UNIVERSITA' DEGLI STUDI DI PADOVA

DIPARTIMENTO DI SCIENZE ECONOMICHE ED AZIENDALI
"M. FANNO"

CORSO DI LAUREA MAGISTRALE IN BUSINESS ADMINISTRATION

TESI DI LAUREA

"SEARCH FUNDS AND AGENCY THEORY: AN EMPIRICAL ANALYSIS"

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ANNO ACCADEMICO 2023 – 2024

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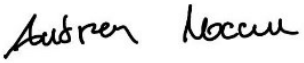
Firma (signature) 

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INTRODUCTION

Having its roots in the 80s of the last century, the Search Fund model is now experiencing one of its best periods in the alternative investments' environment. Among the asset classes available today, Search Funds (SFs) represent a promising and attractive investment model for all those investors seeking high potential return, diversification of their portfolios and opportunities to invest in SMEs which have interesting growth potentials. Developed especially in the U.S. and Canada, the asset class was born thanks to HBS[1] alumn Jim Southern who, together with his professor and friend H. Irving Grousbeck, decided to give the light to a new investment vehicle, the Search Fund indeed. After ten years from their inception, Search Funds began to spread also around Europe, where presentations about the model's structure began to take place in some prominent Business Schools.

Universities soon became a reference point in the community by developing ad-hoc courses and studies about the SF model for the first time. Prominent example of universities that took the lead to that extent and continue with that aim are the STANFORD Business School (for the U.S. area) and the IESE University of Navarra in Spain (for the European continent); another relevant institution contributing to the spreading of knowledge of this asset class is undoubtedly the Yale School of Management.

Search Funds represent a unique investment vehicle mixing finance and entrepreneurship and characterise for being particularly suitable to young and talented MBA students willing to run a company without the need to go through the start-up phase or without the capital resources to buy a company. A Search Fund is an entrepreneurial path undertaken by one (or two individuals), named Searcher(s), who establish an investment vehicle and decide to be backed by a group of Investors with the aim of searching for, acquiring and running a privately held company for a given period, which typically goes from five to ten years. This type of investment relies on three actors: the Searcher/entrepreneur, the Investor base and the Target company. The collaboration between the parties is one of the distinctive features differentiating this asset class from the other ones. Additionally, the feature making the SF model unique is the possibility recognised to the Searcher to earn a high percentage of the target's equity (up to 30% for a partnership of Searchers, otherwise 25%) without the need of investing any personal amount but being completely financed by the group of Investors.

[1] HBS stands for Harvard Business School

The relevance of SFs in the community was increased by the fact that they provide a solution for the generational passage issues in some familiar companies willing to change ownership but not entering the traditional PE market. Moreover, the model has proven successful in targeting a market gap, focusing on companies that are too small for traditional private equity investors or funds, yet too large for individual private investors. So far, this investment model has performed well, as consistently demonstrated by the high returns achieved by the investors, averaging an IRR of 30-35%.

The life of this asset class passes through four stages which, in order, are: the raising of initial capital, the search for the target company, the operation and value creation and the exit from the investment. Each of these lasts a specific amount of time and, overall, the process can endure up to ten years or even longer. In the initial stage, the Searcher has to find a bunch of capital providers from which raising the necessary money to fund the search phase; in the second one, the entrepreneur focuses on finding a target company presenting certain qualitative and quantitative characteristics and without a clear succession plan in action; the third one is the phase in which the Searcher becomes CEO of the target acquired and works to enhance the profitability and scale of the business; the last one is instead when finally Investors realise a return on their investment and exit the fund. Throughout this long process, Investors do play a key role, not only to the extent of being those who finance the entire acquisition, but especially for the role they acquire for the Searcher, that is that of mentors who leverage their network and expertise to support the entrepreneur's success. The mentorship given by the Investors is indeed a feature differentiating this investment vehicle from all the other ones.

As a matter of fact, over the years search funds have become one of the fastest growing niches inside the alternative investment asset classes, proved by the increasing number of funds established and the capital totally raised worldwide. This relevance contributed to boost the covering of topics related to SFs, with a particular rise in these recent years. Nevertheless, most of the studies still concentrate on presenting the model and its main alternatives, with only few of them focusing on the "dark" side of the funds, meaning the issues we can encounter within the asset class. In addition to that, what is interesting to note is that the relationships among the actors involved can rightly be framed within Agency Theory, as Investors and Searchers' actions and intentions recall those among Principals and Agents. Additionally, another important point is that SFs present some "problems" inherent in the way they have been structured and the literature developed up to now has not particularly focused on these challenges, except for few relevant cases.

The awareness of the challenges inherent in the Search Fund model, the strong comparability between the Investor-Searcher relationship and the Principal-Agent framework, and especially the gap in the literature addressing both Agency Theory and Search Funds together, has led to the development of the research topic. As a result, a thesis analysing Search Funds through the lens of agency theory appeared to be a compelling subject.

The dissertation is built on four chapters. The **first one** starts with presenting the search fund model and it specifically focuses on the relevance they have for entrepreneurs, investors and the market overall. The chapter deals with the four stages of a SF's lifecycle and presents the alternative models that developed from the traditional one.

The **second one**, instead, reverts around the framework that has been chosen to analyse the problems that may arise in Search Funds: the Agency Theory. The framework, known as Principal-Agent theory as well, has been described in detail, by focusing on its origins, on the core topics that scholars presented (like adverse selection and moral hazard), and lastly on the main solutions proposed by the literature.

The **third chapter** indeed represents the core part of this work, as it introduces and describes the research topic of the dissertation: the aim is giving a clear overview and analysis of the potential problems that may arise between Searcher(s) and Investors in a Search Fund, with the objective of setting a starting point for a future exploration of possible improvements to the model. Ten potential issues have been presented and categorised according to the four stages of the SF's lifecycle.

Finally, the **last chapter** presents the empirical analysis conducted to increase the relevance of the preceding discussion. In order to carry out this analysis, the survey was selected as the empirical method, due to its ease of distribution to the target audience. Then, this survey was distributed to key investors within the SF community who, being highly familiar with the model, were ideally positioned to confirm or refute the identified issues. A discussion of the survey results follows, offering insights into the findings and their implications.

CHAPTER 1: INTRODUCTION TO THE SEARCH FUND ASSET CLASS

In the contemporary landscape of asset classes available, the search fund model represents an attractive investment vehicle and opportunity suited both for investors looking for high returns and for young and talented entrepreneurs willing to become owner-CEOs early in their career path. Originated at Harvard Business School in 1984 by H. Irving Grousbeck, the term and the model began to spread across North America, starting its path in Stanford, where it was firstly studied and popularised (Kelly & Heston, 2022). Almost ten years later, the first search fund was created in the Europe, specifically in the United Kingdom, paving the way for its diffusion in the European continent as well.

According to Stanford Business School, "a search fund is an entrepreneurial path undertaken by one or two individuals (the Searchers) who form an investment vehicle with a small group of aligned Investors, some of whom become mentors, to search for, acquire, and lead a privately held company for the medium to long term, typically 6 to 10 years" (Kelly & Heston, 2022, p.3). This type of investment became first popular among fresh and skilled American MBA graduates, capturing then the interest of mid-career managers belonging to different functional areas, with the objective of leading and owning an existing company. According to the statistics on the topic[2], approximately 30 to 50 percent of all searchers who establish a fund do so between two and ten years after completing their business school program.

Search funds are included within the broader category of Entrepreneurship Through Acquisition (ETA), that can be defined as an alternative career path through which an individual acquires and runs an existing business without the need of building it from scratch. Consequently, ETA is often used as synonym for search fund.

Since their strong relevance and increasing adoption as an alternative form of investment, two institutions represent nowadays the specialised centres for studying the evolution, the diffusion and issues related to the search funds world: the Stanford Business School and IESE Business School (University of Navarra). These two universities, by producing market studies every two years, provide a detailed and broad coverage of the two main areas of search funds concentration.

[2] A Primer on Search Funds (Center for Entrepreneurial Studies, 2021)

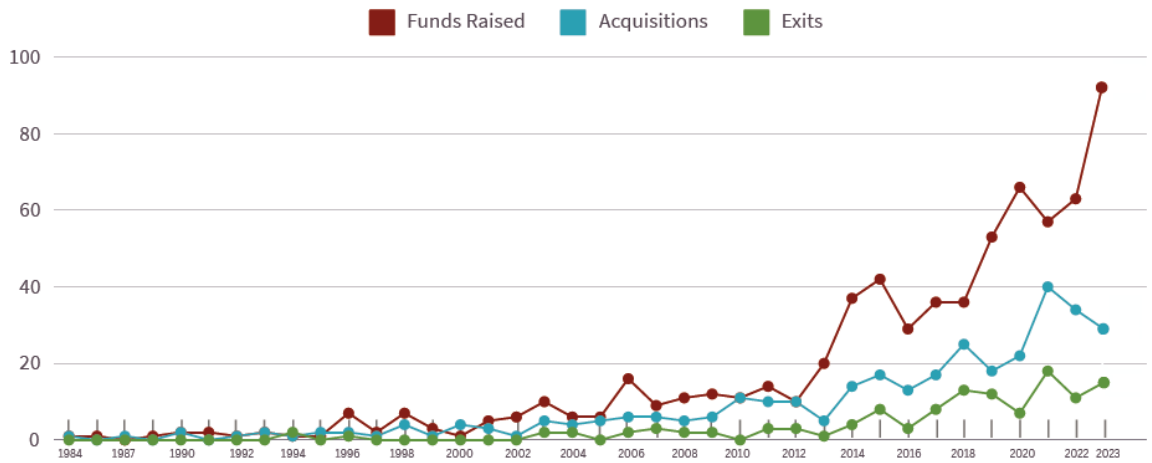
This first introductory chapter starts by focusing on the actual situation of the increased activity of search funds and the strong relevance the model has gained among a broad base of individuals and the society itself. It continues by presenting the key players involved and the relationships between them. Afterwards, it shows how the process to raise and manage a search funds is structured and, in addition to that, after introducing the alternative SF models developed, the last point will briefly cover some of the critical aspects inherent in the model.

1.1 The increasing relevance of search funds

Positioning as one of the most promising alternative asset classes that investors can consider when making their investment decisions, the search fund keeps on being the investment vehicle of records: with a growing number of searchers, investors and entrepreneurial classes offered by business schools, activity in the SF community continues to grow (Kelly & Heston, 2024).

Just to give a brief insight, the number of search funds formed in U.S. and Canada from 1984 are 681 (Kelly & Heston, 2024), with an increase of 155 new funds established from 2022, when they were 526 (Kelly & Heston, 2022). Only in 2023, in the area covered by the studies produced by Stanford, the number of funds launched was ninety-four, thus reaching a record since the starting of researches on the topic. *Figure 1* presents the U.S. search fund activity by year, from which it is evident the sharp increase from 2012 and the record reached last year.

Figure 1 – U.S. Search Fund Activity by Year

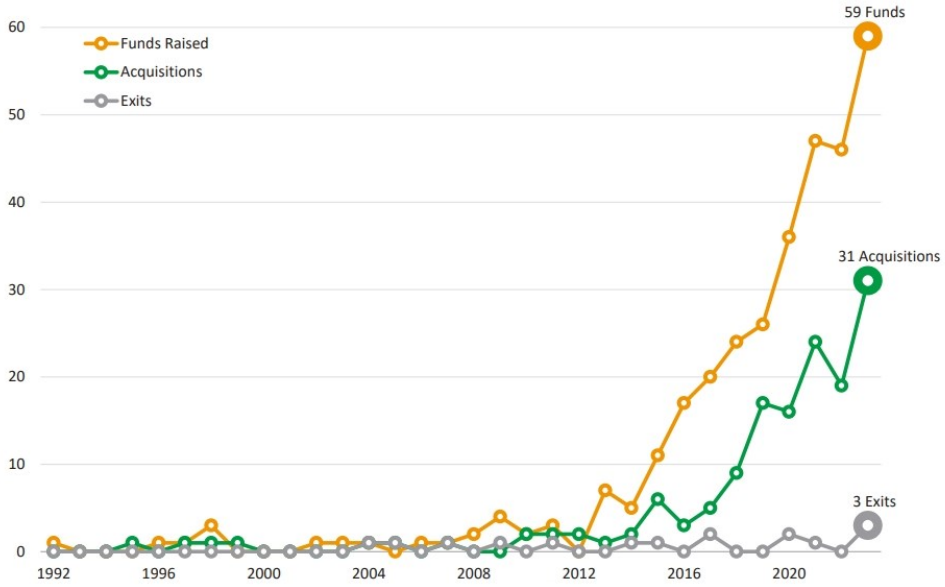


Source: Kelly & Heston (2024)

On the other hand, if we look at overseas data, the amount of *international*[3] search funds established overall since the first one reached the lower number of 320 (Kowalewski et al., 2024), according to the latest study available by IESE.

An overview of the international activity is provided in *Figure 2*. As shown in the image, the international search fund activity has increased significantly starting from 2019, with an exceptional peak in 2023, when a record of 59 new international funds has been created (Kowalewski et al., 2024).

Figure 2 - International Search Fund Activity by Year



Source: Kowalewski et al. (2024)

By looking at the results produced, instead, the ROI (Return On Investment) and IRR (Internal Rate of Return) produced in the last two years (2022-2024) by the U.S. funds are in line with those of the 2022 study and are respectively 4.5x and 35.1%; conversely, the results produced by the international funds in the parallel study differ slightly: the overall ROI reached is 2x (a rise of just 0.1% from the 2022 level) while the IRR obtained decreased from 19.4% to 18.1%. This indicates a stronger performance of U.S. funds compared to the international ones in the last study. However, overall, the studies demonstrate high returns for investors, with natural fluctuations over the years.

[3] With *international* we mean search funds established outside the United States and Canada

In recent years, therefore, the search fund model confirmed to be a peculiar investment vehicle which differentiates from all other forms of investing, in such it capitalises on the leadership and entrepreneurial potential of young MBA graduates and bets very much on the level of collaboration between the parties involved, that is searcher(s) and the pool of investors. This collaboration is at the core of the model, and the alignment of interests between the parties is crucial; it is particularly this latter point that will represent the core of the analysis of this dissertation.

Thanks to the options offered by the model, the searcher-promoter has a unique opportunity to grow professionally and leading a company often from the outset of its career, giving him a lot of expertise and without the need to personally put up the financial resources necessary for acquiring a business. As a matter of fact, this alternative of equity investment opens up entrepreneurship through acquisition to many ambitious people previously held back by financial constraints (Ener & Dàvila, 2022). Nonetheless, the searcher should have enough courage and a strong commitment to engage in such risky asset class.

As to this point, specifically, search funds position in the class of alternative investments which among the main common features have: the relative illiquidity, a diversifying potential relative to a portfolio of stocks and bonds and the high due-diligence costs (Morissette & Hines, 2015). Specifically, search funds fall within the traditional alternative investment category referred to as "private equity" (*ibidem*). With relation to the legal structure of the fund, search funds involve an agreement between the General Partners (GPs), who are the searchers/entrepreneurs, and Limited Partners (LPs), that is the investor base, therefore much alike a Private Equity firm's structure.

In *Figure 3* it is presented a table in which the main common characteristics of Private Equity Investments are shown, with a focus on some specific factors. As evidenced, in terms of asset class positioning, search funds are after traditional PE and before Venture Capital Investments (VC).

Figure 3: Common Characteristics of Private Equity Investments

	Angel Investors	Venture Capital	Search Fund	Traditional Private Equity	Independent Sponsor
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)

Additionally, investing in search funds means focusing on investments going from expansion to later stage of private companies showing stable and profitable cash flows. Moreover, in terms of fee structure, search funds are usually able earn larger total fees due to some characteristics. Among the ones that Morissette and Hines (2015) pointed out, we find: the active management role assumed by general partners post-acquisition, the smaller acquisition targets and the fact that investors' funds are not fully committed at the start of the investment, but rather are provided in different moments.

The relevance of asset class comes also from the fact that the SF model addresses a "fragmented and inefficient part of the market [characterised by] deals too small for institutional investors and too large for most group of angels" (Johnson, 2014, p.4).

The targets of a search fund are indeed included in the Small and Medium Enterprises (SME) market, which is a very ample market in Europe and especially in Italy, where most firms show revenues < €50m and have less than 250 employees. Looking at the American continent, in the USA as well there are many companies fitting the requirements for being a suitable search fund target.

Towards these firms, whose owners usually have succession issues and look for ways to get out from daily operations, the value proposition of searchers to the old owner selling its company

is “material” (*ibidem*): the owner-seller usually sees the searcher as his younger version and prefers to sell to a search fund over other options available. By giving some numbers, in the U.S there are more than 24 million businesses which are family owned (Vliet, 2021) and most of them, the 61% to be precise, do not have a formal, written succession plan in place (Brightstar, 2023). As a matter of fact, the search fund model proves to be a good succession tool for many aging owners, in societies where the number of businesses looking for a change in ownership is increasing. As a consequence, prospective buyers, including searchers, are becoming more active.

All the aforementioned characteristics have led to a boost in activity of search funds in recent years, both in the United States and in the rest of the world. According to the latest studies on the topic, provided by Stanford business school and IESE School of Navarra, search fund activity has never been higher, with around more than a hundred search funds being raised per year in the last periods in America (Kelly & Heston, 2022, 2024), and almost close to that number outside of North America during the same period (Kolarova et al., 2022, p.11). So, this confirms that the model is gaining more and more momentum across the SF community.

1.2 Players involved

The particularity of the search fund model lies also in the fact that it is built around three main players which, with different motivations and expectations, have a crucial role in the process. Specifically, these players are: the entrepreneur Searcher, the pool of Investors who provide capital and expertise and finally the target company that will be acquired. Over the years, these roles have come to be known as *Jokey*, *Trainer* and *Horse*, following a famous metaphor introduced by Rob Johnson in his paper[4]. This terminology is widely recognized and frequently used among practitioners.

The Jockey

The *Jokey* is the Searcher, the *horse-riding* (that is the one who will run the target), the person at the core of the model: it is from his willing to become an equity-owning CEO of an already existing small company that a fund is made up. Searchers are usually young talented entrepreneurs who recently finished an MBA program or mid-career professionals, most of the

[4] *Search Funds - What has made them work* (Rob Johnson, 2014)

times inexperienced in running a company; for this reason, they primarily look for experienced investors able to back and help them in the process since the beginning.

Searchers raising search funds usually share two common motivations[5]:

- a desire to start an entrepreneurial path to run a company;
- a desire to achieve significant financial upsides.

As a matter of fact, searchers should have a strong entrepreneurial spirit pushing them to take on responsibilities and bear risks in the process. The motivation to run and grow the target company should be accompanied by good analytical skills as well as the ability to create a large and supporting network of experienced investors. To delve deeper into the personal characteristics essential for these entrepreneurs' success, the Stanford Business School suggests several key traits[6]. Searchers must have attention to details and lot of perseverance: the search process, once the capital is collected, can be long and tiring, with many rejections by the prospective sellers, so they should not discourage themselves during the phases of the process and always trying to keep up with it. In addition, they should be able to build good relationships and networks, especially with investors, intermediaries and professionals in the industry segments of interest.

It's important to note that searchers carefully select the investors they want to involve in their search, while investors similarly evaluate and choose the searchers they wish to support. This creates a mutually selective, highly structured process for both parties. Additionally, searchers must demonstrate strong leadership skills, aligning teams toward a clear vision and executing strategies to continually drive the company's renewal and growth.

Going now deeper in what mostly attracts an individual engaging in this innovative career path, there is certainly the relevant financial upside he can potentially get, the fact to represent the main actor having the power to partly shape a good or bad outcome of the fund established and lastly the possibility to enter in a stimulating learning environment. As specifically to the financial rewards, the jockey will vest up to 25 or 30 percent of the common equity[7] of the target company it will acquire, in three equal tranches depending on some specific milestone: this aspect underlines once more the many advantages that the SF model recognises to Searchers.

[5] *A Primer on Search Funds* (Center for Entrepreneurial Studies, 2021)
[6] *A Primer on Search Funds* (Center for Entrepreneurial Studies, 2021)
[7] Usually a solo searcher can vest up to 25% of the target's equity while a partnership can acquire the 30% of equity in two. More on this aspect later on.

Looking at searchers' backgrounds, the evidence coming from the latest studies on the topic is that the median age at which searchers launch their first fund is 32. Moreover, most searchers graduated from a MBA program, launching a search fund often within two years from their graduation. As to the professional backgrounds of origin, instead, the majority of entrepreneurs keep on coming from management consulting, investment banking and general management areas[8].

The Trainer

Finding an active and experienced group of investors ready to back the searcher in the process makes a big difference and can discriminate the success of the fund. Since searchers are often relatively inexperienced in certain areas crucial to a fund's success, it's essential to build a diversified investor base including investors with deep expertise.

The traditional SF model usually has a group of roughly 15 investors which can belong to different categories of individuals, some of which already familiar with this asset class and others who are novel to it. Among the main categories of capital providers, we generally encounter professional search fund investors, high net worth individuals who have already invested in SFs, business owners, friends and family members[9], and many others that will be described later.

