at potential - larger - targets with the support of a private equity partner as a majority investment partner? (3)	<input type="radio"/>	<input type="radio"/>
could you envisage to look at potential - larger - targets with the support of a high net worth individual/business angel as a majority investment partner? (4)	<input type="radio"/>	<input type="radio"/>

Display This Question:

If Q64 = Yes

**Q98 12. Regarding shareholding and a potential co-investment partner,...**

	Yes (1)	No (2)
were you looking at potential targets with someone else, an investment partner with you would be partnering? (1)	<input type="radio"/>	<input type="radio"/>
could you envisage to look at potential targets with someone else, an investment partner? (2)	<input type="radio"/>	<input type="radio"/>
could you envisage to look at potential - larger - targets with the support of a private equity partner as a majority investment partner? (3)	<input type="radio"/>	<input type="radio"/>
could you envisage to look at potential - larger - targets with the support of a high net worth individual/business angel as a majority investment partner? (4)	<input type="radio"/>	<input type="radio"/>

**Q51 13. Who is the preferred seller of the target company?**

- Family owned - succession issue (1)
- Family owned - no succession issue (2)
- Investor (wealthy individual, private equity, ...) owned (3)
- Corporate spin-off (4)
- Other (5)

End of Block: What do you want to buy? - Part 3

---

Start of Block: Why? - Part 1

**Q52 WHY?**

---

**Q53 1. I will acquire my firm, in order to ...**

	Not at all important (1)	Low importance (2)	Slightly important (3)	Neutral (4)	Moderately important (5)	Very important (6)	Extremely important (7)
advance my career in the business world. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
solve a specific problem for a group of people that I strongly identify with (e.g., friends, colleagues, club, community). (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
play a proactive role in shaping the activities of a group of people that I strongly identify with. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
play a proactive role in changing how the world operates. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q54 2. As a firm acquirer, it will be important to me to ...**

	Not at all important (1)	Low importance (2)	Slightly important (3)	Neutral (4)	Moderately important (5)	Very important (6)	Extremely important (7)
operate my firm on the basis of solid management practices. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have thoroughly analysed the financial prospects of my business. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
provide a product/service that is useful to a group of people that I strongly identify with (e.g., friends, colleagues, club, community). (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be a highly responsible citizen of our world. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
make the world a "better place" (e.g., by pursuing social justice, protecting the environment). (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q55 3. When managing my firm it will be important to me to ...**

	Not at all important (1)	Low importance (2)	Slightly important (3)	Neutral (4)	Moderately important (5)	Very important (6)	Extremely important (7)
have a strong focus on what my firm can achieve vis-à-vis the competition. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
establish a strong competitive advantage and significantly outperform other firms in my domain. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have a strong focus on a group of people that I strongly identify with (e.g., friends, colleagues, club, community). (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
support and advance a group of people that I strongly identify with. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have a strong focus on what the firm is able to achieve for the society-at-large. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
convince others that private firms are indeed able to address the type of societal challenges that my firm addresses (e.g., social injustice, environmental protection). (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Why? - Part 1

Start of Block: Why? - Part 2

**Q56 4. Main personal motivations for buying your own company. Please indicate on the following scale:**

	Very important (1)	Important (2)	Neutral (3)	Unimportant (4)	Very unimportant (5)
Doing the kind of work you want to (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being independent (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Being frustrated by head office control (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being frustrated by head office politics (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lacking opportunities in existing company (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avoiding to work for others (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being rewarded for what you do (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing my own strategy (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognising a specific commercial opportunity (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using it as a vehicle for a future acquisitions programme (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Building a successful organisation (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Earning significantly more money (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gaining personal capital (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning about a particular business (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being made redundant (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## End of Block: Why? - Part 2

### Start of Block: Finish

Q57

Thank you for answering this questionnaire! You have contributed to academic research on a topic where until now not much research has been done.

*According to the GDPR rules on academic research, we hereby guarantee that your personal data will remain strictly confidential and only be used for academic research purposes. Moreover, we will only use and publish the results on an aggregate level. By answering this questionnaire, you confirm that you agree to participate in this academic research and you are aware that the GDPR rules for academic research will be strictly applied.*

I would love to forward you the final results of the research and more importantly, as said in the introductory email, I would love for you to win one of following prizes: 3 vouchers of €150 each for a lunch or dinner at Hof Van Cleve (Belgium's finest restaurant). 1 free ticket to the 2019 [Entrepreneurial Buyout Academy](#) (value: €1995). 5 free tickets to the 2019 [Buy Your Own Company Conference](#) (value: €250 each).

**Q58 Please leave your email address here:**

---

Q59 On behalf of Antwerp Management School and Vlerick Business School, thanks again. Your contribution is highly appreciated! Don't forget to submit your input by clicking the button in the bottom right corner one last time.

Kind regards and the warmest academic greetings,

Hans Vanoorbeek  
PhD Candidate Antwerp Management School

**End of Block: Finish**

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## Appendix 2. Non-response bias analysis

In order to make an additional check for non-response bias, we made a statistical analysis between late respondents and early respondents, in order to analyse possible differences between respondents and non-respondents, assuming the late-respondents as a proxy for the non-respondents. As we have sent three waves of reminders to the respondents (see here above), while sending out the survey, we defined late respondents as the respondents who answered the survey after the second wave, i.e. from December 14<sup>th</sup> 2018 and later.

