VYSOKÁ ŠKOLA EKONOMIE A MANAGEMENTU
Nárožní 2600/9a, 158 00 Praha 5

DIPLOMOVÁ PRÁCE

MANAGEMENT FIREM

Vysoká škola ekonomie a managementu
info@vsem.cz / www.vsem.cz

VYSOKÁ ŠKOLA EKONOMIE A MANAGEMENTU

Nárožní 2600/9a, 158 00 Praha 5

NÁZEV DIPLOMOVÉ PRÁCE/TITLE OF DIPLOMA THESIS
Private Equity and Value Creation

TERMÍN UKONČENÍ STUDIA A OBHAJOBA (MĚSÍC/ROK)
Leden 2021

JMÉNO A PŘÍJMENÍ STUDENTA / STUDIJNÍ SKUPINA
Karolína Holinková

JMÉNO VEDOUCÍHO DIPLOMOVÉ PRÁCE
doc. Ing. Miroslav Špaček, Ph.D., MBA

PROHLÁŠENÍ STUDENTA

Odevzdáním této práce prohlašuji, že jsem zadanou diplomovou práci na uvedené téma vypracoval/a samostatně a že jsem ke zpracování této diplomové práce použil/a pouze literární prameny v práci uvedené.
Jsem si vědom/a skutečnosti, že tato práce bude v souladu s § 47b zák. o vysokých školách zveřejněna, a souhlasím s tím, aby k takovému zveřejnění bez ohledu na výsledek obhajoby práce došlo.
Prohlašuji, že informace, které jsem v práci užil/a, pocházejí z legálních zdrojů, tj. že zejména nejde o předmět státního, služebního či obchodního tajemství či o jiné důvěrné informace, k jejichž použití v práci, popř., k jejichž následné publikaci v souvislosti s předpokládanou veřejnou prezentací práce, nemám potřebné oprávnění.

Datum a místo: Krnov, 1.12.2020

PODĚKOVÁNÍ

Ráda bych tímto poděkovala vedoucímu diplomové práce doc. Ing. Miroslavu Špačkovi, Ph.D., MBA, za metodické vedení a odborné konzultace, které mi poskytl při zpracování mé diplomové práce.

VYSOKÁ ŠKOLA EKONOMIE A MANAGEMENTU

Nárožní 2600/9a, 158 00 Praha 5

SOUHRN
1. Cíl práce: Hlavním cílem této diplomové práce je učinit investiční rozhodnutí týkající se optimální investice soukromého kapitálu pro institucionální investory. Toho bude dosaženo provedením náležité péče ve dvou soukromých kapitálových společnostech. Výsledky mají sloužit institucionálním investorům, včetně penzijních fondů, nadací, nadací nebo jednotlivců s vysokým čistým jměním. Podpůrné cíle této diplomové práce jsou: - představení soukromého kapitálu jako třídy aktiv s jeho charakteristikami a procesem tvorby hodnoty, který řídí návratnost soukromého kapitálu v teoretické části - modelování procesu due diligence prostřednictvím analýzy sedmi různých oblastí due diligence dvou soukromých kapitálových společností ve spotřebitelském sektoru - závěr s návrhy a doporučeními pro investory
2. Výzkumné metody: Teoreticko-metodologická část diplomové práce spočívala v obsahové analýze, participativním pozorování a syntéze poznatků získaných ze sekundárních zdrojů, zejména z časopisů, knih, článků a další odborné literatury, ze zahraničních zdrojů z důvodu omezené dostupnosti domácích zdrojů. Tato část představuje soukromý kapitál jako třídu aktiv, jeho strukturu a strategie tvorby hodnoty, které mají soukromé kapitálové společnosti k dispozici. Analytická část se zaměřuje na modelování procesu due diligence u dvou soukromých kapitálových společností a kategorizuje informace shromážděné prostřednictvím rozhovorů do různých kritérií, která jsou následně analyzována pomocí multikriteriální analýzy. Zjištění jsou poté porovnána, aby se dospělo k doporučením a návrhům.
3. Výsledky výzkumu/práce: Výsledkem výzkumu je rozhodnutí, které bylo učiněno pro investory, pro které si soukromá kapitálová společnost vybere pro investice. Výsledku bylo dosaženo analýzou různých oblastí s náležitou péčí, kterou bylo třeba prověřit, aby bylo možné úspěšně určit optimálnější investice do soukromých kapitálových společností. Bylo zjištěno, že společnost SF Private Equity, která byla modelována pro tuto práci, je optimální investicí pro institucionální investory z důvodu získání více bodů a vážených průměrů v multikriteriální analýze, která byla součástí rozhodovacího procesu.
4. Závěry a doporučení: Investoři v oblasti soukromého kapitálu podléhají důkladné náležité péči soukromých kapitálových společností, pokud očekávají, že naleznou prémiové výnosy, které překonají veřejné trhy, což je hlavním lákadlem této třídy aktiv. Výnosy soukromých kapitálových společností se mohou významně lišit, proto je důležité odhalit proces tvorby hodnoty, který provádějí během životnosti fondu, a určit, zda je v budoucnu replikovatelný. Firmy soukromého kapitálu, které mají tendenci mít solidní procesy v místech pro vytváření a opouštění hodnot, příznivé zadní vítr odvětví a zkušené týmy mají tendenci překonávat soukromé investiční společnosti, které nemají. Toto je však obtížný úkol odhalit a proces due diligence investora může trvat až měsíce, než se dospěje k rozhodnutí, proto bylo identifikováno sedm hlavních oblastí due diligence, které proces investora zjednoduší a analyzují hnací síly úspěchu soukromého kapitálu.