The metaphor of investors as *trainers* is key: they are the searcher's mentors, those who guide the entrepreneur during the search phase and "train" the future CEO after the acquisition of the target. Since they play this crucial advisory role, there should be a broad rage of operational experience among the investor group, as to better support the searcher in the different stages.

Investors' experience plays a big role in selecting and filtering the deals; for this reason the searcher should have the ability and the patience to find and select the most appropriate investors who, in addition to have the possibility to invest a given amount of money[10], should have the features of being active and collaborative, as well as the patience to listen to the searcher's doubts and work with inexperienced CEOs.

[8] IESE and STANFORD Search Fund Studies (2022)

[9] According to *A Primer on Search Funds* (Center for Entrepreneurial Studies, 2021)

[10] Each investor will fund the two-years search phase, that is the initial phase of the process, with a unit of €35/40k and then will have the option to invest in the target once found.

To summarise the main benefits for an individual investing in a search fund we find:

- the high return on the investment done: usually investors are able to get up to 35% of IRR on their investments at exit date. According to the latest studies by Stanford, the aggregate pre-tax returns were above 35% internal rate of return (IRR) and more than 5x return on investment (ROI)[11];
- the right to invest in the target: regardless of the participation, investors will have a step-up on the initial capital provided (usually 1.5x)
- networking opportunities.

The Horse

As evidenced, the goal of the SF model is identifying and acquiring a small company, with the intention of growing and selling it. The *horse* is the target, the business that the searcher must find and invest in. These micro targets should possess specific qualitative and quantitative characteristics that are going to be presented in this paragraph. Over the years, indeed, the search fund community has developed a set of predefined criteria, as to the specificities of the target and the industry in which this belongs to, which have the potential of making a company more desirable than another that does not fit into these prerequisites.

Obviously, only an ideal company would have all these criteria, but in any case, good targets possess most of them. In *Figure 4*, it is presented the set of desirable and undesirable criteria provided by the Primer on Search Funds.

[11] *Stanford Search Fund Study: Selected Observations* (Kelly & Heston, 2022)

Figure 4 – Suitable and undesirable target's characteristics

	DESIRABLE	UNDESIRABLE
INDUSTRY	• Fragmented industry • Growing industry • Sizable industry—both revenues and number of companies • Straightforward industry operations • Relatively early in industry life cycle • High number of companies in target size range • Healthy and sustainable profit margins (ROTC >20%)[7]	• Highly consolidated industry • Declining industry • High competitive intensity/limited barriers to entry • High customer pricing power • Unpredictable exogenous factors
COMPANY	• Competitive advantage • High recurring revenue [8] • History of cash flow generation • Motivated seller for nonbusiness reasons • Fits financial criteria, e.g., $10 million to $30 million in revenues and greater than $1.5 million in EBITDA • Multiple avenues for growth • Solid middle management • Available financing • Reasonable valuation • Realistic liquidity options in three to six years	• Turnaround situation • High customer concentration • High customer churn • Small company—less than $10 million in revenues or $1.5 million in EBITDA • Limited or no management bench strength • Competitive auction • Public to private transaction

Source: Center for Entrepreneurial Studies (2021)

As a matter of fact, the search fund model has been developed on a proven set of successful parameters to find a target, which indeed are summarised above and here explained. For a company to be an attractive acquisition target, it should operate in a growing and fragmented market, that is one without dominant national players, where there is ample opportunity for consolidation. The target's size is required to be small-medium, that is having revenues above €10m and up to €30/40m.

Moreover, the target should have a history of growth and profitability, with EBITDA margin higher than 15% and positive cash flow generation of 10 years.

Additionally, the firm should be safe: a good level of "safety" is proved by having recurring revenues and low CAPEX requirements. Companies with low capital requirements are usually easier to be managed and have more straightforward operations, thus are considered better for inexperienced CEOs.

According to the 2024 studies published by IESE and Stanford Universities, by looking at the industries, the ones more targeted are technology, services and healthcare.

1.3 The Search Fund Model

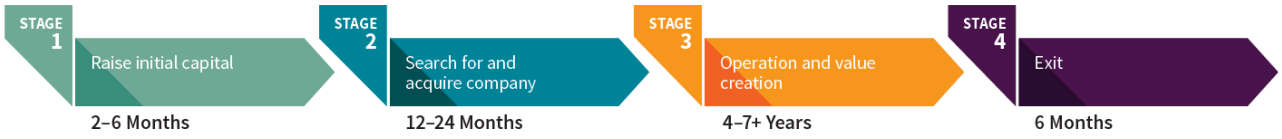
Increasingly common within the global investor community, a search fund is a pool of capital raised from a group of investors to support the search and acquisition of a privately held company with the goal of operating and expanding it.

This investment vehicle is very relevant for both sides involved: for the investors, it is an opportunity to invest in talented youngers early in their careers, to target the least efficient segment of the private equity market (the micro one) otherwise not considered, and finally to get high returns; on the other hand, it allows a young entrepreneur to become CEO very rapidly, with a significant equity stake and most of the times without investing one euro and with no prior top management experience.

The search fund process involves more than simply making an investment. It consists of four generally accepted phases which all together generally last 7 years, even though the timing of the exit from the investment ultimately depends on the board of directors and CEO's willing (hence with theoretically no limit, with some SFs lasting for more than 10 years).

In *Figure 5*, the four stages[12] with the related expected timeframes are presented.

Figure 5 – Stages of the Search Fund Process



Source: Kelly & Heston (2024)

[12] According to what reported in *Stanford Search Fund Study: Selected Observations* (Kelly & Heston, 2024)

Stage 1: Raise Initial Capital

The first very step required is collecting the search capital from a group of investors willing to back and support the searcher in the two-year process of the search (that is the following phase). The amount of needed capital varies depending on the type of the fund; for instance, for a solo searcher it is typically €300/400k while for a partnership is roughly €600/700k.

This initial amount is used to cover a modest salary for the searcher and the expenses needed for completing the search phase, such as office space, travel, administrative and due diligence costs.

During this stage, which can last up to six months, searchers sell *units* of search capital. Each fund generally comprises from 10 to 20 units, with individual unit values ranging between €20,000 and €40,000. In exchange for the unit bought, the investor receives two primary benefits: (1) the right, but not the obligation, to invest pro-rata in the equity required for the acquisition, commonly referred to as the *right of first refusal*; and (2) the conversion of their initial search capital investment, typically at a premium (e.g., 150% of the original investment), into securities issued as part of the acquisition capital. This second benefit is also known as step-up on the capital provided.

To formally start the fundraising process, the searcher has to write the Private Placement Memorandum (PPM). This is a formal document in which he/she provides to the prospective investors valuable information related to the investment opportunity. Among the main information included[13] we find:

- the specific criteria to be used to screen industries and companies;
- the financing structure of the fund ;
- a detailed timeline of the investment;
- the budget requested;
- the outline of potential exit opportunity;
- summary of the searcher's personal background.

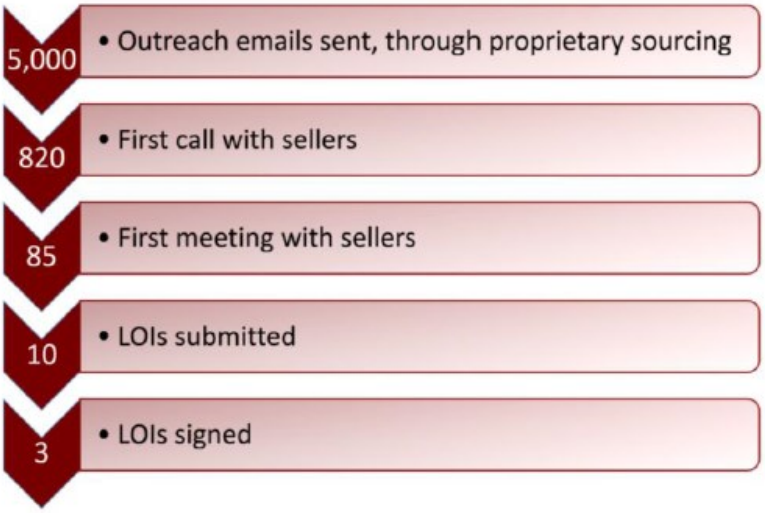
[13] *Stanford Search Fund Study: Selected Observations* (Kelly & Heston, 2022)

Stage 2: Search for and Acquire Company

Once the initial search capital is raised, searchers begin sourcing as many targets as possible. Compared to the first stage, this phase is certainly more time consuming with a median of 23 months[14] of duration, and it goes from the moment the entrepreneur begins searching for an acquisition target to the one when the acquisition is finally completed. There are many factors that can facilitate or delay this phase, such as regulatory issues, the general economic environment, industry characteristics and sellers' willingness to sell, etc. It is up to the searcher to be able to address a target that is positioned well in the market and possess many of the "ideal" and suitable characteristics mentioned earlier in the chapter. The company targeted should also reflect the specific criteria agreed with investors in the Private Placement Memorandum. In this circumstance the search of the target can happen through two primary methods: proprietary and broker deal flow[15], with the former being preferred by most searchers.

An illustrative search funnel describing how the search process works is shown in *Figure 6*.

Figure 6 – Search Funnel



Source: Dennis & Laseca (2016)

Therefore, the evaluation phase is pretty demanding: after a preliminary due diligence, the searcher has to structure a Letter of Intent (LOI) to present to the different sellers considered interesting. The LOI presents the main terms of the transaction, the bidding price and other

[14] *Stanford Search Fund Study: Selected Observations* (Kelly & Heston, 2022)

[15] Proprietary deal flow means directly looking to buy a business that is not being marketed with no use of intermediaries; for this reason, this kind if search makes the searching process rather difficult. In most cases, searchers reach out to thousands of business owners before finding the target they eventually acquire. Broker deal flow, instead, means taking advantage of intermediaries who market businesses for sale to multiple potential buyers.

financial and legal data. Afterwards, once the target is found, the searcher should finally perform a comprehensive due diligence until all information is verified and all questions are answered. Subsequently, the approval by most of the investors is needed and once had, the searcher must eventually arrange for the other funds requested to complete the acquisition, if the acquisition capital provided by the original investors is not sufficient. The remained capital needed can come from a variety of sources: seller debt, senior and subordinated loans and equity financing from new investors for instance.

Here the investors retain a sort of call option to have an equity percentage of the target: they can decide to invest in the company found by the searcher (and therefore underwriting the acquisition capital of the target) or decide not to invest (in this case the withdrawn investors will have 1.5x of the search capital given at the beginning).

It is just on the moment of the closing of the acquisition that the searcher gets the first tranche of equity of the target, amounting to roughly 8% of common equity for a solo searcher and 10% if the fund is in the form of a partnership[16].

Stage 3: Operation and Value Creation

This is the phase lasting the most, on average up to six years, in which the searcher must be able to manage and grow the company acquired. The first thing he has to do is establishing the new board of directors, which usually includes a strong representation of the investor base that have backed him. In the first year, sometimes it could happen that the seller remains in the company with an active management role to help the searcher, now new CEO of the company, become familiar with daily operations and other business relationships.

Usually, during the first periods, searchers do not try to make significant changes to the business but only commits to continue to run operations and strategic activities in a similar way as his predecessor did. Then, after becoming fully comfortable with the business, the search fund entrepreneur should find ways to improve the performance of the company and finally generate value for the shareholders, hence the investors.

Searchers have a lot of options[17] open: they can create value through revenue growth, the improvement of operations, organic expansion, use of leverage, multiple expansion, add-on acquisitions, financial optimization and in many other ways.

[16] Partnerships typically earn 30 percent of the common equity, while solo searchers earn up to 25 percent (Center for Entrepreneurial Studies, 2021)

[17] According to what reported in *Stanford Search Fund Study: Selected Observations* (2022)

Over time the searcher will vest linearly the second tranche of equity (commonly, a four to five year vesting schedule)[18], as long as he works as CEO of the acquired company and is able to manage the target.

Stage 4: Exit

As Dennis and Laseca (2016) affirm, the average holding period of a target acquired by a search fund is usually seven years, and this is longer than typical investments in private equity deals. Therefore, this evidence confirms the riskier nature of this asset class.

Nevertheless, the timing of exit can widely vary among different SFs and the most influential factors of this decision include market conditions and the profile of the investor base (Dennis & Laseca, 2016).

In any case, investors and searchers share a desire to realise returns at some point; consequently, different exit alternatives are taken into consideration throughout the life of the business. Among the main liquidity events available to exit the investment, we find: selling or IPO of the target; the repayment of the investor debt; investor equity may be sold to other investors or bought by the company; or the company can issue dividends[19] (Kelly & Heston, 2022). According to a research conducted by Morissette and Hines (2015)[20], roughly 80% or more of search funds exits are to a PE company while the remaining 20% is targeted by strategic buyers.

At this point the searcher vests the third and last tranche of equity, which is earned on achieving specific performance benchmarks (mostly in the form of IRR hurdles). These benchmarks most commonly start at 20 percent IRR and max out at 35 percent IRR. Just to give an example, the searcher will get 0% of additional equity if he/she is not able to make an IRR for investors higher than 20 percent; a pro-rata amount if he reaches 20% < IRR < 35%; and the full additional 10% if IRR will be equal to 35%.

[18] *Search Fund Primer* (Center for Entrepreneurial Studies, 2021)
[19] *Stanford Search Fund Study: Selected Observations* (2022)
[20] *An Investor's Guide to Search Funds* (Morissette, Hines, 2015)

1.4 Alternative Search Fund Models

In recent years, the interest in search funds is increased. Additionally, as awareness of the traditional (or core[21]) search fund model has grown, other alternative approaches have emerged and achieved increasing popularity (Rice & Wasserstein, 2021). These new models are quite recent, so there is not much information available about them.

What emerges nowadays is that a "one size fits all" approach to search funds does not exist anymore as in the past, but otherwise the searcher has a wide array of options available that he can use to best fit his needs and goals.

The objective of this section is to provide a constructed resume of the main alternative models that have been generated up to now. The main advantages and disadvantages of each of them will be presented and this discussion will reveal particularly useful especially in the last part of this thesis, where they will be recalled.

The alternative models most widely used after the traditional one are four: (1) the self-funded, (2) the accelerator (also referred to as incubated search), (3) the sponsored search and finally (4) the search fund with majority of equity accruing to the searcher. The (2) and the (3) fall within the assisted search fund category[22] and are usually treated together, even though they present some slight differences between them.

These approaches are just the main ones differentiating from the traditional search fund model; there are plenty of other minor alternatives to these (Rice & Wasserstein, 2021)[23]. Here the models are ordered according to their inception year, from the oldest to be developed to the newness one.

The Self-Funded Model

This alternative model gained popularity among those entrepreneurs who desired to have more control over the established search fund: among all models, this is the one which provides to the searcher the highest form of control and, at the same time, the riskiest form of search (Rice & Wasserstein, 2021). In a self-funded search, the entrepreneur or group of entrepreneurs search for, acquire and operate the target by using their own financial resources, without the backing

[21] The traditional or core SF model is the one for which Stanford and IESE Business Schools make the biennial studies.
[22]The common feature of the assisted models is that the carried interest for a solo searcher (that is the amount of equity earned by the searcher) requested is slightly higher than the traditional model (30% vs 25% of the traditional model). Also, the budget in the PPM (600 000) is higher than the traditional (500 000).

[23] Other minor alternative models for instance are: single sponsor model, mid-career accelerator model, concentrated model, impact model etc. (Rice and Wasserstein in *Exploring Various Search Fund Structures*, 2021)

of any investor. Therefore, this model draws on limital capital resources; in addition, the searcher does not earn a salary, and due to the mentioned funding limitations, the companies that can be targeted are smaller in size than those acquired using comparative models (usually in the range of €500.000-€1.500.000 EBITDA). The absence of investors is not limiting only to the extent that there are often fewer financial resources, but also the lack of guidance provided in the other cases.

Consequently, this model brings many advantages and disadvantages at the same time. Among the pros there is undoubtedly the high level of flexibility recognised by the self-funded structure: in this circumstance, the searcher retains the control from both an economic and governance perspective, so that he can freely focus his search on a more detailed and niche geography or industry in a way that usually is not open to traditional searchers, leading sometimes to an increase in the investment risk (Rice & Wasserstein, 2021). Another aspect stemming from this characteristic is that the searcher faces fewer time constraints than traditional search fund entrepreneurs, allowing him to proceed at his own pace without needing to respond to investor demands. Along with the smaller dimension of the target, the searcher can vest higher percentages of equity ownership, usually in the range of 50 to 70%[24], thus having the majority of the company acquired (Kelly & Heston, 2022).

Moreover, this model allows for the use of higher debt percentages to fund the company acquisition, and to make this possible the searcher can rely on raising debt on sources like SBA 7(a) loans, which are a specific loan program designed by the U.S. Small Business Administration (SBA) to provide financial assistance to small businesses (US SBA, 2024). The possibility of raising more debt than other models bring with it a disadvantage: the searcher has to personally guarantee the SBA loan. Other disadvantages encountered are: the lack of the ecosystem of advisors who help sourcing the companies and enforcing best practices, the limitation to smaller deals and the lack of any salary during the search initial phase.

The Accelerator Model

In the accelerator model, sometimes also known as incubated search (Dennis & Laseca, 2016), the searcher is backed and helped by a sponsor organization, which substitutes to the pool of investors found in the traditional model.

Sponsor companies began to focus only in investments in search funds almost at the inception of this kind of alternative models, allowing them to develop deep specialization in this type of

[24] Rice and Wasserstein assert up to 100%.

private equity investment. A sponsor organization trains aspiring searchers in all those tasks required to search for, acquire and then run a suitable small enterprise. While the searcher maintains control of the deal, the accelerator commits to perform all the other activities needed for the good execution of the acquisition such as providing guidance as a mentor, material assistance (like templates) and financial support. It is indeed the sponsor which pays the salary to the searcher and provides eventual additional equity financing to complement the debt financing that usually the searcher arranges in this model (Rice & Wasserstein, 2021).

Additionally, the accelerator usually organises specific events such as financial and management boot camps during which it presents the main skills to help searchers navigate the search process (*ibidem*). All this contributes to build that very strong infrastructure representing the main advantage of this alternative model.

The most famous accelerator and the first to pave the way to the others is the SFA (Search Fund Accelerator) and was established by Timothy Bovard in New York in 2015. From that year, multiple search funds accelerators began to spread all around the world. Among the most famous listed by Nicholson (2024), we can cite: Seqos (established in UK in 2022), Broadtree Partners (US, 2016), Novastone Capital Advisors (focus on Europe and US, launched in 2020), JaSFA (Japan, 2020).

Another great advantage of this model is the fact that the accelerator company provides the full amount of equity (hence the 100%) needed to acquire the company, "[…] allowing [the searcher] to skirt the problem of putting a fund together and assembling a network of aligned investors" (Rice & Wasserstein, 2021, p.6). Post-acquisition, the accelerator company takes two board seats in the company and reserves two for independent advisors (obviously with the searcher taking one as usual). The equity percentage that a solo searcher will vest is equal to the one of the traditional model, that is up to 25% (Dennis & Laseca, 2016).

The Sponsored Search

The sponsored search model is very similar to the accelerator one: the searcher partners with an investment firm that substitutes to the pool of investors of the traditional model and provides all the capital needed for the search and acquisition process, thus becoming the controlling shareholder. The firm will further provide all the infrastructure essential to the process, letting the searcher not to waste time on finding for office spaces, administrative support and so on. In addition, the searcher can take advantage of a daily interaction with the firm, which works as a personal coach and mentor for the entrepreneur.

The sponsored search model is very similar to the accelerator one: the fund raises capital from a single source rather than a pool of investors, thus again differentiating from what happens with the traditional models or the last category that will be later explained.

The typical sources of financing of this model are *family offices*, which are born as private wealth management firms that handle the investments and affairs of high-net-worth families providing adequate knowledge; in this circumstance, they take the role of the pool of investors and help the searcher by providing tools to address the unique goals and needs requested by a SF. Once found the target, it is the sponsored firm, that is mostly the family office, which contributes the full percentage of equity needed to secure the deal, exactly as in the case of the accelerator model.

Overall, the advantages associated with this alternative are many:

- the searcher will have availability of a good infrastructure (research tools, administrative support, office space etc.) as soon as he starts the search;
- daily interactions of the searcher with shareholders, that are the members of the family office or the investment firm backing the entrepreneur;
- smoother decisional process: the searcher only has to deal with one member and not multiple investors having sometimes different views.

On the other side, the main drawback of the model is that since there is one single source of capital, the sponsor will own most of the equity and control of the board of directors (Dennis & Laseca, 2016). Alike the accelerator model, the searcher has the possibility to earn up to 25% of the equity of the target.

Search Fund with majority of equity accruing to the searcher

The search fund model with majority of equity accruing to the searcher is another very recent alternative established for the first time in the United States. This model combines some elements of the self-funded model with those of the single sponsor search, and the first example of this typology was developed by Justin Burris and Tim Ludwig, two MBA students respectively from the Dartmouth College and the University of Michigan. The main peculiarity is the fact that the searcher has the ability to earn the *majority* of the equity of the target based *only* on specific growth-rate hurdles (Rice & Wasserstein, 2021). As a matter of fact, the ending

ownership recognised to the searcher by Majority Search can go up to 51%+, as it is described in their official website[25].