Early respondents (93 respondents) which means from December 6<sup>th</sup> until December 13<sup>th</sup>

Late respondents (77 respondents) which means from December 14<sup>th</sup> until January 23<sup>th</sup> (closing of the survey)

We decided to check the following variables for the non-response bias: the dependent, independent and control variables used in Chapter 3 (for more detail on these variables – see Chapter 3 Section 3.4.2.):

- acquired a company
- age
- work experience
- level managerial experience
- general management experience
- entrepreneurial experience
- self employed
- amount to invest
- origin of finance
- parents background
- education level
- education type
- gender

The statistical analysis was done using Chi-square tests for categorical variables and two sample t-tests (equal variances) using continuous variables. When assumptions of t-tests (comparing means of groups of data) were not fulfilled (i.e. the data do not show a normal distribution per group), a Mann-Whitney U test (testing the median of the difference between a sample of both distributions) was performed instead.



Table Appendix 2.1. Non-response bias analysis

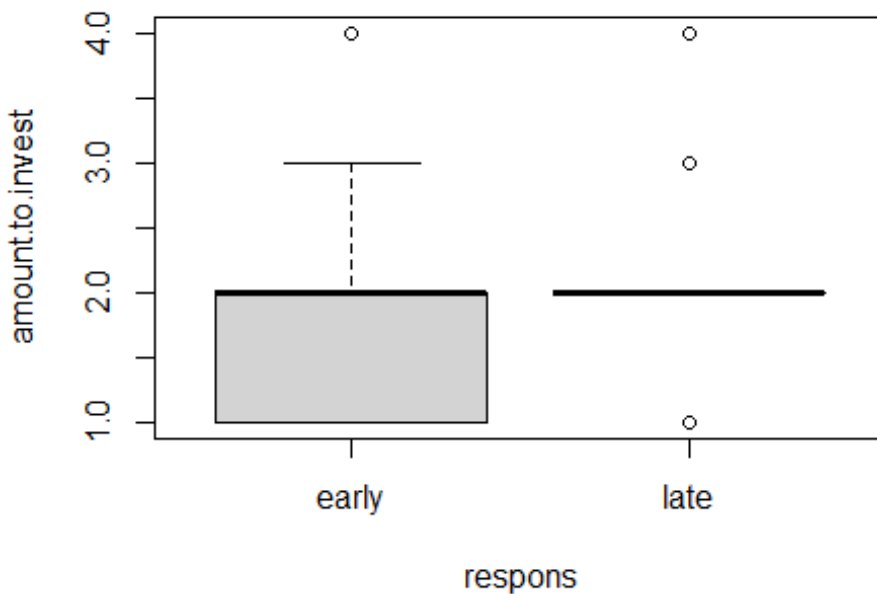
Variable (#170)		Test Statistic	p-value	Mean Early	Mean Late
Acquired a company or not	Pearson's $\chi^2$	0.3102	0.5776		
Age	t-test	-0.06336	0.9496	44.6	44.67
Previous Work Experience	t-test	0.1211	0.9037	20.26	20.12
Level managerial experience	t-test	-0.3403	0.7341	3.604	3.699
General management experience	Pearson's $\chi^2$	0.007346	0.9317		
Entrepreneurial experience	Pearson's $\chi^2$	0.8577	0.3544		
Self employed	Pearson's $\chi^2$	3.419	0.06443		
Amount to invest	Mann-Whitney U test	2770	0.04432*	1.811	2.054
Origin of finance	t-test	1.071	0.2857	9.143	8.784
Parents background	Pearson's $\chi^2$	0.336	0.5635		
Education level	Mann-Whitney U test	3409	0.666		
Education type	Pearson's $\chi^2$	2.975	0.08458		
Gender	Pearson's $\chi^2$	2.137	0.1438		

\*Statistical significance level of the differences between the subgroup are measured at the 10% level, i.e. conclusions of significance are based on p-values <0.10.

Based on the statistical analysis of the different variables we did not observe any significant differences between the early and late respondents, indicating no non-response bias in our study.

We used the Mann-Whitney-U test, applying a significance level of 0.05. Except for the variable “amount to invest”, where we did observe a slight significant difference between early and late respondents ( $p=0.04$ ), we did not see any meaningful difference elsewhere. See also boxplot here below in Figure Appendix 2.1: no indication of a meaningful difference.