As a consequence, as asserted by the two founders "the searcher's equity compensation is 100 percent performance-based with materially more upside than in some other search structures" (Rice & Wasserstein, 2021, p.17): this differentiates the model from any other structure, making this alternative particularly rewarding and suitable for people with the right skills to run small companies, and not the people with the capital to buy them.

What Majority Search does is addressing those categories left unserved by the traditional and self-funded search models, that is "those who have proven leadership experience but not the MBA pedigree to go with a traditional search or the ability to sign a personal guarantee on an SBA 7(a) loan in a self-funded search" as asserted by Burris and Ludwig (2023, p.17).

As to the characteristics of the companies targeted, these are the same of the traditional model, except for the dimension: the targets of this model are smaller than those targeted by traditional search funds but larger than self-funded companies (Majority Search website).

1.5 Overview on some critical aspects

Coming now to a crucial point that will represent the core of the analysis of this thesis, there must be kept in mind that one of the main reasons why search funds have worked well and continue to attract more and more investors and searchers is the fact that the "whole process is a real partnership, a collaborative effort to achieve value for both the searcher and the investors" as Johnson and Simon assert (2017 p.1).

A search fund certainly works better if there is a good alignment of interests between the investors and the searcher; as a matter of fact, the model is regarded to align incentives "more than any other ecosystem" (Johnson, 2014).

So, the specificity of the traditional model and all its alternatives is indeed the relationship that originates between the Investors (seen as principals), or the company accelerator, and the Searcher (seen as agent) and the alignment of incentives necessary to ensure the effective functioning of the process. This relationship and the potential points of conflicts began to be discussed among scholars, with the objective to find a possible resolution to the problems that might originate from it.

[25] Please see https://www.majoritysearch.com/approach for more.

Particularly, the Investor - Searcher structure can rightly be framed within a principal - agent relationship, seen from the perspective of the agency theory. Like any of these types of relationships, also players in search funds are subject to common agency problems, brought about by different goals and information asymmetry characterising the parties. Just to give an initial insight, key concerns include moral hazard and adverse selection problems; as such, in some cases the Searcher-agent does not act in the best interest of the Investors-principals who back him and prefers to fulfil his needs rather than satisfying both. In addition, Searchers may also misrepresent their abilities or intentions, and to a certain extent Investors as well may appear able on some aspects on which they have no adequate knowledge.

Other potential problems related to these include the free riding, that investors could potentially do when engaging in the cap-table (by taking advantage of the motoring on the searcher performed by the other investors), and those related to the incentives structure (such as the mechanism of equity vesting).

The objective of the following chapters will be that of deepening inside the relationship between Investors and Searchers and try to analyse in a thorough way the agency risk perceived by the principals about the agent. The final aim is trying to find possible solutions with the potential of improving the search fund model.

CHAPTER 2: AN ACADEMIC VIEW TO THE PRINCIPAL - AGENT RELATIONSHIP

Search funds are becoming a very interesting asset class for more and more investors around the world. The model is indeed based on the collaborative effort between the Searcher/ entrepreneur and the Investors who put the capital in the fund; without such strong collaboration, the system created by the model risks to fail. As anticipated, the Searcher - Investors structure can rightly be framed within a Principal - Agent relationship, seen from the perspective of Agency Theory. As a matter of fact, the relationship between the two parties is inherently characterised by the dynamics of the mentioned theory, where the Investors act as principals and the Searcher(s) as their agent(s).

Like any other principal - agent relationship, also the search fund model presents problems in the alignment of goals and incentives among searchers and investors (Ener & Dàvila, 2023). At its core, every search fund involves a long-term relationship between these two parties; however, sometimes aligning their respective interests give rise to various challenges for both sides. To be more precise and according to what Ener and Dàvila came across in a recent study[26], ensuring the alignment of goals, which scholars have sometimes called *goal congruence* (Arthurs & Busenitz, 2003), is a major challenge that can be extended to the SF world as well.

Given the relevance of this topic and the ultimate objective of this dissertation, in this second chapter the origins and the core topics of agency theory will be presented. These subjects will be covered by focusing on the literature produced by prominent scholars who set the bases for the development of the theory, such as Jensen and Meckling, Eisenhardt, Arthurs and Busenitz and Fama, just to mention some among the most important.

The chapter will delve into the important concepts of adverse selection and moral hazard, central to the comprehension of the broad topic, as well as the main mechanisms employed to mitigate these two problems. Overall, this chapter aims to provide an academic and comprehensive understanding of what agency theory is and how it can be leveraged to enhance the decision-making and performance in entrepreneurial settings, like the search fund one.

It is worth specifying that the approach that is going to be used in this chapter is mostly general, meaning that the objective is explaining the principal - agent theory for what it is. It will be specifically related to the various search fund models and relative problems of goals alignment only in the following Chapter 3, where the research part of this thesis will be introduced.

[26] *What makes search fund entrepreneurship different in Europe?* (Ener & Dàvila, 2023)

2.1 Introduction to the Agency Theory

2.1.1 Overview of Agency Theory

Agency theory is one of the most relevant frameworks in business literature, distinguished from all the other conceptualisations for its usefulness in analysing environments of cooperative structures. This theory saw its birth in the 1960s and early 1970s, years during which scholars like Arrow and Wilson began to explore how individuals and groups share risks in situations of cooperative effort. The first phase of development of this literature focused on investigating the risk-sharing problem "[…] that arises when cooperative parties have different attitudes toward risk" (Eisenhardt, 1989, p.58). Afterwards, this type of literature broadened its focus from the risk-sharing themes, to also include the agency problem originating in circumstances where cooperative parties have different goals and tasks to perform, thus paving the way for a conceptualization of the agency theory as we know it today.

Since its inception, the theory examined has been applied by scholars across multiple disciplines, ranging from accounting, economics, finance, and marketing to political science, organizational behaviour, and sociology (Eisenhardt, 1989). During the years, agency theory, with its innovative ideas on risk, incentives, uncertainty, asymmetry and other themes, developed important novel contributions to organizational thinking, thus becoming a fundamental framework to consider every time a situation having a cooperative structure is studied. The wide existence of agency problems in different types of organizational structures made this theory as one of the most important frameworks in the economic and finance literature (Panda & Leepsa, 2017).

Many scholars reputed the division of labour as "the foundation of agency problems" (Besley & Ghatak, 2014), and, as such, the need for delegating tasks to those with appropriate knowledges already traced back to Adam Smith, who saw in the specialization of workers the best and most effective way to enhance productivity. Therefore, the first insights for the development of a theory about agency could be already found in Smith's work.

According to the famous definition provided by Jensen and Meckling in one of the building blocks of the agency theory[27], an agency relationship is defined "as a contract under which one or more persons (the principal(s) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent" (Jensen &

[27] *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure* (1976)

Meckling, 1976, p.6). Consequently, the relationship generated is ascribed as principal-agent relationship and is unique for a series of characteristics that will be analysed during this chapter.

As one can easily understand from the definition provided by the two scholars, agency theory strives to describe the relationship between the agent and the principal by using the metaphor of the contract, meaning that their relationship is based on explicit or implicit agreements that outline the incentives, duties and performance expectations of each party. According to Eisenhardt (1989), the final aim of the theory is to determine the most appropriate and efficient contract able to govern the principal-agent relationship given specific assumptions about people (such as risk aversion, self-interest and bounded rationality), the organization (for instance the conflict among members of the same organization or the information asymmetry between shareholders and managers), and about information (seen as a commodity that can be traded). The contract serves as a "basis" for managing the potential conflicts of interest arising between the parties involved.

Therefore, the search for solutions specifically focuses on the type of contract that can solve the problems arising from this type of framework: from the one hand, there could be developed *behaviour-oriented contracts* based on rewarding the agent according to his adherence to certain behaviours rather than final results, and from the other hand, there could be devised *outcome-oriented contracts*, more based on linking the agent's compensation directly to the outcomes and results he or she achieve by performing his tasks.

Going more in detail, agency theory is concerned with resolving two main problems occurring during the interplay between the agent and the principal (*ibidem*):

- the first agency problem arises in a specific situation, that is "when (a) the desires or goals of the principal and agent conflict and (b) it is difficult or expensive for the principal to verify what the agent is actually doing" (Eisenhardt, 1989, p.58). In such a situation, the principal is not always able to verify if the agent has behaved appropriately;
- the second problem, instead, deals with "the risk sharing that arises when the principal and agent have different attitudes toward risk. The problem here is that the principal and the agent may prefer different actions because of the different risk preferences" (Eisenhardt, 1989, p.58).

2.1.2 Branches of research

Having its roots in information economics (Eisenhardt, 1989), agency theory developed along two main directions that share the common idea of the presence of a contract between the principal and the agent: the positive stream and the principal-agent one (Jensen, 1983). Categorised by Eisenhardt himself, the main features of these two branches are presented in the following brief sections.

Positivist Agency Theory

It is the less mathematical branch between the two and focuses on conceiving governance mechanisms that can mitigate the self-serving behaviour of the agent. One of the particularities of this stream is that, at the beginning, positivist researchers mostly focused their search only on the principal-agent relationship among owners and managers of large public corporations. Over the years, however, this tendency began to change, and the solutions devised for large publicly held corporations began to be adaptable to analyse also other business forms, such as small medium enterprises, venture capital, private equity, and so rationally search funds as well. Therefore, we can assert that the positivist branch has proven flexible and applicable across a wide range of organizational settings beyond its original focus on large corporations.

Prominent examples of researchers active in this branch have been: Jensen and Meckling, who with their work dated back to 1976 treated the ownership structure of large corporations, presenting ways in which equity ownerships recognised to managers help align the interests of both parties; Fama (1980) who focused its work on capital markets, and others who also focused on the role recognised to the board of directors as a strong instrument of information system.

The core of the positivist agency theory is indeed the search for effective governance mechanisms that can solve agency problems. According to Eisenhardt (1989), two sentences summarise the mechanisms originated in this stream:

- the first one is that when contracts between agents and principals are outcome-based, the agent is more likely to behave in the principal's interests, which means that "outcome-based contracts are effective in curbing agent opportunism" as Eisenhardt said (1989, p.60). Jensen and Meckling provided the example of how by increasing the managers' equity ownership, the managerial opportunism tends to decrease, but at the same time principals could have problems in recognising too high equity stakes to agents;

- the second proposition adds that information systems as well contribute to decrease the managerial opportunism, in such these kinds of systems have the potential to inform the principal on the agent's actions.

Principal-Agent Research

The principal-agent branch commits to provide a more general theory of agency, in order to apply it to a broader list of cases, such as buyer-supplier, employer-employee, lawyer-client and many others (Harris & Raviv, 1979). It is regarded as a formal specification of the principal-agent paradigm, built on careful assumptions and, if compared with the other research stream, much more abstract and mathematical, with the consequence to be less applicable and understandable by organizational scholars (Eisenhardt, 1989). While the positivists looked for alternative mechanisms to mitigate agency risks, this branch specifically focused on finding the optimal contract to be created between the agent and the principal, or said differently, the most efficient contract to be devised according to the varying levels of "outcome uncertainty, risk aversion and information" (Eisenhardt, 1989, p.60).

The main assumption of the model is the perceived goal conflict between the parties involved, the risk aversion of the agent[28] and the easily measurable outcome. The model cited was often described by cases, particularly two:

- one case in which there is complete information, that is the principal knows the actions performed by the agent, and in which a contract based on behaviour is most efficient;
- the other situation is when the principal does not exactly know the actions of the agent (case of incomplete information), and it is in this circumstance that agency problems arise. This situation is the one most common in economic and financial decisions, where almost always there is a lack of information characterising the parties involved.

  As such, two main problems are the direct consequences of the information asymmetry originated and they form the core of the agency theory itself: adverse selection and moral hazard.

[28] Usually, in classic agency theory agents are considered to be risk averse while principals are deemed to be risk neutral, for the possibility of diversifying their investment.

2.2 Agency problems and core concepts in literature

As seen, an agency relationship is a contractual agreement between a principal and an agent (or more than one person for each party) in which the agent assumes the role of representative of the former party and should act in the principal's best interests when making decisions. The delegation of the decision-making authority from the principal to the agent is proved to cause a loss of efficiency and an increase in costs, which usually are sustained more by the principal than the agent.

As a consequence, the background of agency theory is indeed the principal-agent relationship and the information asymmetry present among the parties involved. Information, as many economic scholars pointed out along the years, represents the basis for any economic and financial choice taken by economic agents (Akerlof, 1970), and thus having a good and broad level of information before engaging in an economic transaction is judged essential. Conversely, being in an environment where complete information is lacking for at least one party makes several problems arise. Given the utility maximizing principle assumed for both parties involved in a cooperative relationship, Jensen and Meckling (1976) asserted that there is enough probability "to believe that the agent will not always act in the best interests of the principal" (p. 5). As such, the fact that both parties are utility maximisers, generates the ground for the conflict of interests we see in many cooperative frameworks, both inside and outside the corporation.

Otherwise said, the divergence of interests among parties in such a situation generates costs to the actors involved, that in literature have been called *agency costs*. In order to limit the divergences from what should be performed on behalf of the principal, this latter has the possibility to establish appropriate incentives for the agent or also to monitor the agent when performing the activities for which he has been given the mandate. According to Jensen and Meckling (1976), it is impossible for the principal to make it happen that his agent will perform all the appropriate optimal decisions from the principal's viewpoint at zero costs: the principal will always incur in some costs to align the agent's interests with his ones. So, the parties involved (especially the principal) will often incur positive monitoring and bonding costs to make the relationship happen properly, and despite this, in any case there will remain still some divergence between the two parties' interests (Jensen & Meckling, 1976).

In their famous work *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, one of the milestones of the agency theory, the two scholars define agency cost as the sum of three related costs (p.6):

1. the monitoring expenditures by the principal,
2. the bonding expenditures by the agent,
3. the residual loss.

The first category, the monitoring expenditures, are the costs (which like the others can be pecuniary or not) borne by the principal to control and oversee the agent's behaviour, in order to ensure the alignment of interests. The various monitoring costs cover a series of expenses which usually include the "payment for watching, compensating and evaluating the agent's behaviour" (Panda & Leepsa, 2017, p.84). From this follows that all the costs associated with audits, appointment of board members, performance evaluations and other form of incentives designed to limit the deviant agent's behaviour are included in this category.

Bonding costs, instead, are those incurred by the agent who wants to guarantee to the principal that he will act in his best interests or that, otherwise, he will compensate the principal in case he acts in a harming way. Said with Panda and Leepsa's words (2017), bonding cost is represented by the cost incurred by the agent to set up and perform according to the predefined and correct firm's operations. A feature that is worth underlining is that bonding cost and monitoring cost go in the opposite way, that is when bonding costs increase (said differently, the commitment of the agent in fulfilling principal's expectations increase) monitoring costs borne by the principal decrease.

The last category, the residual loss, is the last cost of the agency relationship, the irreducible one that remains after all the effort incurred by the agent and the principal to bond and monitor. It is defined as the "dollar equivalent of the reduction in welfare experienced by the principal as a result of this divergence" (Jensen & Meckling, 1976, p.5). This happens because it is practically impossible to design a perfect contract aligning all the interests among the parties involved and therefore a given level of misalignment will always remain after the other two agency costs have been considered.

In addition to these three types of agency costs, each cooperative framework gives birth to two specific agency problems, which arise as a consequence to the information asymmetry between the parties and due to the difficulties in motivating properly the agents involved in the relationship. The following paragraphs will indeed deal with the specificities of adverse

selection and moral hazard, which are these two types of agency issues. Just to give a first insight, it is worth mentioning the first difference between the two: adverse selection arises when "the desires or goals of the principal and those of an agent conflict" (Marwala & Moloi, 2020, p.73) while moral hazard deals with different risk aversions and indeed "arises when both principal and agent have different attitudes towards risk" and then they could likely prefer to do different actions according to their different risk preferences (*ibidem*, p.74)

2.2.1 Adverse Selection

Adverse selection, together with moral hazard, represents a core topic in the agency theory framework and its concepts are widely present in disciplines like economics, risk management and insurance. Like moral hazard, the problem of adverse selection stems from the information asymmetry among the parties involved in a relationship, where indeed there is a counterparty who is more knowledgeable and informed than the other(s) and can take advantage of that and working against the less informed one.

The base of adverse selection can be found in the work *The Market for Lemons: Quality Uncertainty and the Market Mechanism* written by Akerlof (1970), who was among the first scholars to study the effect of information asymmetry. The example used to facilitate the understanding of the topic was that of the market of used cars (some of which can be damaged and not in good conditions to be sold, and therefore called *lemons*, by using a slang American word). In the example used, there is a second-hand vehicles dealership who has two similar-looking cars to sell, with the difference that one of them is a peach (that is a car which has been appropriately taken care of and hence functions well) while the other is a lemon (which means that it has not been properly maintained). The seller obviously knows the quality of the cars he is selling but decides not to disclose them to the buyers, who cannot easily assess the quality of the vehicles. However, since buyers are only aware of the two quality products offered but cannot discriminate between them, the presence of this incomplete information will result in buyers available to pay lower prices to buy the car (in order to account to account for the risk of buying a lemon). The direct consequence of this is buyers willing to pay up to an average price for the cars offered, same both for good cars and bad ones. As a result, the market will collapse, in the extent that the dealers of high-quality cars will exit due to the low offered prices, leaving only lemons in the market. Akerlof refers to this as a market failure and a classic example of adverse selection.

The agency problem of adverse selection is also known as the *problem of hidden attributes*, and is widely present in insurance markets as well, where unhealthy individuals with higher risks are by far more likely and advantaged to purchase insurance than those with lower risks (who can decide to not buy and leaving the insurer with a disproportionately high-risk pool). Another application of the concept is labour markets, where the personal abilities that workers claim to have in their cv cannot be fully indagated until one is effectively in his workplace.

By using Eisenhardt's words (1989), "adverse selection refers to the misrepresentation of ability by the agent" (p.61). This means that the agent, in the process of hiring for instance, can assert to have some skills and abilities that he or she has not, hiding therefore the true reality. In that way, the agent misrepresents his abilities, and the principal is in the condition that he is unable to properly verity the agent's characteristics. As we will see in the following chapter, this can undoubtedly happen also during the initial interactions among the Searcher(s) and Investors, with Searchers depicting themselves in a different way than they actually are. So, the situation depicted by this problem is a situation in which the agent has more accurate information than the principal, who is at disadvantage to the former party.

Coming now to a crucial feature of adverse selection, which distinguishes it from moral hazard and represents the main different between the two, is the time of occurrence: adverse selection happens *before* a contract is made or prior to when the deal is agreed upon. Conversely, moral hazard refers to the "change in the behaviour of one party *after* the agreement has been made" (Nickolas, 2022).

2.2.2 Moral Hazard

Like adverse selection, also moral hazard is an agency problem which is direct consequence of the information asymmetry occurring between economic actors in a given transaction (Marwala & Moloi, 2020). Using the definition provided by The Economic Times (2024), "Moral hazard is a situation in which one party gets involved in a risky event knowing that it is protected against the risk and the other party will incur the cost. It arises when both the parties have incomplete information about each other". Said differently, moral hazard has more to do with risk and it occurs when the agent, aware that he will not bear the full consequences of his actions, engages is actions, also risky ones, which might be undesirable from the principal's perspective.

As a matter of fact, also here it is a situation of unobservable behaviour, and the main difference with adverse selection is that moral hazard arises after an agreement has been made: it is about *hidden actions* that may occur after the parties make an arrangement while adverse selection, as seen, is more about *hidden attributes* affecting a transaction before it happens.

The term originated in the insurance business and, as Cecchetti and Schoenholtz (2017) noted[29], moral hazard emerges when it is not possible to observe people's behaviours in a costlessly way and hence it is impossible to judge an outcome without incurring in costly monitoring. Continuing, it is defined by a lack of effort of the agent (who he is said to "shirk" in the relationship), occurring when he is not performing at the agreed level of productivity.

2.3 Solutions proposed by scholar

As previously seen in the chapter, the feature of being utility maximisers, valid for individuals engaged in a cooperative relationship, makes the relationship itself sometimes complicate to be managed. Agency theory is essentially based on the relationship between two parties, the principal and the agent, who are engaged in a cooperative behaviour, but at the same time having different goals and attitudes towards risk. If things were easy, everything would go well and people involved will cooperate to reach common goals, but the reality is that agents have an intrinsic opportunistic behaviour. What happens is that often agents' interests and desires conflict with those of the principal, giving therefore birth to an agency problem. And like any other problem, it needs to be solved.

When conflictual interests arise, the focus of the parties must be that of finding ways to solve these conflicts, and particularly relating to the agency problems stemming from the conflict between the principal and the agent, scholars have produced several solutions with the potential to mitigate adverse selection and moral hazard problems. In this section, the solutions found by researchers over the years will be presented, trying to set useful academic bases for finding practical remedies for the agency problems within the SF world that the following chapter will deal with.

As can be inferred by the work of Eisenhardt (1989), when we are in front of situations of unobservable behaviour, like in the case of adverse selection and moral hazard, the principal has two main options available:

[29] Cecchetti S. G, Schoenholtz K. L, (2017). *Moral hazard: A Primer*

- the first one is to make use of information systems in order to understand the true intentions of the agent. Examples proposed by Eisenhardt (1989) are for instance: “budgeting systems, reporting procedures, boards of directors, and additional layers of management” (p.61).
- the other option recognised by the scholar is to design outcome-based contracts. According to the researcher, with such a contract the risk previously incurred only by the principal will be partly transferred to the agent as well, making the coalignment of the preferences of the agent with those of the principal easier.