Figure Appendix 2.1. Boxplot showing early and late response for “amount to invest”



## Appendix 3. Descriptive statistics Chapter 3 (before recoding)

Table Appendix 3.1. Descriptive statistics for the Vlerick data 2013-2018 on the impact of human, financial and cultural capital on (nascent) ETA entrepreneurship (before recoding)

Independent Variable	Min	IQR	SD	Max	Unknown
Age	27.00	45.00 (38.00, 51.00)	44.63 ± 7.43	64.00	2/170
Number of years work experience	2.00	20.00 (14.75, 25.00)	20.19 ± 7.27	40.00	2/170
Number of years working abroad	0.00	1.00 (0.00, 5.00)	3.86 ± 6.06	32.00	3/170
Years of employment with current employer	0.00	3.00 (1.00, 9.00)	5.79 ± 6.11	30.00	30/170
Years in Management (still looking)	1.00	10.00 (5.00, 13.50)	9.82 ± 5.40	23.00	115/170
Years in Management (already acquired)	2.00	10.00 (7.00, 15.00)	10.52 ± 5.73	24.00	141/170
Companies (co)founded	0.00	2.00 (1.00, 2.00)	1.91 ± 1.34	6.00	112/170

Variable	%	#
Education (highest level)	100%	168
I did not complete secondary school	0.60%	1
Secondary school	1.19%	2
Bachelor degree	8.93%	15
Master degree	83.93%	141
PhD	5.36%	9
Education (type)	100%	168
Business/economics	55.95%	94
Sciences (including engineering)	32.74%	55
Social sciences	2.98%	5
Law	4.17%	7
Languages	1.19%	2
Other	2.98%	5
Industry experience	100%	168
Capital intensive	4.76%	8
Agribusiness/agriculture	2.98%	5
Production	17.86%	30
Building	5.95%	10
Trade & distribution	8.33%	14
Retail/food	7.14%	12
Retail/non-food	3.57%	6
Repair/transport	2.98%	5
Finance	11.90%	20
Real estate	2.98%	5
Professional services	16.67%	28
Other	14.88%	25
Type of employer	100%	168
Self-employed (I acquired my own company)	22.02%	37
Self-employed (full time looking to acquire a company)	8.33%	14
Self-employed (full time, mainly other activities than looking to acquire)	31.55%	53
Self-employed (part time looking to acquire and part time other activities)	5.95%	10
Stock quoted company	10.71%	18
Large private company (>250 employees)	8.33%	14
Medium sized SME (>50 and <250 employees)	6.55%	11
Small SME (<50 employees)	4.17%	7
Government	0.60%	1
Other	1.79%	3
Start-up experience	100%	167

Yes	35.33%	59
No	64.67%	108
Future founding of venture	100%	167
Yes	64.67%	108
No	35.33%	59
Parents background	100%	167
Blue collar employees on payroll	8.98%	15
White collar employees on payroll	46.11%	77
Business owners	27.54%	46
Professional services (e.g. doctors, lawyers...)	13.77%	23
Other (government, teachers...)	3.59%	6

Independent Variable	Still looking		Already acquired	
	%	#	%	#
Size of last company	100%	118	100%	49
1 employee	4.24%	5	2.04%	1
>1 and	6.78%	8	10.20%	5
>10 and	13.56%	16	20.41%	10
>50 and	15.25%	18	22.45%	11
>250 and	12.71%	15	12.24%	6
>1000 employees	47.46%	56	32.65%	16
Managerial background at the last job	100%	118	100%	49
General management	46.61%	55	59.18%	29
Sales & marketing	22.88%	27	10.20%	5
Production	5.93%	7	0.00%	0
Finance & administration	11.86%	14	16.33%	8
Self-employed	8.47%	10	8.16%	4
Other	4.24%	5	6.12%	3
Level of managerial experience at the last job	100%	115	100%	49
Responsible for P&L with sales of <1 million	18.26%	21	14.29%	7
Responsible for P&L with sales of >1 million and <3 million	8.70%	10	14.29%	7
Responsible for P&L with sales of >3 million and <10 million	21.74%	25	18.37%	9
Responsible for P&L with sales of >10 million and <30 million	19.13%	22	14.29%	7
Responsible for P&L with sales of >30 million and <50 million	12.17%	14	8.16%	4
Responsible for P&L with sales of >50 million	20.00%	23	30.61%	15
Previously majority owner	100%	118	100%	49
Yes	11.86%	14	22.45%	11
No	88.14%	104	77.55%	38
Subsequently sold this majority stake	100%	14	100%	11
Yes	35.71%	5	27.27%	3
No	64.29%	9	72.73%	8
Previously minority owner	100%	118	100%	49
Yes	29.66%	35	36.73%	18
No	70.34%	83	63.27%	31
Subsequently sold this minority stake	100%	35	100%	18
Yes	40.00%	14	55.56%	10
No	60.00%	21	44.44%	8
Targeted investment amount	100%	116	100%	48
<100k	4.31%	5	2.08%	1
>100k and <200k	31.90%	37	20.83%	10
>200k and <400k	34.48%	40	29.17%	14
>400k and <600k	13.79%	16	22.92%	11
>600k and <800k	6.03%	7	6.25%	3
>800k and <1,000k	6.03%	7	6.25%	3
>1,000k and <1,200k	0.00%	0	4.17%	2
>1,200k	3.45%	4	8.33%	4
Personal equity as % of net worth	100%	116	100%	48

<20%	25.00%	29	22.92%	11
>20% and <40%	36.21%	42	29.17%	14
>40% and <60%	21.55%	25	18.75%	9
>60% and <80%	10.34%	12	16.67%	8
>80%	6.90%	8	12.50%	6