The heart of agency theory is indeed “the trade-off between (a) the cost of measuring behaviour and (b) the cost of measuring outcomes and transferring risk to the agent” (Eisenhardt, 1989, p.61) and to respond to the need of balancing these costs, two approaches have been devised in form of contracts: behaviour-oriented contracts and outcome-oriented contracts. These two typologies mostly differentiate for the level of risk attributed to the agent and the type of action measurement.

As *behaviour-based contracts* are concerned, they are useful when agent’s actions are easily observable and measurable by the principal and when there is a high level of uncertainty about the outcomes due to external factors not dependent on agent’s control. These contracts are designed by clearly specifying tasks and responsibilities that the agent should perform and reward the individual if he acts according to those predefined behaviours. Examples are represented by all the contracts including a detailed job description with certain responsibilities that the worker must respond to get the monthly salary. More in detail, these contracts try to avoid agency problems, mainly those concerning moral hazard, by ensuring that the agent's behaviour aligns with the interests of the principal.

As to *outcome-based contracts*, their focus is essentially linking the agent’s compensation to the achievement of specific outcomes or results, differently hence from the other category where rewards are given according to the adherence of the agent to certain behaviours. This solution is often employed when directly and easily monitoring the agent's actions is challenging. Some examples of result-based contracts are those recognising performance bonuses or stock options.

Coming now to the remedies thought by academics to particularly mitigate adverse selection, it is worth reminding firstly that this agency problem occurs ex-ante in the relationship, so when agents have more information pre-contractually, therefore solutions must be able to reveal the true characteristics and intentions of the agent, aiming at reducing the potential agency conflict

early at the beginning of the relation. Among the main solutions proposed by the scholars, we find many alternatives; specific focus will be made on the one that is more relevant for our future reasonings in the thesis. The instruments available to the parties are:

- **Screening**, developed with the contributions of Akerlof (1970) and Rothschild and Stiglitz (1976). This mechanism is initiated by the principal, that is often the uninformed party in the relationship, who takes actions to induce the more informed party (the agent) to disclose those private information that he would otherwise hide. Making a reference specifically to the work of Joseph Stiglitz and Michael Rothschild, the example used was that of the insurance market where, since the insurer does not know the risk level of his clients, he will propose them contracts with different combinations of coverage and premium. By choosing the contract that best suits client's characteristics, clients will screen themselves and this will allow insurers to identify the risk level of his clients. Enlarging the reasoning, each mechanism devised with features like this one will make agents self-differentiating into categories based on their characteristics.
- **Signaling**, firstly proposed by Spence in his work[30] published in 1973. Explained with the example of education, Spence underlined how someone looking for a job could engage in behaviours to reduce information asymmetry. Spence explained "[…] how high-quality prospective employees distinguish themselves from low-quality prospects via the costly signal of rigorous higher education" (Connelly et al., 2011, p. 40).

  A fundamental notion in signaling theory is the concept of quality which, even though can be interpreted in many ways, its common meaning in this framework is "[…] the underlying, unobservable ability of the signaler to fulfill the needs or demands of an outsider observing the signal. In Spence's classic example, quality refers to the unobservable ability of the individual, which is signaled by completion of the educational requirements necessary for graduation" (Connelly et al., 2011, p. 43).

  The theory reverts around some key concepts: the actors involved in the exchange (the signaler and the receiver), the message itself (the signal) and feedback. Spence underlines that a signal, to be effective, must be credible (Spence, 1973). More in detail and by using Connelly's words, for a signal to be efficacious there must be two characteristics, that are *signal observability* and *signal cost*.

  The first one, signal observability, refers "to the extent to which outsiders are able to notice the signal. If actions insiders take are not readily observed by outsiders, it is difficult to use those actions to communicate with receivers.

[30] Spence M, (1973). *Job Market Signaling*.

Observability is a necessary but not sufficient characteristic of a signal. On the other hand, as to signal cost, it represents the price the signaler has to sustain to send a signal. The idea is that a signal to be credible has to be costly to produce, meaning that only those effectively of high quality can afford to signal. Consequently, this acts as a deterrent for low quality senders. Examples of credible signals are for instance specific work experiences, education degrees and certifications.

- **Specific contract designs**. The researchers who gave the highest contribution for this specific remedy, particularly for this agency problem were Grossman and Hart (1983) and Laffont and Martimort (2002).
- **Third-party verification**, meaning the introduction of auditing to mitigate the information asymmetry produced. Particularly relevance for this topic is recognised to the work of Dye (1993).

On the other hand, to solve the problem of moral hazard, which originates ex-post and during the relationship, scholars have thought of other remedies or simply have integrated those already proposed for adverse selection. Among the main ones we find:

- **Monitoring of the agent's actions**. It was very likely the milestone written by Jensen and Meckling (*Theory of the Firm*) in 1976 to represent the foundations of how monitoring and supervising agent's actions could be beneficial in mitigating the agency problem of moral hazard.
- **Design of optimal contacts**, specifically aimed at reducing moral hazard. The scholar developing these solutions was mostly Holmström (1979). Its work paved the way for more practical applications later became performance-based compensation or balanced scorecards for instance.
- **Governance structures**, both in terms of specific board composition and external regulation (making use of audit mechanisms like the ones thought for adverse selection).

Since their conception, the mechanisms above mentioned have been proved useful and mostly effective in the mitigation and solution of the issues occurring within a cooperative framework. Each remedy should be carefully thought depending on the type or combination of agency problems it has to minimise, so first of all particular attention should be paid to recognise them. With businesses' features constantly evolving and new types of entrepreneurial settings emerging, new problems threat the long-term relationships within those organizational contexts and new ways of mitigating agency are devised. New solutions could be also provided by recent technology and the application of artificial intelligence.

To conclude, as we have seen throughout this second chapter, agency theory is central and applicable to a wide range of cooperative situations studied by different disciplines. This framework, aiming at finding the most effective contract design and mechanism to solve agency problems, is constantly taken into consideration in scenarios of information asymmetry, where agents are the most informed party and could work against the principal's interests. Having been widely used to explain different settings in venture capital contracting[31], agency theory can rightly be related to the search fund asset class as well, where the different stages of the search fund process often entail goal alignment and incentive issues, thus responding to the same incentive problems and mechanisms of the principal – agent relationship that have been analysed in this chapter.

The objective of the following chapter will be presenting the research part of this thesis, by starting from the rationale that inspired the idea of the research topic and proceeding with enlisting the common and more relevant issues that can be found within the search fund model. Then the problems, whenever possible, will be framed within the agency theory framework. Some solutions to overcome these issues will be subsequently presented and then proposed to the SF investors' community, in order to see if there is some desirability in changing the actual model.

[31] The work of Arthurs, J. D., & Busenitz, L. W. (2003) *The boundaries and limitations of agency theory and stewardship theory in the venture capitalist/entrepreneur relationship* represents one of the first notable examples on the topic.

CHAPTER 3: AGENCY ISSUES INSIDE SEARCH FUNDS

By presenting the research part and the rationale that has led to deal with the issues present in the SF model, this third chapter introduces the core of the dissertation. At its foundation, every Search Fund involves a long-term relationship between Investors and the Searcher(s) and, as already anticipated in the previous chapter, this relationship can rightly be framed within the agency theory. The chapter indeed begins with a literature review about SFs, indagating what has been treated by scholars so far and highlighting the gap found in the research developed on the asset class. This indeed represented the starting point to find out an effective topic for the empirical part of the work.

To contribute to the finding of the subject, there was the awareness that the asset class in exam is not absent from issues characterising the relationship among the parties involved. As the reader will realise from the chapter, Search Funds could present some issues in the alignment of interests among the parties which can be effectively interpreted at the light of the principal-agent theory analysed in the previous chapter.

Since the problems encountered can often be addressed through the agency lens and given that we identified a gap in the literature developed on SFs, we decided to choose this topic and analyse it empirically. When dealing with these issues, most of them have been associated with a specific agency concern and, whenever feasible, likely solutions based on the literature and the features of the SFs model have been proposed. Then, all of this has represented the foundation for the survey that was sent to relevant investors focusing on this asset class, and that the following chapter will show.

3.1 Literature on Search Funds

A proof of the relevance that SFs have gained in the alternative investments asset class over the years is being showed by the increasing covering that scholars and lecturers are giving to the topic and the different ways into which the subject is treated. This paragraph explains the rationale that has been followed to find the research topic of this thesis. To begin with, in order to find the core subject of the work, we have started from a detailed bibliographic analysis of the papers and studies about Search Funds produced so far. Because of this first step, we came up with different information streams across which the knowledge and the research about this asset class has been developed.

The turning point was the gap in literature encountered during the analysis of the material, and which will be presented in subparagraph 3.1.2.

3.1.1 Existing research on the asset class

The existing literature about search funds reverts around some specific topics that here are delineated.

- To begin with, and with the aim of spreading the knowledge of the asset class, many works provide *general information about the core (traditional) SF model and its main alternatives*. This information stream is undoubtedly the most important one and the first to be developed at the inception of search funds as an asset class back in the 80s. The pioneers of its developing are the Universities of Stanford in the U.S. and Navarra (IESE) in Spain, but as the model became more famous over the years, also other important universities decided to focus on its covering; the most relevant among these new that is worth mentioning is the Yale School of Management.
  To delve more into the topics considered, the information about the traditional model[32] is mostly provided by the IESE and STANFORD studies. They have been devised with the scope of presenting a sufficient coverage of the traditional search fund model. As asserted at the begin of each edition of these researches, which are published every two years, these studies report on the key characteristics of search funds formed respectively outside the American continent (referred to as "*international search funds*") and those established in U.S. and Canada; in addition, information about the financial returns

[32] With traditional or core search fund model is intended the one established by a solo searcher or a partner of searchers and it is the one that has been taken into consideration in the first chapter.

achieved by the funds and their comparison along the years are taken into consideration as well. Just to mention other information provided, we find: definition of what a search fund is, activity of the funds across the years, detailed explanation of the stages of the model, profile of principals, search funds' outcomes, Searchers' compensation, targeted industries, location of established funds, brief insights about the main alternative models. Given the design of these studies and the expertise of the lecturers who wrote them, they are likely the most significant source of information on the search fund model in the current literature.

Another milestone in the SF literature which gives insights about the traditional model and its key features is *Search funds. What has made them work*?, a paper published by Rob Johnson in 2014 in which he presents the famous metaphor of the Searcher as *jockey*, the Investors as *trainers* and the target as *horse*, as it was explained in the first chapter.

Also, it is worth mentioning the work by Rozenrot & Wainwright (2005) *Note on search funds*, which particularly focuses on the four stages of the model and the benefits for both parties involved.
Instead, the information about the alternatives search fund models are provided more specifically by sources like:

- Dennis & Laseca, (2016). *The evolution of entrepreneurship through acquisition*;
- Rice & Wasserstein, (2021). *Exploring Various Search Fund Structures. There are many ways to approach launching a search fund*;
- Thresh, (2023). *Traditional vs self-funded search funds: how the models differ at the five key stages in a fund lifecycle,* and so on.

- An excellent work has been done also to prepare specific *guides specifically devised for who decides to establish a new fund or has the interest to invest in the asset class* (hence meaningful for Investors).
  The most relevant source for Searchers is undoubtedly *A Primer on Search Fund*, published in 2021 by the Stanford Business School and presented as a "practical guide for entrepreneurs embarking on a search fund" as the Center for Entrepreneurial Studies (p. 1) defined the same document. The aim of the Primer is providing details about the model and the search fund career path; as asserted by the lecturer Peter Kelly and Sara

Heston that oversaw the revision of the guide, "it attempts to answer the most frequent questions raised by people embarking on the process, provide an unbiased view of its benefits and challenges, explain the typical interactions between entrepreneurs and investors, examine their respective incentives, and share execution tips provided by search fund entrepreneurs" (p.2).
For all these reasons, this guide is sometimes referred to as the "Search Fund Bible" or the "Search Fund Playbook" (Ener & Dàvila, 2023, p. 490). The contents of this document are many: beginning from personal questions every potential Searcher should ask himself before embarking in the search, the Primer proceeds dealing with the search fund, how to perform the targets screening and also some informative parts on the transition of ownership and management once an acquisition is completed.

As for the Investors, even though all the mentioned works represent a very useful base for them as well, these ones specifically focus on the relevance of the asset class for this party. They usually compare search funds to other asset classes. Some of these are:

- Morrissette & Hines (2015). *An Investor's Guide to Search Funds*;
- Johnson (2023). *A Note to Investors Who Are New to Search Funds*.

- Finally, the last topic considered by the existing literature is *the future of search funds or the development of the model in some specific continents*, like Europe in this case.
  As a matter of fact, very recently in literature, scholars have began to focus also on the future of search funds. Prominent examples are some articles on websites and papers mostly developed by the Yale University. A better overview of this topic will be provided in the last chapter. Examples of this topic are:
  - Steven J, Wasserstein AJ, (2023). *Exploring the Future of Entrepreneurship through Acquisition*;
  - Rilling J et al. (2023). *A Reference Guide on European Search Funds*.

3.1.2 Gaps in the literature

Turning now to topics that scholars have only recently begun to examine, most fall under the broad category of challenges and risks associated with investing in search funds.

In fact, beginning in the 2010s, several prominent scholars within the SF community started focusing on the causes of failures and specific issues related to the model.

The first work to address this is the one by Kessler & Ellis published in 2012 and titled *Search funds: death and the afterlife*. This study was defined as an effort to "[…] understand and evaluate common themes present in unsuccessful search fund acquisitions" (Kessler & Ellis, 2012, p.1) and these causes were ascribed to nine themes.

After this, a relevant work beginning to doubt about some structures of the model, especially those related to the incentives and the equity attributions to the Searcher, is *Re-Thinking Search Fund Incentive Structures* published by Johnson & Simon (2017). The purpose of this work was to stimulate discussion among key people in the community on several topics related to SFs, with the proposal of setting as a baseline for future exchanges on the subject.

A very recent work, instead, treated the agency theory related to the search fund model, with a particular focus on analysing the differences between the European funds and the American ones. This study, written by Ener and Dávila (2023) and titled *What makes search fund entrepreneurship different in Europe,* dealt with agency theory inside SFs for the first time ever, thus starting to fill a gap that was present in the literature until last year. And it was especially this lack of covering that increased our belief that a thesis investigating deeper the relationship between search funds and agency theory could represent an innovative idea, useful also for future development of the subject itself.

Given that the relationship between the Searcher and the Investors exemplifies an agency relationship, as outlined in the previous chapter, this theme has been chosen as the central focus of the research part. To date, all literature on SFs has explored the above-mentioned themes, yet no study (except for the recent work by Ener and Dávila) has examined the relationship between agency theory and search funds. In fact, the relevance of agency theory to search funds becomes particularly evident when considering the inherent challenges within the model.

This model presents some issues and improving areas for both parties involved, and the causes of the divergence of interests can rightly be interpreted at the light of the agency theory. From this, the idea of going deeper into this subject and thus moving on a sort of "border of knowledge" as to the search funds world, by analysing the probable issues in the model.

By doing so, this work may contribute to fill the gap found in literature, and that Ener and Dàvila began to address last year.

3.2 The agency theory view on the Investors-Searcher relationship

As anticipated at the beginning of this chapter, the search fund model may present certain issues that require a careful analysis to enhance the overall asset class, particularly regarding the alignment of interests among the parties involved. In the unique paper correlating agency theory to search funds[33], Ener and Dàvila highlighted how the relation between the Investors and the Searcher is "[…] fraught with challenges" (Ener & Dàvila, 2023, p.3).

During the Searcher's job in a search fund, challenges arise and agency theory has indeed the potential to serve as an effective framework for analysing these concerns. Ensuring the alignment of goals between the Investors (or the sponsor company, depending on the type of SF model) and the Searcher(s), which is referred to as *goal congruence* (Arthurs & Busenitz, 2003), is considered a major challenge inside search funds, even though this asset class has worked and continues to work consistently well for the parties involved (Johnson, 2023).

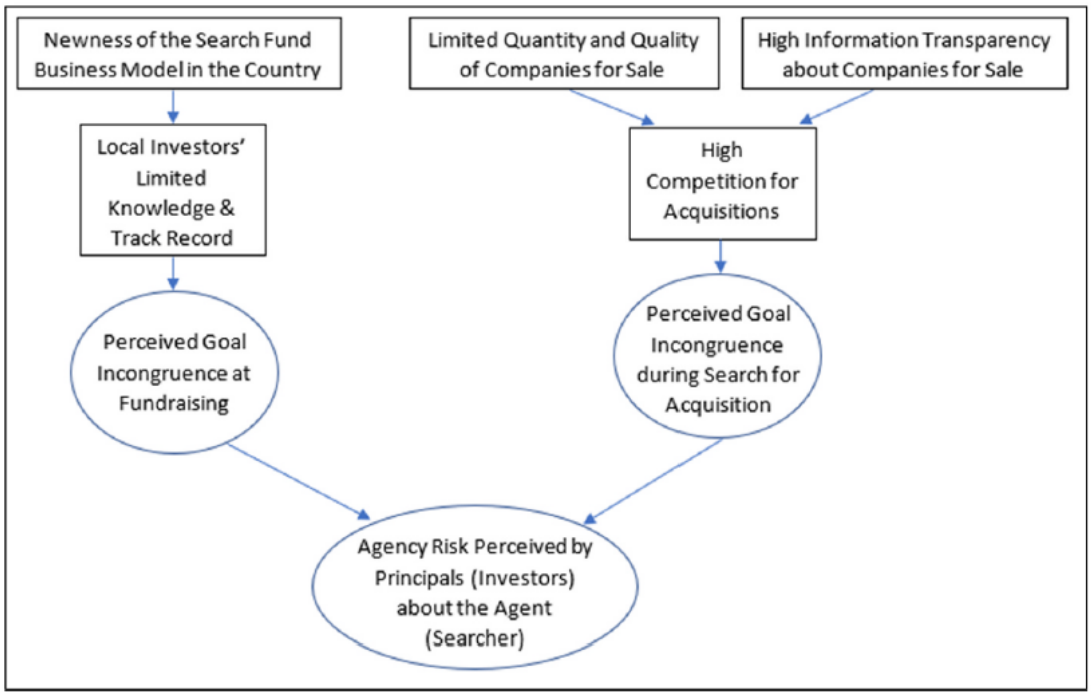
The four phases of a fund involving the finding of a suitable target, the negotiation of the acquisition, the years of managing the target acquired and the final sale to a potential buyer are all subject to issues that can be interpreted at the light of the principal-agent view. Just to anticipate, the dedication and the abilities of the searcher are often questioned by the Investors who take different measures to establish an appropriate level of goal congruence with Searchers (Ener & Dàvila, 2023). In summary, due to the uncertainty and information asymmetry usually charactering their exchanges with Searchers, Investors are active in selecting entrepreneurs and monitoring their performances until the moment they will exit the investment (*ibidem*).

In addition to the challenges faced by the parties related to the overall model that are analysed in the following paragraph, SFs differentiated also for the contextual characteristics of the countries where they originated, making for instance European search funds more subjects to agency problems than American funds[34]. An overview of the issues found in European search funds by the two scholars is provided in *Figure 7*.

[33] The reference here is to Ener H, Dávila A, (2023). *What makes search fund entrepreneurship different in Europe?*, which is the first study to employ agency theory in the context of entrepreneurship through acquisition.

[34] Always according to the Ener and Dávila's study of 2023.

Figure 7 - Synthesis of findings about search funds in European countries



Source: Ener & Dàvila (2023)

The above figure underlines the features due to which the "[…] European context for acquisitions creates principal-agent relationship challenges in search funds" (Ener & Dàvila, 2023, p.8). As the two researches revealed and summarised in the above figure, in the European area there were three main factors (considered as specificities of Europe) which created a certain level of goal incongruence between Searchers and Investors, making arising the agency risk perceived by the principal. Citing the scholars, the challenges in the finding of attractive targets were several: "Few investors and company owners had ever heard of the search fund business model; a relatively small number of industries fit the established search fund playbook[35]; and competition for making an acquisition was intense due to the abundance of information about privately held companies" (Ener & Dàvila, 2023, p.8).

To summarise, when dealing with search funds there must be kept in mind that not only the model presents agency problems stemming from its core structure, but also the unique features of the specific countries where they originate have proven to lead to unforeseen agency issues, "[…] leading to local adaptations of the search fund business model that originated in the US" (Ener & Dàvila, 2023, p.10).

[35] For established search fund playbook, it is meant the "ideal" features a target should have to be considered suitable for a search fund acquisition, which were reported in the table showed in *Figure 4* in chapter one.

Therefore, since no one has conducted a comprehensive analysis of the likely issues present in search funds and their potential connection to agency theory, the following paragraph will serve this purpose.

3.3 Agency problems emerging in the SF investment model by stages

The awareness that the SF model presents some issues deriving from its core structure is most of the times invisible to those outside the search fund community, but Searchers and Investors focusing on this asset class have them clear in mind. These potential issues a re seen as a future area of improvement of the model and one of the objectives of this part is presenting them clearly, showing what is the risk faced by the Investors in each of them.

Each issue has been associated to a specific stage of the SF's lifecycle. Furthermore, wherever applicable, the theoretical elements derived from agency theory (such as adverse selection, moral hazard, asymmetric information, and mitigating mechanisms) are explicitly linked to each issue, contextualised within the distinct roles and characteristics of both Searchers and Investors.

For every issue, moreover, the costs for the actors involved have been highlighted, meaning with *costs* the *consequences* of any action on the Searcher and Investors sides. The guiding principle in this case is as follows: when there is no cost incurred by a party, there is potential for improvement. Then, whenever possible, solutions are proposed, taken by insights from the agency theory literature or from prominent exponents of the SF community.

As also Ener & Dàvila (2023) pointed out in their work, identifying and addressing the types of agency problems encountered in the traditional model and its main alternatives is going to be vital to help both Searchers and Investors better fulfill the potential of entrepreneurship through acquisition.

Our analysis identified ten issues related to SFs, which are detailed in the following paragraphs. Each issue is assigned a specific number for clarity; for instance, the first issue in the initial stage is labelled as *issue no.1*, while the final issue in the exit phase (the last SF phase) is described as *issue no.10*.

3.3.1 Adverse selection in the raising of initial capital (first stage)

As presented in the first chapter, during the first stage the Searcher has roughly from two to four months to collect the necessary capital to fund the search of the target and all the related administrative and travel costs. Within this amount of time, the agency problem that is most likely to arise is that of adverse selection: Investors could often have difficulties in distinguishing between a "high-quality" Searcher and a "low-quality" one.

The first issue that may arise in the model is about ***assessing the real quality of the Searcher*** (issue no.1). Specifically, the problem refers to the risk faced by the investors of choosing a Searcher that seems and claims to be highly qualified and skilled when he might not be so. The Searcher, in fact, may try to present himself as more talented than he actually is in order to collect the search capital. Investors indeed may doubt if the Searcher will be capable of reaching the goals of successfully finding, acquiring and managing the target for several years.

These doubts may arise after investors have reviewed all publicly available information, such as data from professional social networks or other databases, and after thoroughly examining the Private Placement Memorandum (PPM). This occurs because, prior to the preparation of the PPM, investors typically do not invest time in interviewing the Searcher. These characteristics conceptualise the issue as a classic case of adverse selection: the Investors, in fact, retain less information about the competences (quality) of the counterparty, the Searcher, and this fact can lead to a sub-optimal choice of the entrepreneur, who might turn out to be not so capable. This is the essence of adverse selection, as Akerlof defined it, where the party with less information (Investors) is at risk of choosing a "lower quality" and less committed Searcher.

Moreover, this problem is specific of the early phase of the raising of the search capital, when the abilities, commitment and suitability of the Searcher cannot easily be proved. The problem is increased by the fact that the Searcher is usually a first-time entrepreneur, so Investors have not a record of his past experiences except for the academic career and working background, but obviously not as CEO. To keep in mind also that Investors are multiples[36] and not necessarily talk with each other, an information about the Searcher known to some of them may not be known to the others. A consequence of the information advantage of the Searcher is obviously the increase of the Investors' risk in investing in the asset class.

[36] Assuming now we are reasoning with the traditional model.

Analysing now the costs for the parties, the Searcher in the first stage is basically betting on the search capital, and if he cannot convince the Investors, he won't have the money available to fund the two-year search: consequently, we can assert that the cost he bears is high and hence he will try to convince the investors in a good way. As for the investors, instead, if they select a wrong Searcher, they will "only" lose the search capital, but not the acquisition capital, which is asked only in the subsequent moment when the target is found; in addition to this, if they exit the investment, they receive back 1.5 times of their original capital contribution to the fund. Therefore, we can assert that the risk is relatively modest for the investors.

Looking specifically at the mitigants already provided by the SF model, some points should be taken in mind:

- the Searcher is chosen by a multiplicity of investors who reason independently. Whenever important and experienced Investors choose a given Searcher, the other ones could be influenced by this choice and choosing that Searcher trusting their experience.
- the risk of the investors is mitigated also by the fact that the search capital quota given by each investor is relatively modest;
- the capital given by the investors is remunerated 1.5 times whenever they decide to exit in the moment of the acquisition.

It is interesting to note that this problem could also refer to signaling theory, in which the Searcher plays the role of the signaler and the Investors of the receiver. As receiver, the investor base should have adequate information to mitigate its doubts and convince themselves about the Searcher's abilities.

The second risk that the SF model can give rise to in the first stage is ***assessing the Searcher's real commitment*** (issue no.2). In this case, the problem can be considered as adverse selection on the Searcher's *commitment*.

While the previous issue is about the abilities and competences of the Searcher, what additionally may emerge is that the Investor could face difficulties in assessing ex-ante the Searcher's real effort and commitment in the subsequent search of the target. Particularly, the risk faced by the Investor is whether the Searcher will fully commit to the search and not distract himself (by other jobs for instance, as he may consider the period as Searcher as a temporary profession).

To better evaluate his level of dedication, Investors should carefully indagate the previous experience of the Searcher and see what are the costs for him: just to give an example, if the entrepreneur has just abandoned a good job or sacrificed important alternatives to pursue the search fund path, he will bear a high opportunity cost, so rationally he would be very committed in searching for a good target in the subsequent phase of the process, due to a high cost of failure; conversely, if he was without a job before starting the search, Investors should pay more attention to him, since his opportunity cost of not committing completely is clearly lower and he can use the two years of the following phase of the search as a sort of "break" to earn money and exploring other career options.

3.3.2 Issues of the second stage (searching and acquire the target)

As to the second phase of a SF process, three different issues have been identified. Here they are described according to their relevance.

The first issue that may be found in this stage is the ***presentation of overly optimistic projections in the plans prepared by the Searcher for the Investors*** (issue no.3). The issue refers to the plans that the Searcher prepares once he has found a possible target and must propose it to the Investors.

The projections in the plans are often constructed with the promise that the specific SF's investment proposed will produce an internal rate of return (IRR) of around 30-35%, as the average of the asset class, even though the Searcher is not fully confident that the target can actually achieve those returns.

So even though Searchers are not confident that the target will make that return possible (meaning that the risk profile associated with the SF investment would be actually high according to the high return promised), they present the projections optimistically by designing plans that return to the Investors a 30% IRR. By presenting such a plan, the Searcher's objective is simply to convince the investor base to go on with the acquisition capital.

This problem relates to both signaling theory and agency theory. Framing this issue into the former theory, Searchers are the agents who send a signal (which concretises in the plan with optimistic projections) to the Investors-principals to prove the viability of the target. Within agency theory, the presentation of this type of plan could partly be viewed as a form of moral hazard where information asymmetry plays a role. It is just a partly association with moral hazard because in this circumstance there is nothing that Investors cannot check the investors.

In fact, with moral hazard the problem is indeed originated from the difficulty of controlling Searcher's actions, it has to do with hidden actions, while here the problem stems more from signals and intentions.

As to the costs for the parties generated by this issue, the party sustaining the highest one is the investor base, while the cost for the Searcher is almost null, because he will have the 20% equity in any case, also if at the exit Investors do not reach the 30-35% IRR. And keeping in mind the general rule asserted in paragraph 3.4, saying that when there are scarce costs for one party, there is present an area for improvement, solutions should be concentrated on the searcher's side. For instance, if those projections do not reveal real and so the investors are not able to achieve that IRR promised by the searcher, the second equity attribution earned after the 4 years as CEO could not be made obvious or simply reduced. At the same time, it must be considered that the plan could also not be reached due to factors that are not in the Searcher's control and not attributable to him, like sellers not in line with the management of the new CEO. Another possible solution could also be completely tying the Searcher's equity vesting and compensation to performance or to the achieving of financial goals (like the *Majority of equity accruing to the searcher model*[37] devised by Ludwig which already does something like this).

The traditional model in particular works pretty well in the first phase of the SF process: until the moment the Searcher does not find a target he will not get the first tranche of equity of the target, therefore he is pushed to find a target and the incentive of the first equity stake seems to work well. In any way, in this circumstance the Searcher may have the ***incentive to speed up the search of the target before the budget or the time expected for the search finish*** (issue no.4). Therefore, the problem mostly lies in the fact that sometimes Searchers may try to accelerate the process of the search and select a risky target. Their aim is indeed to find a target before they run out of the available budget collected or before the two years meant for the search finish. The hurry in closing this phase could actually lead to a bias in evaluating the target, which might be chosen without the proper attention.

It is important to recognise that Investors typically have more experience than the Searcher, making it challenging for the latter to mislead the investor base regarding the target's characteristics. Thorough due diligence processes provide Investors with a clear understanding of the target's actual features. Consequently, this situation does not involve much information

[37] Type of alternative model described in paragraph 1.4. of Chapter 1.

asymmetry; rather, it is a scenario where the Searcher primarily seeks to accelerate the search process.

This issue can be analysed through the lens of agency theory, highlighting a potential misalignment of interests between the parties involved. Specifically, this case exemplifies a form of moral hazard, in which the Searcher might act in ways that serve his own goal of quickly securing the initial tranche of equity. This urgency can lead to behavior that potentially compromises the quality of the acquisition, increasing the risk of a "bad" investment for the investors. Moral hazard arises here because the Searcher's incentive to expedite funding may conflict with the investors' interest in a careful selection process, creating for them a potential disadvantage.

Another scenario that may create during the second stage is the ***potential misalignment of interests between Investors and the Searcher related to the target's size*** (issue no.5). At times, the Searcher may have an incentive to deviate from the target's standard criteria, as typically defined in the Search Fund model (according to which revenues should be above €10mln and up to €40mln or EBITDA to be within €4mln for instance), by aiming to acquire a larger company. This is because, with the same equity allocation, in absolute terms the potential financial gain would be greater for him. In addition to this, it is important to remind that Searchers do not put any money into the acquisition, so if they target bigger firms, the cost is all borne by the Investors who provide the acquisition capital.

3.3.3 Third stage's issues (operation and value creation of the target)

A first issue characteristic of the third stage and recently highlighted by scholars is the ***non optimal incentive structure for the vesting of the second equity tranche*** (issue no.6).

Among the points dealt in the famous paper written by Rob Johnson and published in 2017[38], this one represented a core topic in the scholar's research. The issue found is related to the earned equity incentive structure recognised to the Searcher. As Johnson asserted, recently to that year experienced investors had questioned the value of the middle, time-based vesting tranche**.** What they said was the following: "[…] perhaps it makes sense to eliminate the middle tranche and have only two tranches: one upon closing a deal and the other tied to performance"

[38] *Re-Thinking Search Fund Incentive Structures*

(Johnson, 2017, p.4). And the reason for Johnson was quite clear: "since the performance-base tranche already effectively includes a time-vesting element […], there is no real need for a separate time-based tranche" (*ibidem*).

The issue is whether the second tranche of equity vesting that the Searcher earns linearly over time as the target's CEO is truly earned. As a matter of fact, the second equity tranche is attributed to the Searcher based exclusively on time and not on the actual SF's performance.

After the four years as CEO, the Searcher indeed earns an additional 10% of equity, only based on the passing of time. Related to this point, investors are certainly aware that in every SF investment there is the possibility that Searchers can earn the second tranche (that is the additional 10% of the equity of the target) even though they make Investors perform "poorly" relative to the average IRR for the asset class (for instance making them reach the 7-8% of preferred return only).

Consequently, in the worst scenario, Investors could reach only the hurdle rate of 7-8% and the Searcher could earn a total of 20% of equity (10% at the acquisition and the other additional 10% linearly over time). This possibility, though not very common, could actually occur, leading to a strong misalignment of interests.

Considering this, the scholar proposed one possible solution to the problem: restructuring the searcher's equity vesting from three tranches to only two: one at acquisition and the other one being performance-based. This solution, just one of several possibilities, is often referred to as the 50:50 split. In addition, what Jonhson added was also the fact that "with this structure, it probably also makes sense to widen the IRR range; for example, starting vesting at 15% and fully vesting at 35%. […]. The added advantage of this proposed model is that it makes the performance element more powerful, while also enabling the Searcher to begin earning equity at a lower IRR". (Johnson, 2017, p.4).

Another solution may be that of assigning the middle tranche in the same way as it is currently (that is linearly), but conditional upon the IRR achieved for Investors between the hurdle rate of 8% and the 20%, while also considering the fixed salary recognised to the Searcher as CEO.

Particularly relevant in the stage of the operations, it is also the issue that creates within the investor base in controlling the searcher's actions. What emerges from the analysis is that the ***fragmented investor base in a SF challenges an effective monitoring and control of***

Searcher's actions (issue no.7). The problem arises from the fragmentation of the investor base, where multiple principals (Investors) must collectively oversee a single agent (the Searcher).

By using the agency theory's terminology, the issue could be seen as a *multiple principals on single agent problem*: the principal is not unique but otherwise it comprises multiple individuals, sometimes not in line with each other. The principal is indeed a group of investors, which are not a unique head. Using the metaphor proposed by Johnson, we can say there is a plurality of *trainers* giving mandate to the *jockey* (Searcher). Some of them, as seen, could be "on the ride" and very active in checking what is going on in the managing of the target while others may be simply followers. The principal structure is hence decentralised, with investors having different motivations as well as different levels of engagement.

With each Investor typically holding a small share of the target's equity and having different levels of engagement, it results difficult to coordinate and enforce a unified control over the Searcher's actions. At the same time, this fragmentation creates both pros and cons for the parties involved: from the one hand, the lack of a dominant shareholder prevents the over-concentration of investor power, and from the other it creates a challenge, limiting the effective monitoring and control on the Searcher's actions.

This governance issue can be described as a principal–principal conflict, representing another facet of the agency context compared to what has been addressed in the previous stages. Traditionally, agency theory focuses on conflicts between the principal and the agent; however, this framework also applies to conflicts among multiple principals, as in this case, where ownership is dispersed and no dominant shareholder exists.

The last point observed for this stage and certainly relevant in the relationship between Searcher and Investors is the ***information rights of the Investors*** (issue no.8). This refers to the rights of shareholders to access information, which are typically agreed upon between the Investors and the Searcher at the outset. A primary concern is establishing an appropriate level of communication that the Searcher must provide to both the board and the investors who do not hold board seats. The Searcher is responsible for regularly updating the Board of Directors, usually composed of three or four investors, who then communicate relevant updates to the remaining investors during shareholder meetings.

However, this process may create information asymmetry, where investors in the board have access to more detailed or timely information than those who are not represented on it. As a

result, some investors may feel they lack access to the information they need or desire, as not all are directly included in the board's updates. Effectively managing this communication gap is essential to ensure transparency and maintain trust among all stakeholders, regardless of their level of board representation.

3.3.4 Problems occurring in the last stage

The ninth issue found is ***how to measure the attribution of equity to the Searcher*** (issue no.9). The key question is whether the performance of Search Funds should be evaluated based on the Internal Rate of Return (IRR) or the Multiple of Invested Capital (MOIC). From the Searcher's perspective, the main difference between the two lies in the consideration of time: IRR accounts for the time value of money, whereas MOIC does not. As a result, if a SF's performance is measured solely by MOIC, without factoring in time, for instance the Searcher could potentially triple the Investors' capital over a ten-year period and still receive 30% of the equity, even though the Investors may end up with a relatively modest IRR after that long time of ten years. So far, search funds' performance has never been measured exclusively by MOIC.

Traditionally, the performance of the fund has been measured by using the exit IRR on the investors' capital. As Johnson (2017)[39] underlines, what investors point out when they focus on long term investments like the SF's one, is that they are much more interested in achieving a good MOIC than in focusing on the IRR.

As a matter of fact, most of investors recognise that "using an IRR hurdle has the potential to encourage the entrepreneur to seek an early sale in order to lock in his/her performance tranche. Conversely, using a multiple of invested capital ("MOIC") can have the opposite effect, causing the entrepreneur to hold on too long" (Johnson, 2017, p.4). The approaches could have therefore the effect of encouraging a sort of "game-playing" (*ibidem*) by Searchers, so a correct balance should be found according to the scholar.

One solution coming from Johnson's analysis is to "earn the performance equity based on a time-limited aggressive MOIC followed by more benign IRR targets. This would reduce the pressure to sell in the beginning while still allowing for long-term value accretion" (Johnson, 2017, p.5). The highest level of uncertainty remains the usual inexperience of the Searcher. So here the problem is finding a solution that can work for all the parties involved. And this reveals to be difficult, as both Searchers and Investors are used to certain performance measurements.

[39] The reference is to the work *Re-Thinking Search Fund Incentive Structure*, published in 2017

The need for a balanced and structured approach between the IRR and MOIC is therefore more important than ever.

On this topic, various investors participated in the debate, and maybe one of the most famous contributions to it is an article published by Tom Matlack on June 2017[40]. Matlack is a SF investor, and his analysis focused on the performance vested tranche recognised to the Searcher, claiming it as perhaps the most debated one.

The issues that Matlack highlighted as a consequence of the actual design of the performance tranche can be summarised in the following two points:

- *a short-term preference*: the IRR method may encourage Searchers/CEOs to pursue quick exits that maximise the performance equity gained;
- *time sensitivity*: in the current situation, achieving a 35% IRR in a short time period is treated the same as getting it over a much longer period, despite the latter is significantly more challenging and valuable for the investors.

The incentive for Searchers to look for a quick exit made several Searchers and Investors replace the actual system with "[…] multiple of cash-on-cash return performance thresholds. For example, [the Searcher] must return 2.5 times the investor capital to begin to earn performance equity and 5.0 times the investor capital to max out that portion of your equity" (Matlack, 2017).

Having in mind these two complexities, Matlack proposed a modified hybrid approach accounting for both IRR and MOIC, with the final objective to favor the alignment of interests among the parties. The model developed by Matlack has the following structure:

- *for the first five years of the investment,* the parties use a cash-on-cash multiple linked to the IRR range (20%-35%) that is applied for any exits in the first five years. What Matlack says is that "a five-year hold at 20% IRR gets [the investors] to a 2.49 times return.

  A five-year hold at 35% IRR produces a 4.48 times cash-on-cash return". Therefore, within the first five years, investors have to receive 2.49 times their capital back before the Searcher starts to get performance equity; and to completely vest the 30% of the target's equity for an exit in the first five years, investors need to receive 4.48 times their capital back, with a linear interpolation between those two points.

[40] The article is titled *"A New Idea on How to Calculate Search Fund Performance Equity"* and was shown on LinkedIn.

- *for the subsequent five years*: the MOIC continues to grow annually, compounded at a rate of 20%. This encourages long-term value creation but adjusts the thresholds to ensure that long-term holds are appropriately rewarded. As a consequence, if the Searcher wants to sell the business after 10 years, investors have to receive 6.19 times their capital back for the Searcher/CEO to begin vesting the last 10% of equity and 11.16 times their money to max out the performance equity.

A summary of the model devised by Matlack is provided in *Figure 8*.

Figure 8 - Matlack's Hybrid approach

Percent Vested	Five-year IRR Target	Long-Term IRR Target	5-Year Cash-on-Cash Return	7-Year Cash-on-Cash Return	10-Year Cash-on-Cash Return
0%	20.00%	20%	**2.49**	**3.58**	**6.19**
25%	23.75%	20%	**2.90**	**4.18**	**7.22**
50%	27.50%	20%	**3.37**	**4.85**	**8.38**
75%	31.25%	20%	**3.89**	**5.61**	**9.69**
100%	35.00%	20%	**4.48**	**6.46**	**11.16**

Source: Matlack (2017)

As a matter of fact, this new framework tries to find a balance among short and long-term incentives, avoiding extreme behaviors driven by pure IRR or cash-on-cash metrics, but obviously it is up to the overall SF community to see if this could actually work out.

The last issue found (and related to the one presented above) is the ***misalignment of interests on how much time to remain inside the fund*** (issue no.10). Searchers and Investors sometimes have different preferences as to the timing of exit from the fund or different visions on how many years a SF should last. The misalignment mainly comes from two main reasons:

- the Searcher may want to remain in the SF even though the business grows slowly over time, due to the fact that the absolute values for him increase (supposing an equal equity allocation);
- on the other hand, for Investors, with the same MOIC, the IRR decreases over time, and given the same IRR, they may prefer to exit their investment earlier than the Searcher would desire.

Whenever Searchers realise of managing a good company (that is proved by increasing revenues and improving profitability, solvency and other positions for instance), they may have the incentive of remaining inside the search fund for more years, due to the simple reason that the absolute values for them of a target performing well increase. Another advantage for the Searcher in delaying the end of the fund is also that he continues to earn the compensation as CEO of that company, and not only the “simple” equity vesting.

In this chapter, the research topic of the dissertation has been presented: the aim was to clearly analyse the relationship between the Searcher and the Investors supporting him throughout the Search Fund process, linking it to agency theory and examining the potential challenges that may emerge. The ultimate objective is to either confirm or refute the existence of these issues, as well as to explore possible improvements. To achieve this goal, a survey was chosen as the empirical method for gathering the necessary data, and the subsequent chapter will present the findings and analysis.