Independent Variable (#165)	Not at all important		Not so important		Somewhat important		Very important		Extremely important	
Origin of personal investment										
Personal savings	3.03%	5	7.27%	12	21.21%	35	43.03%	71	25.45%	42
Golden handshake	62.42%	103	14.55%	24	11.52%	19	7.88%	13	3.64%	6
Re-mortgage of house	77.58%	128	10.30%	17	6.67%	11	5.45%	9	0.00%	0
Sale of financial assets	53.94%	89	12.73%	21	15.15%	25	13.94%	23	4.24%	7
Financing from partner	55.76%	92	8.48%	14	16.36%	27	13.94%	23	5.45%	9
Loans from friends/family	59.39%	98	15.15%	25	15.15%	25	7.88%	13	2.42%	4
Inherited money	52.12%	86	13.33%	22	18.18%	30	11.52%	19	4.85%	8



## Appendix 4. Descriptive Statistics Chapter 4

Table Appendix 4.1. Investment criteria for a suitable target company statistics

Variable (#163) Criteria Importance	Min	Max	Mean	Std Deviation	Variance
Location	1.00	5.00	3.74	0.94	0.89
Industry	1.00	5.00	3.79	0.88	0.77
Particular or stable technology	1.00	5.00	3.61	0.77	0.59
Sales turnover	1.00	5.00	3.58	0.80	0.64
Potential market growth	1.00	5.00	4.21	0.77	0.59
Stable demand (recurring customers)	1.00	5.00	4.07	0.73	0.53
Competitive strength and limited exposure to import competition	1.00	5.00	3.80	0.78	0.60
Valuation multiples	1.00	5.00	3.54	0.80	0.64
Highly cash flow positive	1.00	5.00	3.78	0.79	0.63
Highly leverageable (i.e., less equity needed)	1.00	5.00	3.71	0.89	0.79
Asset value	1.00	5.00	3.02	0.84	0.70
Turnaround potential	1.00	5.00	3.52	1.03	1.06
Professionalisation & improvement potential	1.00	5.00	4.12	0.78	0.61
Previous financial track-record	2.00	5.00	3.71	0.71	0.50
Future investment requirements	2.00	5.00	3.82	0.68	0.47
Company management and presence of good second tier	2.00	5.00	3.71	0.81	0.65
Buy and build potential	2.00	5.00	3.80	0.87	0.76
Exit opportunities	1.00	5.00	3.37	1.06	1.13

Table Appendix 4.2. Investment criteria for a suitable target company statistics (Likert scale)

Variable (#163)	Very unimportant		Unimportant		Neutral		Important		Very important	
Location	3.07%	5	6.13%	10	23.93%	39	47.24%	77	19.63%	32
Industry	1.23%	2	6.75%	11	23.31%	38	49.08%	80	19.63%	32
Particular or stable technology	1.23%	2	4.29%	7	36.81%	60	47.85%	78	9.82%	16
Sales turnover	1.84%	3	5.52%	9	34.36%	56	49.69%	81	8.59%	14
Potential market growth	1.23%	2	1.23%	2	9.82%	16	50.31%	82	37.42%	61
Stable demand (recurring customers)	1.23%	2	1.23%	2	12.27%	20	60.12%	98	25.15%	41
Competitive strength and limited exposure to import competition	0.61%	1	3.68%	6	27.61%	45	51.53%	84	16.56%	27
Valuation multiples	0.61%	1	6.75%	11	41.72%	68	39.88%	65	11.04%	18
Highly cash flow positive	0.61%	1	3.68%	6	30.06%	49	48.47%	79	17.18%	28
Highly leverageable (i.e., less equity needed)	2.45%	4	4.29%	7	30.67%	50	44.79%	73	17.79%	29
Asset value	2.45%	4	23.93%	39	44.79%	73	26.38%	43	2.45%	4
Turnaround potential	4.29%	7	9.82%	16	33.74%	55	34.36%	56	17.79%	29
Professionalisation & improvement potential	0.61%	1	1.23%	2	17.79%	29	46.63%	76	33.74%	55
Previous financial track-record	0.00%	0	4.29%	7	31.29%	51	53.99%	88	10.43%	17
Future investment requirements	0.00%	0	3.07%	5	25.15%	41	58.90%	96	12.88%	21
Company management and good second tier management	0.00%	0	7.36%	12	29.45%	48	48.47%	79	14.72%	24
Buy and build potential	0.00%	0	7.98%	13	26.38%	43	43.56%	71	22.09%	36
Exit opportunities	4.29%	7	17.18%	28	30.67%	50	33.13%	54	14.72%	24

Table Appendix 4.3. Importance of location

Variable	Still looking		Already acquired	
	%	#	%	#
Are you / were you prepared to move your residence?	100%	116	100%	47
Yes	31.90%	37	19.15%	9
No	68.10%	79	80.85%	38

Table Appendix 4.4. The “ideal” company

Variable	Still looking		Already acquired	
	%	#	%	#
Ideal sales size of the target company?	100%	116	100%	47
Sales	23.28%	27	12.77%	6
Sales between 2-10 million	59.48%	69	57.45%	27
Sales between 10-20 million	11.21%	13	25.53%	12
Sales above 20 million	6.03%	7	4.26%	2
Ideal profitability of the target company?	100%	116	100%	47
EBITDA	27.59%	32	14.89%	7
EBITDA between 300,000-1 million	57.76%	67	59.57%	28
EBITDA between 1-2 million	9.48%	11	21.28%	10
EBITDA above 2 million	5.17%	6	4.26%	2
Ideal staff size of the target company?	100%	116	100%	47
Number of employees	19.83%	23	8.51%	4
Number of employees between 5-20	51.72%	60	34.04%	16
Number of employees between 20-50	23.28%	27	44.68%	21
Number of employees above 50	5.17%	6	12.77%	6