CHAPTER 4: EMPIRICAL ANALYSIS BASED ON A SURVEY ON SEARCH FUNDS' INVESTORS

Throughout the previous chapters, the foundations of the Search Fund model have been presented in detail. Then, once recognised that the relationships among Investors and Searchers recall those among principals and agents according to agency theory, the conceptual framework of agency has been discussed. Subsequently, the third chapter introduced the research part and core of this dissertation, by deepening into the likely issues that may arise inside a search fund, relating them to the agency framework whenever possible.

The ten issues analysed aim at stimulating discussion among the actors involved in the process, specifically the Investors, with the ultimate objective to verify or disprove their presence and to investigate potential avenues for improvement.

In this last chapter, we are going to perform an empirical analysis based on the contents presented in Chapter 3. The empirical tool that has been chosen is the survey, for some specific qualitative features that will be described in the following sections. Designed to be as much direct as possible, the survey was then sent to relevant SF investors established all around the world, who had to answer mixed questions about the ten problems found.

The chapter is organised as follows: it begins by presenting the research method used, first introducing the target audience (Investors) and then outlining the specific survey design. Next, it focuses on the Investors' responses and the subsequent analysis of the results. Finally, an overview of the potential areas for improvement in the SF model, based on the responses received, is provided.

4.1 Research method used

As previously asserted, the goal of the empirical part of this thesis is to confirm or refute the existence of the potential issues inherent in the SF model described in Chapter 3 and trying to look for possible solutions. To increase the relevance of this research, there is also the awareness that only few works in the past dealt with the critical parts of the model and, moreover, just one related SFs to agency theory. Therefore, investigating these aspects of search funds may assume a real importance for the SF community.

The research method used followed two main phases:

- Phase one: identification of the target audience
  In order to design the survey, it was necessary to find an effective target audience to which sending it. Since their essential role of capital providers and mentors to the Searcher, the choice was on the Investors, who represent the most experienced party inside a SF.
- Phase two: survey creation, collection of data and results' analysis
  The second phase focused on the specific design of the survey, including its structure, the number of questions, and distribution method. The result was a survey of 25 mixed questions, which was sent to the sample base of investors chosen. Then, once the results were collected, they were analysed.

A detailed explanation of these phases is provided by the next two paragraphs.

4.1.1 Whom to target: building the contact's base

Investing in search funds is not as simple as investing in other asset classes, "[…] is not simply about providing money […]", as Johnson said (2023, p.6). There is a relevant participation component for the Investors that choose this investment vehicle: they become the mentors of the Searcher and they should guide him in many of the actions he will undertake, staying very close to the action. A SF investment is more than a financial transaction; it is a real partnership between the Investors and the Searcher they choose, therefore an Investor should invest a considerable amount of time, in addition to the money required by the different phases of a SF.

Investors specialized in search funds are many and continue to increase due to attractiveness of the model. There are different types of SF investors and, in order to have a unified view, this empirical part aimed at reaching all those categories.

Search Funds investors can belong to the following six categories:

- *Fund of Search Funds*: these are pooled investment vehicles allocating capital to multiple SFs. They allow a broad diversification within the SF asset class and are typically managed by institutional investors who focus specifically on search funds' investments. This type of institutional investor is usually the most common category of SF's investors;
- *Club Deal Investor*: an Investor who participates in a "club deal" is an individual who decides to make group with others capital providers to fund a single search fund or acquisition together. Club deals enable investors to collectively back a larger transaction than they might individually and allow them to diversify risk by sharing responsibilities and expertise;
- *Holding company*: a holding company investor is a strategic investor who uses capital from a parent company to invest in SFs;
- *Family/Multifamily Office*: family offices (single or multifamily) are private wealth management firms that invest the assets of one (or several) affluent families. These ones often pursue SFs investments as a way of portfolio diversification;
- *Former Searcher*: a SF Investor could also be a former Searcher who had previously completed one or more successful SF processes, by acquiring a target and operating it. Turning into an Investor, a former Searcher brings unique insights and practical experience, offering mentorship, operational guidance, and strategic advice to new SF entrepreneurs;
- *Individual Investor*: commonly referred to as angel investor as well, this is typically a high-net-worth person who decides to invest his own personal capital in SFs. These Investors may contribute smaller amounts than institutional funds but are often valuable due to their willingness to provide personalized mentorship and guidance.

With the objective to enhance the relevance of this empirical part for the entire SF community, the survey was directed to investors from all around the world. The target audience primarily consists of European and North America investors, supplemented by participants from Latin America, South Africa, the United Arab Emirates and Australia. This choice aimed at strengthening the study's applicability across different regions and investor backgrounds, providing a well-rounded perspective on the search fund landscape.

We started from a list of investors provided by active players in the community, which enlisted numerous important investors active in the SF panorama. Taken as a starting ground, this list

was then implemented and modified with other investors' names found on papers about search funds or directly from LinkedIn, a professional social network which assumed a high importance for this part. Moreover, some contacts were provided by the same investors surveyed who, very interested by the survey, asked to share it also with their partners.

This activity was performed during the months of September and early October and the result was a final short-list of 63 investors spread all over the world. Given that these investors are widespread around the world, the best solution to reach them in an easy way was by the use of direct emails and direct messages through LinkedIn.

As it will be shown in the following paragraph, and as the reader can see from the appendix, the questions of the survey were structured to be as much direct as possible and designed to give significant results from the point of view of the analysis of the replies.

4.1.2 Survey, collection of data and limitations

As already anticipated, the tool that has been chosen to carry out the empirical analysis is the survey. This was considered the best choice specifically for two reasons: (1) the selected investors live in countries in different time zones, hence it would have been very difficult to schedule at the right time an online interview for instance; (2) the large number of investors' contacts make other tools different from the survey unpracticable for the time they would require.

The software used for the survey creation is Qualtrics, a powerful and user-friendly software used for designing, distributing and analysing surveys for several uses, including academic research. Beyond the basic survey functions, it is also known for its data analytics capabilities, which help users gain valuable insights from the data collected.

Since the aim of the survey was to understand if the ten issues found are considered so also by the investors surveyed, in order to design it, it was necessary to insert text parts whose objective was to explain one by one the problems encountered and the topics of agency theory that can be referred to those specific issues. This feature, though necessary, made the survey a bit long, and therefore represents limitation.

The questions are structured in a mix format, including multiple choices, yes/no answers, ranking of alternatives and open questions as well: this structure has been considered the most effective one due to the characteristics of the issues presented to the investors.

The ten problems identified in Chapter 3 have been sequentially numbered; therefore, for instance, the first issue of the first stage (assessing the real quality of the Searcher) took the description of *issue no.1*.

In particular, the survey is made of 25 questions structured in six blocks. The first one comprises two general questions designed to gather information about the category the investors surveyed belong to and which search fund model type he/she usually invests in. Then, the survey is divided into four blocks, each for a different stage of the SF's lifecycle: raising of initial capital, search and acquisition of the target, operation and value creation and exit from the investment. As anticipated above, before the specific questions for each stage, there is a section which explains the issues found for that phase and their relation with agency theory. An overview of this structure can be inferred by looking at *Appendix 1*.

The idea of structuring these blocks by stages seemed rational as it follows the structure of Chapter 3, where the problems are explained sequentially for each of the four SF's stages. Additionally, by presenting the questions in this order, the survey help the investors think in a more focused way to the risks they may face at each specific phase.

The types of questions for this part follow a common logic: the closed questions (multiple choices, yes/no ones) primarily try to understand if the investors actually see the issues presented and to detect what the frequency of these problems is. Moreover, some closed questions also propose some likely solutions, and the aim is to comprehend if these could work. The open questions, instead, exclusively aim at gathering investors' personal suggestions about any solutions they would desire to some specific issues. Finally, the last and sixth block is made of two concluding questions: the first open-ended question asks investors if there are any additional problems that have not been identified in this dissertation; the last one is a ranking question and asks which are the issues that should by addressed by the SF's community with the highest priority.

The survey has been designed to guarantee investors' privacy and all the information collected have been exclusively used for the research purpose of this work. Regarding the timing of the data collection, the survey was prepared during the first two weeks of October and finally sent during the third week of the month; then, it remained open for roughly 15 days, in order to collect as many answers as possible. Moreover, it was accompanied by a cover letter and an introduction outlining the thesis research topic and its specific purpose. Additionally, as previously mentioned, it was emphasised that the responses collected would be used solely for academic purposes.

During the two-week period of the survey's preparation, it was also tried to send a connection request on LinkedIn to all the SF investors composing the target audience. This was necessary due to the limitation of the professional social network to enable users to send unlimited messages only if connected between one another. At the end, most of the selected investors accepted the request, facilitating the sending.

Once everything was ready, the survey was distributed following this rationale: it was sent via email to all investors for whom we had email addresses; for investors whose email addresses were unavailable but had accepted the connection requests on LinkedIn, a message was delivered through LinkedIn. Subsequently, after a few days, we issued a reminder to all participants through both email and LinkedIn.

For the results' analysis, several graphs have been created with the use of Excel and inserted in the paragraphs with the objective to provide a better visualisation of the investors' replies.

As for this survey's limitations, several are worth noting:

- Firstly, one possible limitation is the survey's *length*. It consists of 25 questions, each deemed necessary to gather a comprehensive view of investors' opinions on the issues presented. Additionally, it includes explanatory text sections which outline the issues and interpret them through the lens of agency theory. While these additions are essential, the survey's length may discourage respondents with limited time from completing it thoroughly.
- Secondly, and related to the above point, there is the *partial answering to the open questions*. As a matter of fact, due to availability of time or other reasons, it results that not everyone answered to this type of questions. It was clear at the beginning that by adding open questions the survey become more structured and time demanding, but this was necessary to fully collect the needed opinions. When respondents skip certain questions, this results in missing data, leading to what is called *nonresponse bias*. As a consequence, the findings may reflect only the views of respondents comfortable with answering, creating a potentially incomplete or unrepresentative view of the overall audience's attitudes.
- Another possible limitation is *sampling bias*, which is direct consequence of the fact that the SF investors surveyed have been pre-selected and therefore represent a non-randomised group. When participants are not randomly selected, there is a higher chance of gathering a sample that is not representative of the broader SF investor population, in this case. This can lead to a sample that is overly homogeneous, with respondents

who may share similar backgrounds, investment strategies, or viewpoints on the SF model.

- Finally, a limitation may also be the *decision to survey only investors, excluding searchers,* which restricts the results to the investors' perspectives. This approach was chosen to align with the structure and objectives of Chapter 3 and to simplify survey design. Additionally, it follows the precedent set by prominent SF scholars who have previously focused on the interest misalignment between Investors and Searchers.

4.2 Main findings

This section presents the key insights gathered from the investors, aiming at understanding whether respondents recognise the SF issues presented and which solutions they consider most feasible and appropriate to address them. Additionally, it seeks to lay a foundation for future discussions within the SF community, particularly given the high level of interest expressed by the surveyed investors. Notably, many respondents took the time to send back direct emails or LinkedIn messages, expressing their commitment to the study's objectives. Several also requested a copy of the dissertation upon completion, which highlights the value of conducting research on this topic.

As for the response rate, by the survey's deadline, **18 out of the 63 contacted SF investors completed it**, resulting in a **response rate of 28.57%.** This rate can be considered favorable, especially given the survey's detailed structure.

As anticipated, the issues presented in the survey align with the stages of a Search Fund's lifecycle. Additionally, they have been ordered according to their expected relevance at each stage and frequency of occurrence. Another objective of the survey was indeed to validate or confute these frequency expectations, based on the investors' opinions.

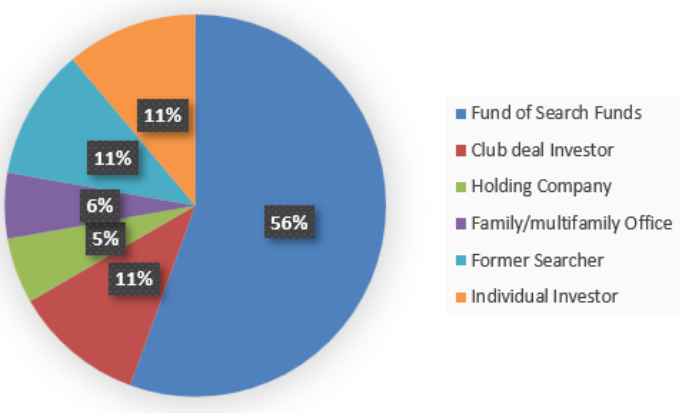
4.2.1 Investors' background and adverse selection issues in the first stage

Investors' background

As it can be noted from *Appendix 1*, after the general introduction about the thesis' topic and research's scope, the survey begins with two general questions aimed at investigating the investors' background. The first question is indeed about the typology of the investor, according to the six categories explained in paragraph 4.1.1.

As it can be evinced from *Figure 9*, the majority of the respondents come from Funds of Search Funds, respecting also the majority of this category in the overall target audience. Specifically, this type of investors represent the 56%, and they are equally followed by club deal, individual investors and former searchers, who represent the 11% of the replies. Therefore, we can claim that SFs are mostly targeted by institutional investors.

Figure 9 – Investor types



Source: Author's elaboration on survey's data

The following question, instead, asked which model is usually chosen by the investors when approaching search funds. In this case, investors were allowed to make more than a single choice.

Specifically, investors could select among five alternatives:

- Traditional model (solo Searcher)
- Partnership of two Searchers
- Assisted models (like the accelerator and sponsored ones)
- Only acquisition capital in equity gaps
- Majority of equity accruing to the Searcher model (like the one developed by Tim Ludwig and Justin Burris in the U.S.)

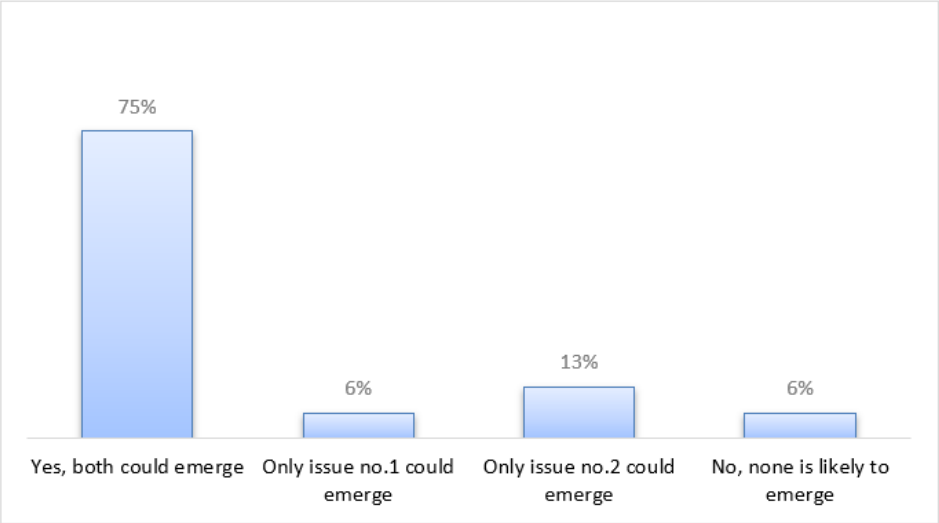
The main finding from the replies to this question is that the traditional model, together with the partnership of searchers, still represents by far the most common model chosen by the investors (83% of respondents prefer this model over the others).

The second place is gained by the assisted models (chosen by the 22% of the investors), while nobody expressed a preference for the model developed by Ludwig and Burris.

Adverse selection issues in the first stage

This represents the first block in which investors found the issues and their interpretation according to agency theory. As described in Chapter 3, in the first stage investors may face two potential issues related to adverse selection***: assessing the real quality of the Searcher*** (issue no.1) and ***assessing the Searcher's real commitment*** (issue no.2). Here investors have been asked about the possibility that these problems may arise. Their responses can be evinced from *Figure 10*.

Figure 10 – Probability of issues no.1 and no.2



Source: Author's elaboration on survey's data

As it can be inferred by the above figure, the great majority of the investors who filled the survey, with a percentage of 75%, think both problems are likely to arise in this phase. Only a very little number of them, think these two issues do not usually emerge, while the 13% of investors consider assessing the Searcher's real commitment (issue no.2) as the unique challenge of this phase. As a result, investors generally agree that they face risks both when selecting a Searcher, who may present as highly qualified but may not be so, and in assessing, in advance, the true effort and commitment the Searcher will dedicate to the subsequent search for a target. Subsequently, respondents have been asked about the way they managed these problems. As this was structured as an open question, it was the first moment in the survey where nonresponse bias occurred. As anticipated, this particular bias arises when respondents leave some questions unanswered, resulting in missing data. In fact, only 8 investors out of 18 have answered, leading to a response rate of roughly 44%. This rate is the average for almost all the open questions included in this survey.

The main insights from the investors are the following:

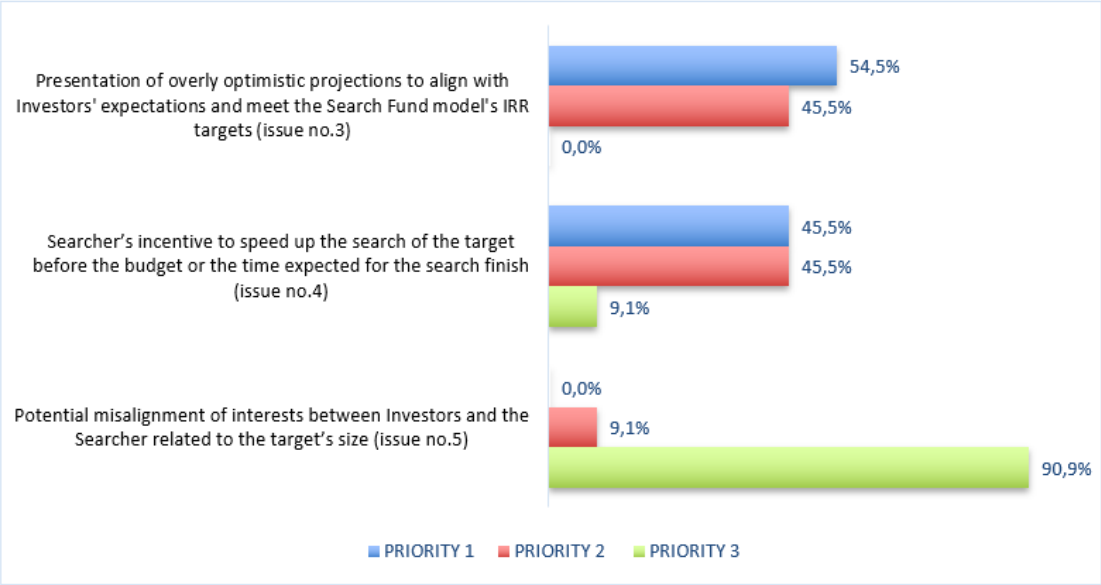
- in order to make an informed decision, investors consider a solid assessment of the Searcher's actual quality and a clear evaluation of their commitment as two key 'requirements' (as one investor described). To evaluate these, investors use various interviews to assess the Searcher's quality and several personality tests to understand their real motivations. Therefore, if Searchers do not pass both these interviews and personality tests, they are rejected;
- a great level of experience can make the difference. According to another investor, only with time and by doing many interviews, one can have a reasonably idea of what he is really looking for. The investor in exam said that he has personally interviewed more than 500 Searchers in his career and, even though he could still make some mistakes, he has now a clear idea of what he generally looks for in entrepreneurs and also in the ways to assess them. According to this investor, another point that is worth reminding is the optionality recognised to investors and the monetary risk of this stage: the investment in the search phase is relatively small compared to what is invested in the acquisition deal, so errors at this stage are not very costly. Additionally, there is flexibility recognised to the investors, as they can decide to not commit the acquisition capital (in this sense the "optionality");
- a lot of due diligence plays a fundamental role: another investor claimed as he and his partners turn down approximately 80% of Searchers coming to them for an investment. This underlines as the expectations from both parties can be sometimes very different;
- other ways emerged to manage the risks of the two issues are: joint on-site visits to potential acquisition targets and the check for references directly from previous employers.

4.2.2 Insights from the section on second stage's issues

In the second stage, that is the search and acquisition of the target, three problems have been identified and presented in Chapter 3. In order to refresh them, they are: the ***presentation of overly optimistic projections to align with Investors' expectations and meet the Search Fund model's IRR targets*** (issue no.3), ***Searcher's incentive to speed up the search of the target before the budget or the time expected for the search finish*** (issue no.4), and the ***potential misalignment of interests between Investors and the Searcher related to the target's size*** (issue no.5).

The first question proposed in this block aims at investigating what the investors' opinion about the relevance of these issues is; particularly, it was asked to prioritize the above issues, placing them in order. The result is shown in the below *Figure 11*.

Figure 11 – Relevance of second stage's issues



Source: Author's elaboration on survey's data

As it is shown, most investors attribute the highest priority to issue no.3, that is the *presentation by Searchers of overly optimistic projections*, with a percentage of 54,5%. Moreover, this issue is placed with medium priority (priority 2) by the 45.5% of respondents while no one marking it as the least important. Therefore, we can assert this is the most significant issue for SF investors, who consider realistic projections crucial in maintaining trust and confidence in the overall search fund process and alignment of incentives among the parties.