Table Appendix 4.5. Previous work experience in industry

Variable	%	#
Importance of target company being active in an industry where you had previous work experience	100%	163
Very unimportant	9.82%	16
Unimportant	24.54%	40
Neutral	38.04%	62
Important	23.93%	39
Very important	3.68%	6

Table Appendix 4.6. Preferred Industries

Industry	Min	Max	Mean	Std Deviation	Variance	Top 1	Top 2	Top 3	Top weighted %	Count
Capital intensive	1.00	3.00	2.47	0.81	0.65	3	2	10	2.4%	15
Agribusiness/agriculture	1.00	3.00	2.11	0.94	0.88	7	2	9	3.5%	18
Production	1.00	3.00	1.53	0.70	0.49	64	32	13	28.0%	109
Building	1.00	3.00	2.50	0.65	0.42	2	8	14	3.8%	24
Trade & distribution	1.00	3.00	1.93	0.73	0.54	26	39	20	18.3%	85
Retail/food	1.00	3.00	2.19	0.77	0.59	7	12	13	6.0%	32
Retail/non-food	1.00	3.00	2.12	0.64	0.41	4	15	7	5.1%	26
Repair/transport	1.00	3.00	1.83	0.80	0.64	5	4	3	2.7%	12
Finance	1.00	3.00	2.31	0.82	0.67	3	3	7	2.3%	13
Real estate	1.00	3.00	2.29	0.82	0.68	5	5	11	3.8%	21
Professional services	1.00	3.00	1.97	0.78	0.61	25	31	23	16.7%	79
Other	1.00	3.00	2.27	0.88	0.78	12	6	23	7.4%	41
Total						163	159	153	100.0%	475

\* Weighted = top 1 given a weight of 3, top 2 given a weight of 2, top 3 given a weight of 1

Table Appendix 4.7. Business Scenario

Variable	%	#
What is your preferred scenario?	100%	162
A relatively well-ran and optimised company and keep on running it as such.	8.64%	14
A company with a limited improvement and professionalisation potential.	24.07%	39
A company with a large improvement and professionalisation potential but requiring extensive involvement.	60.49%	98
A company that needs a turnaround.	6.79%	11

Table Appendix 4.8. Expected valuation

Variable	Still looking		Already acquired	
	%	#	%	#
What is the EBITDA multiple you expect to pay?	100%	115	100%	47
Below 4 x	17.39%	20	10.64%	5
Between 4-5 x	51.30%	59	59.57%	28
Between 5-6 x	22.61%	26	27.66%	13
Between 6-7 x	6.09%	7	2.13%	1
Between 7-8 x	2%	2	0%	0
Above 8 x	0.87%	1	0.00%	0

Table Appendix 4.9. Preferred shareholder situation and partner choice

Variable	Still looking		Already acquired	
	%	#	%	#
Do/did you want to have 100% of the shares at all times?	100.00%	110	100.00%	44
Yes	9.09%	10	22.73%	10
No	90.91%	100	77.27%	34
Do/did you want to have the majority of the shares at all times?	100.00%	112	100.00%	46
Yes	63.39%	71	54.35%	25
No	36.61%	41	45.65%	21
Are/were you currently looking at potential targets with someone else, an investment partner?	100.00%	115	100.00%	47
Yes	34.78%	40	63.83%	30
No	65.22%	75	36.17%	17
Could you envisage to look at potential targets with someone else, an investment partner?	100.00%	115	100.00%	47
Yes	94.78%	109	85.11%	40
No	5.22%	6	14.89%	7
Could you envisage to look at potential - larger - targets with the support of a private equity partner as a majority investment partner?	100.00%	115	100.00%	47
Yes	71.30%	82	70.21%	33
No	28.70%	33	29.79%	14
Could you envisage to look at potential - larger - targets with the support of a high net worth individual/business angel as a majority investment partner?	100.00%	114	100.00%	47
Yes	77.19%	88	80.85%	38
No	22.81%	26	19.15%	9



*Table Appendix 4.10. Preferred seller of the target company*

<b>Variable</b>	<b>%</b>	<b>#</b>
Who is the preferred seller of the target company?	100.00%	162
Family owned - succession issue	70.37%	114
Family owned - no succession issue	17.28%	28
Investor (wealthy individual, private equity, ...) owned	1.85%	3
Corporate spin-off	7.41%	12
Other	3.09%	5

*Table Appendix 4.11. Preferred seller of the target company*

<b>Variable</b>	<b>Still looking</b>		<b>Already acquired</b>	
	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>
Who is the preferred seller of the company ?	100.00%	120	100.00%	48
Family owned – succession issue	73.00%	84	62.50%	30
Family owned – no succession issue	14.78%	17	45.65%	11
Investor (wealthy individual, private equity,...) owned	2.60%	3	63.83%	0
Corporate spin-off	6.96%	8	36.17%	4
Other	2.60%	5	85.11%	3