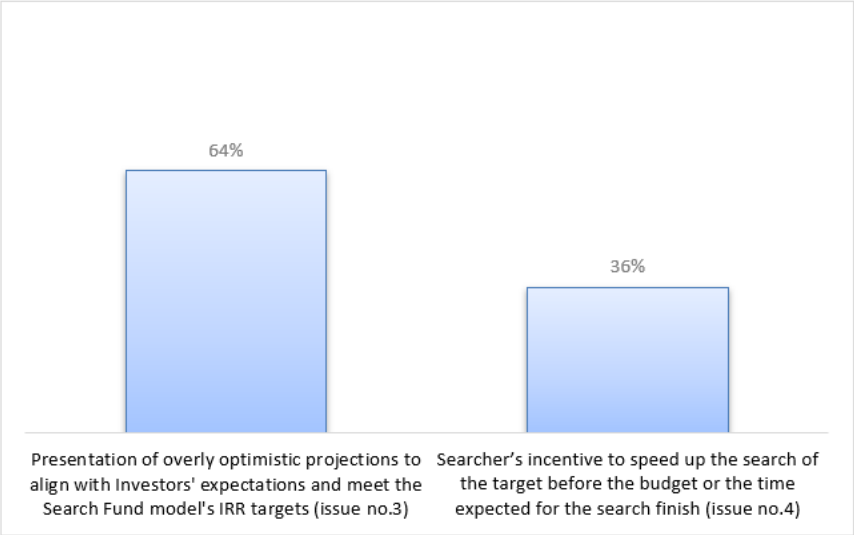
The second issue (issue no.4), related to the *Searcher's incentive to accelerate the search process*, is split between priority 1 and priority 2, with 45.5% rate of preference, with only a very modest percentage ranking it as the least important one. As a result, this problem seems to have a moderate level of concern by the investors. Investors seem cautious about Searchers rushing the process, which could lead to less thorough due diligence or suboptimal deal selection. However, it's not viewed as critical enough to rank it as the top concern.

Finally, the *potential misalignment on the target's size* (issue no.5) is ranked as the lowest priority problem by almost all respondents, with a percentage of 90%. This indicates that investors generally view the alignment of interests regarding target size as the least pressing concern among the three issues presented. It is interesting to note that the ranking by the

investors reflect the order with which the problems have been presented in Chapter 3; therefore, it can be said that our expectation on the relevance of these problems has been confirmed by the results.

An additional question on these three issues was about their frequency of occurrence. As depicted in *Figure 12*, the one occurring most often is the *presentation of overly optimistic projections* (with a selection by 64% of investors), while the *Searcher's incentive to speed up the search of the target before the budget or the time expected for the search finish* is claimed to be the most frequent by the 36% of respondents.

Figure 12 – Most common issue in the second stage



Source: Author's elaboration on survey's data

Afterwards, investors have been asked specifically about issue no.3, the *presentation by Searchers of overly optimistic projections*, with three related questions. The first one aimed at understanding if there could be some incentives for a Searcher to present more realistic projections instead of overly optimistic ones. Also this one was presented as an open question, and the replies by the investors have been sometimes different:

- managing the step-up differently. To better conceptualise, in search funds a "step-up" typically refers to an increase in the equity ownership (also referred to as carried interest) recognised to the Searcher based on certain milestones. The purpose of a step-up is to reward the Searcher for successfully reaching predefined goals. Specifically, as explained in Chapter 1, there are three moments of equity vesting for the Searcher; therefore, three moments of the step-up mechanism: at the

acquisition of the target, a time-based equity recognition during the years of the Searcher as the target's CEO and a final performance-based step-up;

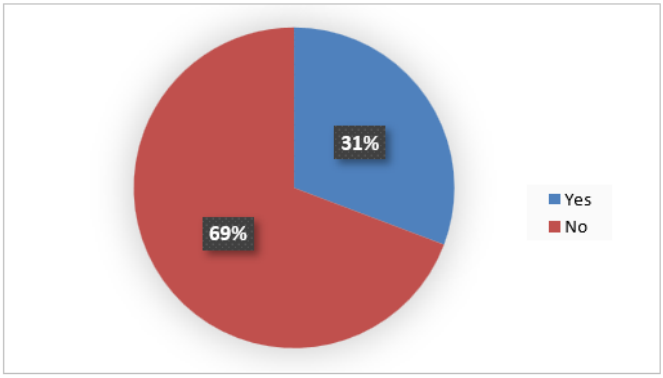
- placing more emphasis on the variable component of the Searcher's carried interest, meaning more focus on the third tranche;
- basing the compensation on the accomplishment of the proposed original business plan;
- the incentives are already present in the model and it is the Searcher's own interest to be realistic, otherwise he will not get his full equity;
- the problem can not be solved with incentive structures. The only possible solution is getting the Searcher to invest his own capital that he will lose if the expectations are not met; for instance, the Searcher invests 100.000 dollars, that will be subordinated to investors getting their initial capital.

The second question asked if investors think that completely tying the Searcher's equity vesting and compensation to the achieving of the promised IRR targets shown in the plan would be good option. Otherwise explained, the question is whether investors think that tying completely the first tranche of equity recognised to the Searcher[41] to the IRR projections presented could be a good option. As it can be seen from *Figure 13*, the great majority of respondents do not consider the above proposed as a possible solution, and the main reason is clear: there could be several situations for which the projections are difficult to be reached. In any case, this should not preclude Searchers to propose realistic and factual plans.

[41] Remind that the first tranche of 10% equity of the target is recognised to the Searcher as soon as he or she acquires the target company.

As shown by numbers, 69% of respondents do not agree with this solution while 31% think this could be a likely solution.

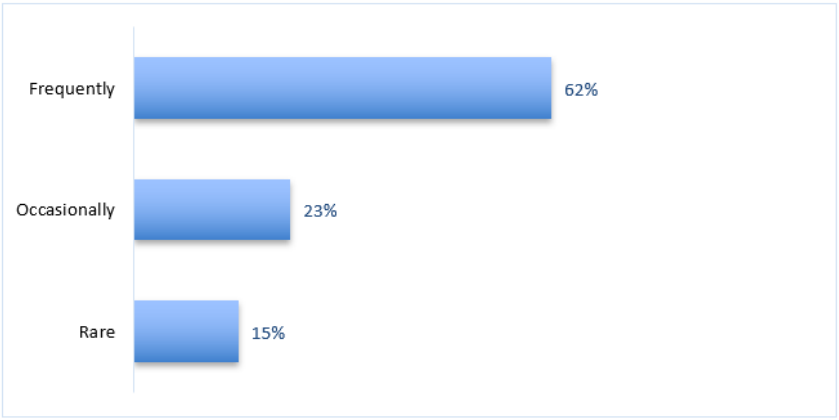
Figure 13 – An idea for issue no.3



Source: Author's elaboration on survey's data

The third and last question for issue no.3 asked about the frequency with which investors face this specific problem. As observed in the following figure, the majority of investors (62%) find this issue frequently and only 15% of them consider it rare.

Figure 14 - Frequency of presentation of overly optimistic projections

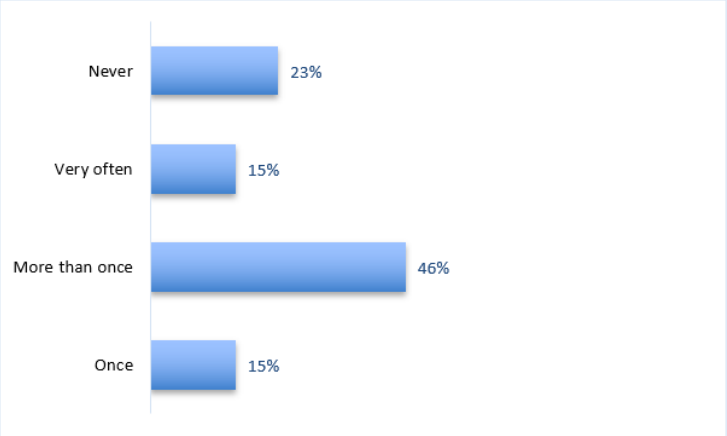


Source: Author's elaboration on survey's data

To conclude with the problems of the second stage, it was tried to collect information also about the frequency of problem no.5, by asking investors how often it has happened in their SF's investments that a Searcher was willing to target bigger companies than them. As already seen from the previous results, this is ranked as the lowest priority problem by almost all respondents, among the three of the second stage. Nevertheless, it was still unknown its specific frequency: from this fact, the reason of the question.

As illustrated by *Figure 15*, the 46% of the target audience found this problem more than once, so almost half of them had a Searcher who wanted to deviate from the target's standard criteria for a SF acquisition. Conversely, an equal percentage of investors reported encountering it either very frequently or just once, while 23% stated they had never encountered it.

Figure 15 - Searcher's willingness to target bigger companies than Investors



Source: Author's elaboration on survey's data

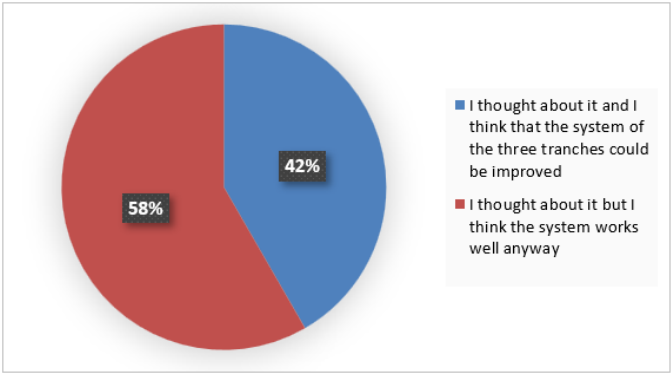
4.2.3 Results from third stage's problems

The third stage of a search fund consists in the operation and value creation of the target acquired. Alike the second phase, also here the problems found are three: ***non optimal incentive structure for the vesting of the second equity tranche*** (issue no.6), ***fragmented investor base challenging an effective monitoring and control of Searcher's actions*** (issue no.7), and ***information rights of the Investors*** (issue no.8).

Since the issue no.6 was considered particularly important, half of the questions of this section have been dedicated to gather information about the investors' opinion on the second equity tranche. The remaining four, instead, focused on the other two issues. Just to remind the concept, issue no.6 is about *whether the second tranche of equity vesting that the Searcher earns linearly over time as the target's CEO is truly earned*.

The first question asked generally whether investors are fine with the structure of the three tranches of equity recognised to the Searcher or they would prefer some modifications of the vesting system. As depicted in *Figure 16*, most of the investors surveyed agree with the actual system and would not change anything about it, whereas the 42% of them think that the actual system could be improved in some way.

Figure 16 – Opinions about the three tranches system



Source: Author's elaboration on survey's data

The following question addressed a potential scenario that could impact investors. As explained in the previous chapter, there is the possibility for Searchers to earn the second tranche, that is an additional 10% of the equity of the target, even though they make investors perform "poorly" relative to the average IRR for the asset class. For example, investors may only reach a preferred return of 7-8%. Consequently, investors were asked whether they had ever experienced "poor" performance in any of their SF investments, defined as returns below the average for the asset class. The results indicated that 58% of respondents reported never encountering this outcome, while the remaining 42% acknowledged experiencing SF underperformance occasionally.

After this, it was tried to understand whether inventors agree on some likely solutions for the second equity tranche. In particular, the options provided were three:

1. Eliminating the middle tranche and keep only two moments of equity vesting: one upon closing the acquisition deal and the other tied to performance (often referred to as the 50:50 split)[42];
2. Assigning the middle tranche in a linear manner, but conditional upon the IRR achieved for investors between the hurdle rate of 8% and the 20%, while also considering the fixed salary recognised to the Searcher as CEO;
3. Other solutions.

[42] This one was directly taken from Johnson R, Simon I, (2017) *Re-Thinking Search Fund Incentive Structures*

The results are highlighted in *Figure 17*: the majority of investors (45%) agree with the original proposal described in Chapter 3, that is keeping a linear assignment of vesting for the second tranche but make it conditional upon the IRR achieved for investors between the hurdle rate of 8% and the 20%, while also considering the fixed salary recognised to the Searcher as CEO. This means that the Searcher could earn all the 10% of the middle tranche if investors reach the 20% IRR and gets 0% of the second tranche if investors reach only the hurdle rate.

The 36% agree with the option firstly proposed by Johnson and Simon in 2017, while according to the remaining investors there should be develop other solutions.

Figure 17 – Modification of the second equity tranche

Source: Author's elaboration on survey's data

The last question related to the second moment of equity vesting asked for any personal proposal to address the sixth issue, and this was the question where the nonresponse bias reached its "peak", since only three investors replied to the open question. Moreover, it is interesting to note that all these answers go in the same direction: the respondents do not consider it a problem and confirm the good structure of how the second tranche is designed.

Specifically, one investor argues that the problem is nonexistent since there is the BoD[43] which retains control over the Searcher's actions; consequently, if the board's members feel the Searcher/CEO is not performing well, they should replace him and the Searcher's second

[43] Board of Directors

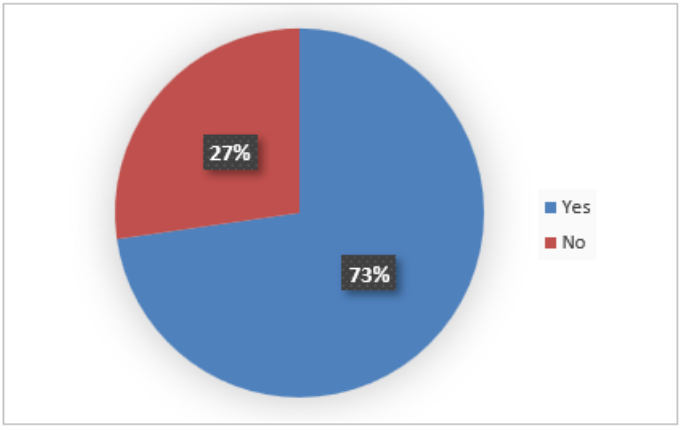
tranche vesting stops. On the other hand, another investor considers the SF model in the actual structure a perfectly working system, so any change would risk to worsen it.

Lastly, the third investor is fine with the actual structure, but asserts that also the 50:50 seems to work pretty well, even though he has seen it in action only a few times.

Continuing with the final insights from this section, regarding the *fragmentation of the investor base* (issue no.7), over half of respondents (58%) do not consider it as a limitation in governing and controlling the Searcher's actions. In contrast, the remaining 42% consider fragmentation to be a real issue that could limit their ability to effectively oversee the Searcher. Moreover, investors were also asked if they would change anything about the equity percentage of the target they can get, specifically whether they would support an increase from the current 5-6% stake. The responses mirrored those from the previous question: 58% of respondents indicated that they would not support investors holding more than the existing 5-6% equity allocation.

Regarding *information rights*, the final issue identified for the third stage, a substantial majority of investors (73%) reported experiencing challenges with this aspect during their SF investments, while a smaller portion (27%) indicated they had not encountered the issue. A summary of these findings is presented in *Figure 18*.

Figure 18 – Information rights issue



Source: Author's elaboration on survey's data

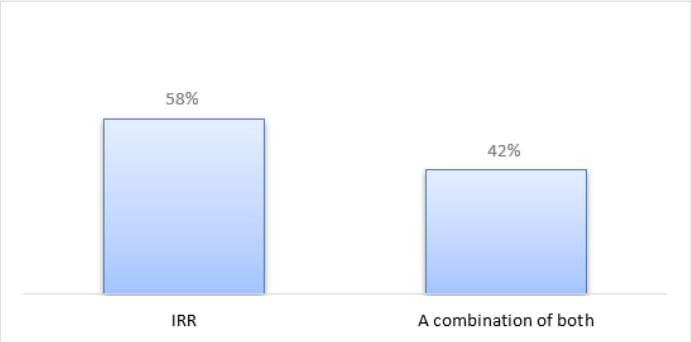
4.2.4 Main conclusions from exit's issues and concluding questions

Exit phase's problems

In the last phase of the SF's lifecycle, the problems encountered are two*:* ***how to measure the attribution of equity to the Searcher*** (issue no.9) and the ***misalignment of interests on how much time to remain inside the fund*** (issue no.10). While the first problem is about whether the performance of Search Funds should be evaluated based on the Internal Rate of Return (IRR) or the Multiple of Invested Capital (MOIC), the latter focuses on the divergence of interests as to the timing of exit from the fund.

Regarding issue no.9, most of investors agree with it and think it is an issue on which the SF community should focus the attention: with a 75% of positive replies, respondents claim it as a problem to be addressed. Additionally, investors have been asked about which performance measure is most used in the SFs they invest. As illustrated by *Figure 19*, in the 58% of cases IRR is the main measure used, while in the 42% of the times a combination of both IRR and MOIC is chosen by the parties.

Figure 19 – Performance measure used



Source: Author's elaboration on survey's data

Then, it was asked if investors had a favorite structure to measure the Searcher's attribution of equity. Being designed as an open question, this one brings with it the usual nonresponse bias mentioned, but overall, the replies revert around some specific points:

- some investors consider the combination of both IRR and MOIC a good option;
- others agree with Tom Matlack's curve which uses a combination of both IRR and MOIC, with IRR switching to Moic after the fifth year (explained in detail in the last part of Chapter 3);

- standard IRR vesting is deemed perfect: according to another investor, the dynamics inside SFs automatically lead the actors to come together over the years and decide how to proceed with the investment (adapting and changing structures at their preference).

Dealing now with the last issue found at all, investors have been asked about if they ever experienced the situation in which they wanted to exit in a given year while their Searcher had the will to continue with the fund for more years to get a bigger equity value.

According to the investors' replies, most of them did not experience this divergence on exit timing (58%) while the remaining 42% agreed on having experienced it. However, the 73% of the respondents do consider issue no.10 a common situation where divergent interests may arise, whereas only 27% do not see the issue.

Continuing with the treatment of the tenth issue, it was asked which elements could be modified or added to better align the parties' interests related to the exit moment. Also in this case, answers were quite different. As a matter of fact, one investor argued that this is an unclear situation because it happens that there are both Searchers willing to exit too late and those willing to exit too early. Additionally, according to another investor, the divergence on exit timing is probably more common among individual investors in the same fund than among investors and Searchers. Other opinions were for instance the adding of put or call options at some point of time or some modifications about the third and last tranche of equity.

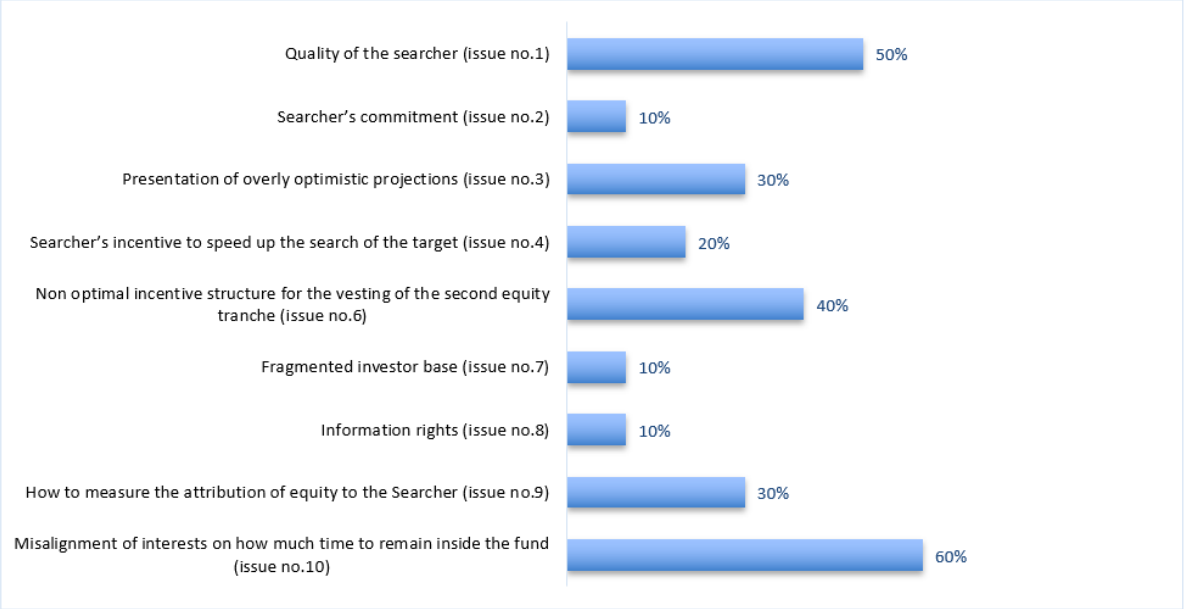
Concluding questions

Finally, two last questions conclude the survey. The first one was about indagating if there could be other issues related to the alignment of interests between the parties that have not been considered in this survey and that investors found in their experience. The main findings from investors are:

- propensity to risk taking: as a matter of fact, it happens that Searchers buy riskier companies that the model recommends, due to the fact they share only the upside with investors but not the risk;
- possible exit targets: in the eventuality a Searcher/CEO doesn't want to remain in the company after the exit, it has happened that he or she did not consider offer from financial players, but only accepted strategic players' proposals.

The second one, instead, asked investors which among the ten issues proposed should be addressed with the highest priority by the SF community, and in this case more than a choice was permitted. The result is revealed by *Figure 20*.