## Appendix 5. Descriptive Statistics Chapter 5

### Appendix 5.1. The Sieger Scale

The scale:

Identity	Construct	Item	Item intro	Item text
DAR	I	A2	I will create my firm in order...	...to advance my career in the business world.
		B1	As a firm founder, it will be very important to me...	...to operate my firm on the basis of solid management practices.
	II	B2	As a firm founder, it will be very important to me...	...to have thoroughly analyzed the financial prospects of my business.
		III	C1	When managing my firm, it will be very important to me...
	C2		When managing my firm, it will be very important to me...	...to establish a strong competitive advantage and significantly outperform other firms in my domain.
COM	IV	A3	I will create my firm in order...	...to solve a specific problem for a group of people that I strongly identify with (e.g., friends, colleagues, club, community)
		A4	I will create my firm in order...	...to play a proactive role in shaping the activities of a group of people that I strongly identify with.
	V	B3	As a firm founder, it will be very important to me...	...to provide a product/service that is useful to a group of people that I strongly identify with (e.g., friends, colleagues, club, community)
		C3	When managing my firm, it will be very important to me...	...to have a strong focus on a group of people that I strongly identify with (e.g., friends, colleagues, club, community)
VI	C4	When managing my firm, it will be very important to me...	...to support and advance a group of people that I strongly identify with.	
	MIS	VII	A6	I will create my firm in order...
VIII		B5	As a firm founder, it will be very important to me...	...to be a highly responsible citizen of our world.
		B6	As a firm founder, it will be very important to me...	...to make the world a "better place" (e.g., by pursuing social justice, protecting the environment).
IX		C5	When managing my firm, it will be very important to me...	...to have a strong focus on what the firm is able to achieve for society-at-large.
	C6	When managing my firm, it will be very important to me...	...to convince others that private firms are indeed able to address the type of societal challenges that my firm addresses.	

All questions are asked with a LIKERT scale (Wade, 2006): from 1 = Not at all important, 2= Low importance, 3 = Slightly important, 4 = Neutral, 5 = Moderately important, 6 = Very Important, 7 = Extremely important (*Likert-Type Scale Response Anchors: Vagias, Wade M. (2006)*).

Some of the questions are slightly and deliberately tweaked in order to situate them in the context of an ETA. The word "founder" is replaced by "acquirer" and the word "create" is replaced by "acquire", leading to the following scale in our survey:

Identity	Construct	Item	Item intro	Item text
DAR	I	A2	I will acquire my company in order to...	...to advance my career in the business world
		B1	As a firm acquirer, it will be very important to me...	...to operate my firm on the basis of solid management practices
	II	B2	As a firm acquirer, it will be very important to me...	...to have thoroughly analyzed the financial prospects of my business
		III	C1	When managing my firm, it will be very important to me...
	C2		When managing my firm, it will be very important to me...	...to establish a strong competitive advantage and significantly outperform other firms in my domain
COM	IV	A3	I will acquire my company in order to...	...to solve a specific problem for a group of people that I strongly identify with (e.g. friends, colleagues, club, community)
		A4	I will acquire my company in order to....	...to play a proactive role in shaping the activities of a group of people that I strongly identify with
	V	B3	As a firm acquirer, it will be very important to me...	...to provide a product/service that is useful to a group of people that I strongly identify with (e.g. friends, colleagues, club, community)
		C3	When managing my firm, it will be very important to me...	...to have a strong focus on a group of people (e.g. friends, colleagues, club, community)
VI	C4	When managing my firm, it will be very important to me...	...to support and advance a group of people that I strongly identify with	
	MIS	VII	A6	I will acquire my company in order to....
VIII		B5	As a firm acquirer, it will be very important to me...	...to be a highly responsible citizen of the world
		B6	As a firm acquirer, it will be very important to me...	...to make the world "a better place" (e.g. by pursuing social justice, protecting the environment)
IX		C5	When managing my firm, it will be very important to me...	...to have a strong focus on what the firm is able to achieve for society-at-large
	C6	When managing my firm, it will be very important to me...	...to convince others that private firms are indeed able to address the type of societal challenges that my firm addresses	

**1. Identity (DAR), Construct I, Item A2**

**I will acquire my company in order to advance my career in the business world**

- 1 = Not at all important
- 2 = Low importance
- 3 = Slightly important
- 4 = Neutral
- 5 = Moderately important
- 6 = Very important
- 7 = Extremely important

**2. Identity (DAR), Construct II, Item B1**

**As a firm acquirer, it will be very important to me.... to operate my firm on the basis of solid management practices**

- 1 = Not at all important
- 2 = Low importance
- 3 = Slightly important
- 4 = Neutral
- 5 = Moderately important
- 6 = Very important
- 7 = Extremely important

**3. Identity (DAR), Construct II, Item B2**

**As a firm acquirer, it will be very important to me.... to have thoroughly analysed the financial prospects of my business**

- 1 = Not at all important
- 2 = Low importance
- 3 = Slightly important
- 4 = Neutral
- 5 = Moderately important
- 6 = Very important
- 7 = Extremely important