Figure 20 – Issues to be addressed with the highest priority



Source: Author's elaboration on survey's data

As it is illustrated by the bar chart in *Figure 20*, the most urgent concerns for investors appear to be the ***misalignment of interests on the duration of the fund*** (issue no.10), which was chosen by 60% of respondents and ranks as top priority, and ***assessing the quality of the Searcher*** (issue no.1), which takes the second places being chosen by half of the investors. These problems have been ranked with the highest priority likely because both of them impact on the long-term success of the SF and the overall stability of the investment: the first one affects liquidity for investors, exit timing and overall returns, while the abilities of the Searcher influence the likelihood to find and managing a good target.

The issue ranking third is the ***non optimal incentive structure for the vesting of the second tranche*** (issue no.6), which was chosen by the 40% of investors. The ones following with 30% of choices are the ***presentation of overly optimistic projection*** (issue no.3) and ***how to measure the attribution of equity*** (issue no.9). As resulted, the moderate concerns focus on the economics and incentive structures of search funds, highlighting the importance of these aspects for investors. All the other issues follow as lower priority problems.

4.3 Final discussion and improvement areas of the model

The primary aim of Chapter 4, along with the survey employed as empirical tool, was to capture the perspectives of key investors within the Search Fund community on the issues identified and discussed in the previous chapter. As seen, the survey specifically targeted SF investors worldwide. Its objectives were twofold:

1. To confirm or confute the existence of the ten core SF issues identified in Chapter 3;
2. To assess the significance of these issues for investors and gather insights into potential improvement areas for the SF model.

The real importance of these topics for the investors surveyed was confirmed by the positive rate of response achieved by the survey, which has been 28,57%. Notably, those who participated demonstrated a high level of interest, actively engaging in the process and even requesting access to the final dissertation. This positive response suggests that the topics discussed hold considerable relevance and importance for the SF investor community.

The results from the survey largely corroborate the issues described in our analysis on the SF model presented in Chapter 3, validating their relevance within the SF model. Based on the investors' feedback, it was possible to understand the priority and importance they attribute to each of them. As illustrated by *Figure 20*, the last to be presented, investors believe the following issues should be prioritised for immediate action within the SF community. Listed in order of importance, they are as follows:

- *misalignment of interests on how much time to remain inside the fund;*
- *assessing the real quality of the Searcher;*
- *non optimal incentive structure for the vesting of the second equity tranche;*
- *presentation of overly optimistic projections to align with Investors' expectations and meet the Search Fund model's IRR targets;*
- *how to measure the attribution of equity to the Searcher*.

Consequently, this list could represent a good starting point for future improvements of the relationships between Searchers and Investors.

Moreover, the survey contributed to assess the frequency with which investors encounter these issues. Regarding this, it is interesting to note that for most of the issues investors reported to face them regularly. For example, investors encounter the presentation of overly optimistic projections frequently and only a minority find it rarely. Similarly, a significant portion of investors, half of the respondents, reported that Searchers often aim to target larger companies

than preferred by investors. Divergence of interests regarding the timing of an exit is another common challenge, with 73% of investors stating that this misalignment occurs frequently in their SF investments. All this data underscores that these issues are not isolated cases but rather recurring challenges within the SF model.

The proposal of this survey was also to gather potential solutions to certain issues directly from the investors' perspectives, capturing them in the investors' own words. To achieve this, several open-ended questions were included. However, as the results show, adding open-ended questions to a highly structured survey may discourage respondents from answering each question fully. This led to a nonresponse bias for all the open-ended questions included. It is clear that a traditional interview format could have provided more information and detailed explanations, but arranging them was not feasible within the time available. Nonetheless, we were able to have important insights from the investors who replied to them, which have been already explained in the previous paragraphs.

In conclusion, the empirical analysis performed contributed to have a more comprehensive view on the search fund model and its specificities, confirming most of the SF issues identified. The survey reached its primary objective of assessing the issues' relevance for the investors and the results obtained could probably serve as a basis for future discussions on these topics. In fact, the collaboration among actors involved in SFs is the prerequisite for its success and that of the entire ETA community. Therefore, if these challenges can be clearly defined, it is in the shared interest of all parties, both Searchers and Investors, to address them with appropriate urgency. This collective effort would lead to meaningful improvements in the SF model overall.

CONCLUSIONS

The research topic of this dissertation aimed at indagating and prove the existence of some potential problems related to the alignment of interests between investors and searchers within the Search Fund model. Specifically, the research objectives can be summarised as follows:

Firstly, recognising that the relationships among the actors involved in the SF model reflect the principal-agent dynamics described by Agency Theory, this study aimed to analyse how key elements of the theory, particularly moral hazard and adverse selection, apply to the SF structure. Given the limited literature connecting Agency Theory to the SF model, a primary goal of this thesis was to address this gap and contribute to the academic understanding of the subject.

Secondly, since the SF model may be subject to certain misalignment of interests among its participants, this thesis sought to enlist and describe in a clear way the potential issues which might arise in the model. From our analysis, ten issues have been identified and described. As seen throughout this work, these problems have been conceptualised within the agency framework, striving to find connections between the issues identified and the problems presented by agency theory.

Finally, the survey delivered to SF investors all over the world, looked for validating and assessing the relevance of the ten issues analysed in Chapter 3. This survey provided empirical insights into the relevance and impact of the challenges described, further enriching the analysis presented in this study.

Chapter 1 started by presenting the SF model and its environment, by presenting the actors involved in the process and the specificities of the traditional model and its alternatives. This first part was particularly important since it dealt with the foundations of the SF model, essential to understand its structure. Chapter 2, instead, focused on the agency theory which, as seen throughout the dissertation, has been the framework chosen to analyse the relationships and the potential issues among searchers and investors. The third chapter described and analysed the potential issues arising in the exchanges among investors and searchers during the four stage of the SF process, by relating them to the agency framework. Finally, Chapter 4 presented the empirical analysis and the main results obtained.

What emerged from the investors' responses is an overall view on the areas of the SF model where the community should primarily focus its attention, since they are the areas perceived as more subject to the misalignment of interests between searchers and investors.

As evidenced by the results, investors assign the highest priority to two specific issues identified in the model: the *misalignment of interests on how much time to remain inside the fund* (issue no.10) and *assessing the real quality of the Searcher* (issue no.1), respectively arising from the last stage (exit) and the first one (the raise of initial capital). It is interesting to note that this two issues refer to different agency problems, since issue no.10 could be considered an example of moral hazard, while *assessing the quality of the Searcher* is a classic example of adverse selection.

Focusing on issue no.1, the general solutions proposed by the agency theory literature could work for addressing this problem and also recall the mechanisms used by the investors surveyed. To address adverse selection in this circumstance, agency theory would propose screening and signaling mechanisms to be performed by both parties: investors should check for external references about the searchers, as well as engaging the searcher in structured interviews, while searchers should demonstrate able for their role, for instance by presenting some certifications or cover letters of endorsement for precedent employers or reputable people in the SF community. These approaches mirror the strategies commonly mentioned by the surveyed investors.

Generally, the solutions proposed by the agency literature to adverse selection and moral hazard can be regarded as good starting points to think about specific improvements for the SF issues confirmed by the investors. However, these theoretical solutions must be tailored to the unique characteristics of each issue and the structural aspects of the model. Customising these strategies ensures they effectively address the priorities and constraints of the search fund context.

As to the objectives set in this thesis, we can say they have been reached. Through the valuable responses provided by investors, we have been able to confirm or refute the issues identified in Chapter 3, assess their frequency and priority, and finally gather insights on which could be possible solutions to them. The significant interest expressed by investors in this research underscores the necessity of addressing the alignment of interests across the broader search fund community, aiming at ensuring alignment and satisfaction for all stakeholders.

It is essential to remind that the key component of the search fund model is the importance of the alignment of interests between the searchers and the investors involved. In 2024, the SF model marks its 40th anniversary since its inception and has consistently demonstrated its effectiveness for both entrepreneurs and investors. Recognising the significant role of this asset class within the alternative investment landscape, this thesis does not seek to discredit the

model. Rather, it aims to bridge a gap in the associated literature by focusing on areas for improvement within the search fund model, as confirmed by active SF investors. In the years to come, the SF model will probably continue to attract a growing number of entrepreneurs and investors all over the world, who see in its structure a good way to acquire companies and achieve high returns. The proven success of search funds to date will likely drive increased activity, attract greater capital, inspire the development of alternative SF models, and expand into new geographies. As a result, the dynamics of Entrepreneurship Through Acquisition will adapt to the challenges and opportunities of future years.

APPENDIXES

Appendix 1 – Survey delivered to the investors

This survey represents the empirical contribution to my Master's thesis in Business Administration. The research topic of the thesis focuses on analysing the potential problems that may arise between Searcher(s) and Investors in a Search Fund (SF), with the aim of exploring and proposing possible improvements to the model.

The idea originated from recognising that the relationship between Investors and Searchers within a SF closely resembles the classical Principal-Agent relationship, as described by Agency Theory. Additionally, there is only one recent paper linking Search Funds to Agency Theory, which highlights a gap in the literature. As a matter of fact, the survey proposes to filling this gap. Accordingly, whenever relevant, the potential issues found have been related to the Agency Theory. The goal of this research is to confirm or refute the existence of these problems and explore possible improvements

Throughout the survey, questions are labeled with letters, while the issues found are marked with numbers. There are 10 issues in total, which have been categorized according to the four stages of a Search Fund.

The survey takes a maximum of 15 minutes to complete and your privacy is fully guaranteed.

Thank you very much in advance for your time and invaluable support in answering these questions. I hope you find them interesting!

GENERAL QUESTIONS

a. Which type of SF investor are you?
   - Fund of Search Funds
   - Club deal Investor
   - Holding Company
   - Family/multifamily Office
   - Former Searcher
   - Individual Investor

b. Which SF model do you usually invest in? **(more than a choice allowed)**
   - Traditional model (solo Searcher)
   - Partnership of two Searchers
   - Assisted models (like the accelerator and sponsored ones)
   - Only acquisition capital in equity gaps
   - Majority of equity accruing to the Searcher model (like the one developed by Tim Ludwig and Justin Burris in the U.S.)

FIRST STAGE: ADVERSE SELECTION ISSUES

In the first stage of a Search Fund's lifecycle, that is the raising of initial capital, the problems found can be related to adverse selection.

As defined in the Agency Theory's literature, adverse selection refers to the misrepresentation of the abilities by the agent. In particular, it describes a situation in which one party in a relationship (the agent) has more or better information than the other (the principal). Consequently, the better-informed party can exploit its informational advantage and negatively affect the less-informed party, who can not rely on the same level of information. In fact, adverse selection is also known as the problem of hidden attributes.

Inside SFs, the Investor assumes the role of the principal while the Searcher that of the agent.

The problems encountered are defined as follows:

1. **Assessing the real quality of the Searcher:** the problem refers to the risk faced by investors when they choose a Searcher who seems and claims to be highly qualified and skilled when he might not be so. The Searcher, in fact, may try to present himself as more talented than he actually is in order to collect the search capital. Investors indeed may doubt if the Searcher will be capable of reaching the goals of successfully finding, acquiring and managing the target for several years.

2. **Assessing the Searcher's real commitment:** the Investor could face difficulties in assessing ex-ante the Searcher's real effort and commitment in the subsequent search of the target. Particularly, the risk faced by the Investor is whether the Searcher will fully commit to the search and not distract himself (by other jobs for instance, as he may consider the period as Searcher as a temporary profession).

c. Do you consider the above two issues likely to emerge in this stage?
    - Yes, both could emerge
    - Only issue no.1 could emerge
    - Only issue no.2 could emerge
    - No, no one is likely to emerge

d. If you encountered one or both of these issues, how did you manage them?

SECOND STAGE ISSUES

In the search and acquisition of the target phase, three problems may occur.

Framing them within agency theory, differently from the first stage's issues these problems deal more with moral hazard and a general misalignment of interests.

Like adverse selection, also moral hazard is an agency problem which is direct consequence of the information asymmetry occurring between economic actors in a transaction. In particular, moral hazard "is a situation in which one party gets involved in a risky event knowing that it is protected against the risk and the other party will incur the cost". The main difference with adverse selection is that moral hazard arises after an agreement has been made: it is about *hidden actions* that may occur after the parties make an arrangement while adverse selection, as seen before, is more about *hidden attributes* affecting a transaction before it happens.

In particular, the problems are:

3. **Presentation of overly optimistic projections to align with Investors' expectations and meet the Search Fund model's IRR targets:** the issue refers to the plans that the Searcher prepare once he has found a possible target and has to propose it to the investors. The projections in the plans are often constructed with the promise that the specific SF's investment proposed will produce an internal rate of return (IRR) of around 30-35%, as the average of the asset class, even though the Searcher is not fully confident that the target can achieve those returns. This creates a mismatch between the perceived risk and the actual risk. Ultimately, the Searcher's goal is to secure the investment despite the inherent uncertainties of the target's performance.

4. **Searcher's incentive to speed up the search of the target before the budget or the time expected for the search finish:** here the problem mostly lies in the fact that sometimes Searchers may try to accelerate the process of the search and select a risky target. Their aim is indeed to find a target before they run out of the available budget collected or before the two years meant for the search finish. The hurry in closing this phase could actually lead to a bias in evaluating the target, which might be chosen without the proper attention.

5. **Potential misalignment of interests between Investors and the Searcher related to the target's size:** At times, the Searcher may have an incentive to deviate from the target's standard criteria, as typically defined in the Search Fund model (according to which revenues should be above €10mln and up to €40mln or EBITDA to be within €4mln for instance), by aiming to acquire a larger company. This is because, with the same equity allocation, in absolute terms the potential financial gain would be greater for him.

e. Please prioritize the above-described issues, placing the most relevant one at the top and the least important one at the bottom.
   - Presentation of overly optimistic projections to align with Investors' expectations and meet the Search Fund model's IRR targets (issue no.3)
   - Searcher's incentive to speed up the search of the target before the budget or the time expected for the search finish (issue no.4)
   - Potential misalignment of interests between Investors and the Searcher related to the target's size (issue no.5)

f. In your experience, which is the most frequent issue among them?
   - Presentation of overly optimistic projections to align with Investors' expectations and meet the Search Fund model's IRR targets (issue no.3)
   - Searcher's incentive to speed up the search of the target before the budget or the time expected for the search finish (issue no.4)
   - Potential misalignment of interests between Investors and the Searcher related to the target's size (issue no.5)

g. What do you think could be the best incentive(s) for a Searcher to present more realistic projections instead of overly optimistic ones (issue no.3)?

h. Do you think that completely tying the Searcher's equity vesting and compensation to the achieving of the promised IRR targets shown in the plan would be a good option?
   - Yes
   - No

i. What is the frequency of issue no.3 (the presentation of overly optimistic projections)?
   - Never
   - Rare
   - Occasionally
   - Frequently
   - Always

j. Related to issue no.5, how often has it happened in your SF's investments that a Searcher was willing to target bigger companies than you?
   - Once
   - More than once
   - Very often
   - Never

PROBLEMS OF THE THIRD STAGE

The third stage is the operation and value creation, during which the Searcher has to enhance the target's value.

The potential problems that have been encountered for this stage are three and they can be rightly related to the topics of information asymmetry, moral hazard and misalignment of incentives characteristic of the agency theory.

6. **Non optimal incentive structure for the vesting of the second equity tranche**: this is a problem characteristic of this stage and has recently been highlighted by scholars (see for instance the paper *Re-Thinking Search Fund Incentive Structures* by Johnson and Simon published in 2017).
   The issue is whether the second tranche of equity vesting that the Searcher earns linearly over time as the target's CEO is truly earned. As a matter of fact, the second equity tranche is attributed to the Searcher based exclusively on time and not on the actual SF's performance.
   After the four years as CEO, the Searcher indeed earns an additional 10% of equity, only based on the passing of time.
   Related to this point, investors are certainly aware that in every SF investment there is the possibility that Searchers can the second tranche (that is the additional 10% of the equity of the target) even though they make Investors perform "poorly" relative to the average IRR for the asset class (for instance making them reach the 7-8% of preferred return only).
   Consequently, in the worst scenario, Investors could reach only the hurdle rate of 7-8% and the Searcher could earn a total of 20% of equity. This possibility, though not very common, could actually occur, leading to a strong misalignment of interests

7. **Fragmented investor base challenging an effective monitoring and control of Searcher's actions**: the problem arises from the fragmentation of the investor base, where multiple principals (Investors) must collectively oversee a single agent (the Searcher). The problem in fact could be defined as ***multiple principals on single agent problem***. With each investor typically holding a small share of equity and having different levels of engagement, it results difficult to coordinate and enforce a unified control over the searcher's actions. At the same time, this fragmentation creates both pros and cons for the parties involved: from the one hand, the lack of a dominant

shareholder prevents the over-concentration of investor power, and from the other it creates a challenge, limiting the effective monitoring and control on the Searcher's actions.

8. **Information rights of the investors**: the problem is about the asymmetry of information between the Investor and the Searcher, when the latter does not properly communicate some relevant information.
   The Searcher has to update the Board of Directors, which is usually made of 3/4 investors, and then it is the board who reports to the other investors. Because of this and the fact that not all the investors are represented in the board, the Searcher may differentiate information disclosures, leading ultimately to a suboptimal decision-making.

k. Related to issue no.6 (Non optimal incentive structure for the vesting of the second equity tranche), have you ever thought about this point? Do you think that the three tranches of equity recognized to the Searcher work well or would you prefer some modifications of the vesting system?
   - o I thought about it and I think that the system of the three tranches could be improved
   - o I thought about it but I think the system works well anyway
   - o I never reasoned about it

l. Related to the above issue, has it ever happened in your specific SF's investments that you performed "poorly"?
   - o Yes
   - o No

m. How do you think the attribution of the second equity tranche could be modified?
    - Eliminating the middle tranche and keep only two moments of equity vesting: one upon closing the acquisition deal and the other tied to performance (often referred to as the 50:50 split)
    - Assigning the middle tranche in a linear manner, but conditional upon the IRR achieved for investors between the hurdle rate of 8% and the 20%, while also considering the fixed salary recognised to the Searcher as CEO
    - Other solutions

n. Do you have any personal proposal to address issue no.6?

o. Related to problem no.7 (Fragmented investor base), have you ever perceived the fragmentation of any SF's investor base you belong to as a possible limitation?
    - Yes
    - No

p. Would you change anything about this, such as allowing an investor to hold more than 5-6% of the target's equity?
    - Yes
    - No

q. Related to issue no.8 (information rights), have you ever experienced this?
    - Yes
    - No

EXIT PHASE'S PROBLEMS

In the last phase of the SF's lifecycle, the problems encountered are two:

9. **How to measure the attribution of equity to the Searcher**: The key question is whether the performance of Search Funds should be evaluated based on the Internal Rate of Return (IRR) or the Multiple of Invested Capital (MOIC). From the Searcher's perspective, the main difference between the two lies in the consideration of time: IRR accounts for the time value of money, whereas MOIC does not. As a result, if a SF's performance is measured solely by MOIC, without factoring in time, for instance the Searcher could potentially triple the Investors' capital over a ten-year period and still receive 30% of the equity, even though the Investors may end up with a relatively modest IRR after that time.

10. **Misalignment of interests on how much time to remain inside the fund**: coming now to the last point noticed as a potential misalignment of interests among the parties involved in a SF, Searchers and Investors sometimes have different preferences as to the timing of exit from the fund or different visions on how many years a SF should last. The misalignment comes from two main reasons:

    - the Searcher may want to remain in the SF even though the business grows slowly over time, due to the fact that the absolute values for him increase (supposing an equal equity allocation);
    - on the other hand, for investors, with the same MOIC, the IRR decreases over time, and given the same IRR, they may prefer to exit their investment earlier than the searcher would desire.

r. Do you agree with the problem depicted by issue no.9?
    - Yes
    - No

s. Which performance measure is most commonly used in the funds you invest in?
    - IRR
    - MOIC
    - A combination of both

t. Do you have a specific structure in mind to measure the attribution of equity to the Searcher? If yes, please explain it; otherwise, skip the question

u. Related to issue no.10, have you ever been in the situation in which you as Investor wanted to exit in a given year while your Searcher had the will to continue with the fund for more years to get a bigger equity value?
   - Yes
   - No

v. In your experience, is this a common situation where divergent interests may arise?
   - Yes
   - No

w. If yes, which elements of the model should be modified to better align interests related to the exit moment?

CONCLUDING QUESTIONS

x. In your opinion, are there other issues related to the alignment of interests between the parties involved that have not been considered in this survey and that you found in your experience?

y. Among all the problems mentioned in this survey, which of them should be addressed by the SF community with the highest priority? **(more than a choice allowed)**

- Quality of the searcher (issue no.1)
- Searcher's commitment (issue no.2)
- Presentation of overly optimistic projections (issue no.3)
- Searcher's incentive to speed up the search of the target (issue no.4)
- Misalignment on target's size (issue no.5)
- Non optimal incentive structure for the vesting of the second equity tranche (issue no.6)
- Fragmented investor base (issue no.7)
- Information rights (issue no.8)
- How to measure the attribution of equity to the Searcher (issue no.9)
- Misalignment of interests on how much time to remain inside the fund (issue no.10)

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