**4. Identity (DAR), Construct III, Item C1**

**When managing my firm....it will be very important to me to have a strong focus on what my firm can achieve vis-à-vis the competition**

- 1 = Not at all important
- 2 = Low importance
- 3 = Slightly important
- 4 = Neutral
- 5 = Moderately important
- 6 = Very important
- 7 = Extremely important

**5. Identity (DAR), Construct III, Item C2**

**When managing my firm.... it will be very important to me to establish a strong competitive advantage and significantly outperform other firms in my domain**

- 1 = Not at all important
- 2 = Low importance
- 3 = Slightly important
- 4 = Neutral
- 5 = Moderately important
- 6 = Very important
- 7 = Extremely important

**6. Identity (COM), Construct IV, Item A3**

**I will acquire my firm in order.... to solve a specific problem for a group of people that I strongly identify with (e.g. friends, colleagues, club, community)**

- 1 = Not at all important
- 2 = Low importance
- 3 = Slightly important
- 4 = Neutral
- 5 = Moderately important
- 6 = Very important
- 7 = Extremely important

**7. Identity (COM), Construct IV, Item A4**

**I will acquire my firm in order.... to play a proactive role in shaping the activities of a group of people that I strongly identify with**

- 1 = Not at all important
- 2 = Low importance
- 3 = Slightly important
- 4 = Neutral
- 5 = Moderately important
- 6 = Very important
- 7 = Extremely important

**8. Identity (COM), Construct V, Item B3**

**As a firm acquirer it will be very important to me.... to provide a product/service that is useful to a group of people that I strongly identify with (e.g. friends, colleagues, club, community)**

- 1 = Not at all important
- 2 = Low importance
- 3 = Slightly important
- 4 = Neutral
- 5 = Moderately important
- 6 = Very important
- 7 = Extremely important

**9. Identity (COM), Construct VI, Item C3**

**When managing my firm it will be very important to me.... to have a strong focus on a group of people that I strongly identify with (e.g. friends, colleagues, club, community)**

- 1 = Not at all important
- 2 = Low importance
- 3 = Slightly important
- 4 = Neutral
- 5 = Moderately important
- 6 = Very important
- 7 = Extremely important

**10. Identity (COM), Construct VI, Item C4**

**When managing my firm it will be very important to me.... to support and advance a group of people that I strongly identify with**

- 1 = Not at all important
- 2 = Low importance
- 3 = Slightly important
- 4 = Neutral
- 5 = Moderately important
- 6 = Very important
- 7 = Extremely important

**11. Identity (MIS), Construct VII, Item A6**

**I will acquire my firm in order....to play a proactive role in changing how the world operates**

- 1 = Not at all important
- 2 = Low importance
- 3 = Slightly important
- 4 = Neutral
- 5 = Moderately important
- 6 = Very important
- 7 = Extremely important

**12. Identity (MIS), Construct VIII, Item B5**

**As a firm acquirer, it will be very important to me....to be a highly responsible citizen of our world**

- 1 = Not at all important
- 2 = Low importance
- 3 = Slightly important
- 4 = Neutral
- 5 = Moderately important
- 6 = Very important
- 7 = Extremely important

**13. Identity (MIS), Construct VIII, Item B6**

**As a firm acquirer, it will be very important to me....to make the world a “better place” (e.g. by pursuing social justice, protecting the environment)**

- 1 = Not at all important*
- 2 = Low importance*
- 3 = Slightly important*
- 4 = Neutral*
- 5 = Moderately important*
- 6 = Very important*
- 7 = Extremely important*

**14. Identity (MIS), Construct IX, Item C5**

**When managing my firm, it will be very important to me....to have a strong focus on what the firm is able to achieve for the society-at-large**

- 1 = Not at all important*
- 2 = Low importance*
- 3 = Slightly important*
- 4 = Neutral*
- 5 = Moderately important*
- 6 = Very important*
- 7 = Extremely important*

**15. Identity (MIS), Construct IX, Item C6**

**When managing my firm, it will be very important to me....to convince others that private firms are indeed able to address the type of societal challenges that my firm addresses (e.g. social injustice, environmental protection)**

- 1 = Not at all important*
- 2 = Low importance*
- 3 = Slightly important*
- 4 = Neutral*
- 5 = Moderately important*
- 6 = Very important*
- 7 = Extremely important*

## Appendix 5.2. Descriptive Statistics

Table Appendix 5.1. TABLE I - Item A

Variable (#160) I will acquire my firm, in order to:	Min	Max	Mean	Std Deviation	Variance
advance my career in the business world (DAR, I, A2).	1.00	7.00	4.72	1.59	2.54
solve a specific problem for a group of people that I strongly identify with (COM, IV, A3).	1.00	7.00	3.12	1.62	2.63
play a proactive role in shaping the activities of a group of people that I strongly identify with (COM, IV, A4).	1.00	7.00	4.14	1.77	3.14
play a proactive role in changing how the world operates (MIS, VII, A6).	1.00	7.00	4.24	1.76	3.11

Table Appendix 5.2. TABLE II - Item A

Variable (#160) I will acquire my firm, in order to:	Not at all important		Low importance		Slightly important		Neutral		Moderately important		Very important		Extremely important	
advance my career in the business world (DAR, I, A2).	3.75%	6	11.88%	19	2.50%	4	18.75%	30	26.88%	43	26.25%	42	10.00%	16
solve a specific problem for a group of people that I strongly identify with (COM, IV, A3).	21.88%	35	21.88%	35	7.50%	12	28.75%	46	12.50%	20	6.25%	10	1.25%	2
play a proactive role in shaping the activities of a group of people that I strongly identify with (COM, IV, A4).	13.13%	21	10.00%	16	5.63%	9	24.38%	39	20.00%	32	21.88%	35	5.00%	8
play a proactive role in changing how the world operates (MIS, VII, A6).	11.25%	18	11.25%	18	4.38%	7	21.88%	35	24.38%	39	20.00%	32	6.88%	11

Table Appendix 5.3. TABLE III - Item B

Variable (#160) As a firm acquirer, it will be important to me to:	Min	Max	Mean	Std Deviation	Variance
operate my firm on the basis of solid management practices (DAR, II, B1).	4.00	7.00	5.86	0.70	0.49
have thoroughly analysed the financial prospects of my business (DAR, II, B2).	3.00	7.00	5.91	0.84	0.70
provide a product/service that is useful to a group of people that I strongly identify with (COM, V, B3).	1.00	7.00	4.33	1.58	2.49
be a highly responsible citizen of our world (MIS, VIII, B5).	1.00	7.00	4.63	1.39	1.93
make the world a "better place" (MIS, VIII, B6).	1.00	7.00	4.38	1.55	2.41

Table Appendix 5.4. TABLE IV - Item B

Variable (#160) As a firm acquirer, it will be important to me to:	Not at all important		Low importance		Slightly important		Neutral		Moderately important		Very important		Extremely important	
operate my firm on the basis of solid management practices (DAR, II, B1).	0.00%	0	0.00%	0	0.00%	0	3.75%	6	21.25%	34	60.62%	97	14.37%	23
have thoroughly analysed the financial prospects of my business (DAR, II, B2).	0.00%	0	0.00%	0	1.25%	2	5.00%	8	17.50%	28	54.37%	87	21.88%	35
provide a product/service that is useful to a group of people that I strongly identify with (COM, V, B3).	5.00%	8	13.75%	22	6.88%	11	22.50%	36	27.50%	44	18.75%	30	5.63%	9
be a highly responsible citizen of our world (MIS, VIII, B5).	3.13%	5	8.13%	13	5.00%	8	23.13%	37	31.25%	50	25.62%	41	3.75%	6
make the world a "better place" (MIS, VIII, B6).	3.13%	5	15.00%	24	6.88%	11	24.38%	39	22.50%	36	23.13%	37	5.00%	8

Table Appendix 5.5. TABLE VI - Item C

Variable (#160) When managing my firm it will be important to me to:	Min	Max	Mean	Std Deviation	Variance
have a strong focus on what my firm can achieve vis-à-vis the competition (DAR, III C1).	3.00	7.00	5.79	0.73	0.53
establish a strong competitive advantage and significantly outperform other firms in my domain (DAR, III C2).	3.00	7.00	5.83	0.82	0.68
have a strong focus on a group of people that I strongly identify with (COM, VI, C3).	1.00	7.00	4.08	1.41	2.00
support and advance a group of people that I strongly identify with (COM, VI, C4).	1.00	7.00	4.16	1.43	2.04
have a strong focus on what the firm is able to achieve for the society-at-large (MIS, IX, C5).	1.00	7.00	4.46	1.35	1.82
convince others that private firms are indeed able to address the type of societal challenges that my firm addresses (MIS, IX, C6).	1.00	7.00	4.21	1.49	2.22

Table Appendix 5.6. TABLE VII - Item C

Variable (#160) When managing my firm it will be important to me to:	Not at all important		Low importance		Slightly important		Neutral		Moderately important		Very important		Extremely important	
have a strong focus on what my firm can achieve vis-à-vis the competition (DAR, III C1).	0.00%	0	0.00%	0	1.25%	2	3.13%	5	21.88%	35	62.50%	100	11.25%	18
establish a strong competitive advantage and significantly outperform other firms in my domain (DAR, III C2).	0.00%	0	0.00%	0	1.25%	2	3.75%	6	25.00%	40	50.63%	81	19.38%	31
have a strong focus on a group of people that I strongly identify with (COM, VI, C3).	5.00%	8	14.37%	23	7.50%	12	28.75%	46	30.00%	48	13.75%	22	0.63%	1
support and advance a group of people that I strongly identify with (COM, VI, C4).	5.63%	9	12.50%	20	5.63%	9	30.63%	49	29.38%	47	15.00%	24	1.25%	2
have a strong focus on what the firm is able to achieve for the society-at-large (MIS, IX, C5).	2.50%	4	10.00%	16	6.88%	11	25.00%	40	33.75%	54	19.38%	31	2.50%	4
convince others that private firms are indeed able to address the type of societal challenges that my firm addresses (MIS, IX, C6).	4.38%	7	15.63%	25	4.38%	7	28.13%	45	27.50%	44	17.50%	28	2.50%	4





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