KLÍČOVÁ SLOVA
Soukromý kapitál, due diligence fondu, institucionální investoři, multikriteriální analýza

VYSOKÁ ŠKOLA EKONOMIE A MANAGEMENTU
Nárožní 2600/9a, 158 00 Praha 5

SUMMARY

1. Main objective:

The main goal of this diploma thesis is to make an investment decision regarding the optimal private equity investment for institutional investors. This will be achieved through conducting due diligence on two private equity firms. The results aim to serve for institutional investors, including pension funds, foundations, endowments or high net worth individuals. The supporting goals of this diploma thesis are:

- introducing private equity as an asset class with its characteristics and value creation process that drives private equity returns in the theoretical part
- modeling the due diligence process through analyzing seven different due diligence areas of two private equity firms in the consumer sector
- concluding with suggestions and recommendations to investors

2. Research methods:

The theoretical-methodological part of the diploma thesis consisted of content analysis, participatory observation and synthesis of the findings collected from secondary sources, primarily from journals, books, articles and other professional literature, from foreign sources due to the limited availability of domestic sources. This part introduces private equity as an asset class, the structure of it and the value creation strategies available to the private equity firms. The analytical part focuses on modelling of the due diligence process of two private equity firms, and categorizes information that was collected through interviews into different criteria that is thereafter analyzed through multi-criteria analysis. The findings are then compared in order to arrive at recommendations and suggestions.

3. Result of research:

The result of the research is the decision that was made for investors on which private equity firm to select for investment. The result was reached through analysis of the different areas in due diligence that needed to be examined for successfully identifying the more optimal investment in private equity firms.
It was found that SF Private equity firm that was modeled for this thesis is the optimal investment for institutional investors due to receiving more points and weighed averages in the multi-criteria analysis that was a part of the decision-making process.

4. Conclusions and recommendation:

Private equity investors are subject to thorough due diligence of private equity firms if they expect to find premium returns that outperform the public markets, which is the main attraction of this asset class. The returns of private equity firms can vary significantly, therefore it is important to uncover the value creation process they conduct during the fund's life time and determine whether it is replicable in the future. Private equity firms that tend to have solid processes in places for value creation and exiting, favorable industry tailwinds and experienced teams in place tend to outperform private equity firms that do not. However, this is a difficult task to uncover and the investor's due diligence process can take up to months to arrive at a decision, therefore seven main areas of due diligence were identified to simplify the investor's process and analyze the drivers behind private equity success.

KEYWORDS

Private equity, Fund due diligence, Institutional investors, Multi-criteria analysis

JEL CLASSIFICATION

F01; G01; G11; G23; G34

Vysoká škola ekonomie a managementu
Nárožní 2600/9a, 158 00 Praha 5

ZADÁNÍ DIPLOMOVÉ PRÁCE

Jméno a příjmení:	Karolína Holinková
Studijní program:	Ekonomika a management (MSc.)
Studijní obor:	Management firem
Studijní skupina:	DMF 01
Název DP:	Fondy soukromého kapitálu a přidaná kapitálová hodnota
Zásady pro vypracování (stručná osnova práce):	1 Úvod 2 Teoreticko-metodologická část 2.1 Základní pojmy ve fondech soukromého kapitálu 2.2 Struktura fondů soukromého kapitálu 2.3 Měření kapitálové hodnoty a uvedení způsobů jak se vytváří 2.4 Kvantitativní výzkum 2.5 Metodika 3 Praktická část 3.1 Představení fondů soukromého kapitálu v USA ve spotřebitelském odvětví 3.2 Měření návratnosti investic hloubkovou analýzou dvou různých fondů 3.3 Měření účinnosti strategie fondů 3.4 Formulace návrhů a doporučení 4 Závěr
Seznam literatury: (alespoň 4 zdroje)	• COFFEY, A. *The Private Equity Playbook : Management's Guide to Working with Private Equity*. California : Lioncrest Publishing, 2019. 184 s. ISBN 978-15-445-1326-3. • MCDONALD, W. *Vested : The Millennial's Guide to The Next Generation of Investing*. New York : New Degree Press, 2017. 198 s. ISBN 978-15-445-0028-7. • MOSCHELLA, J. *Financial Modeling For Equity Research : A Step-by-Step Guide to Earnings Modeling and Stock Valuation for Investment Analysis*. North Carolina : Gutenberg Publishing Company, 2019. 239 s. ASIN B07YHZQXF6. • ZEISBERGER, C. et al. *Mastering Private Equity : Transformation via Venture Capital, Minority Investments & Buyouts*. New Jersey : Wiley, 2017. 368 s. ISBN 978-11-193-2797-4.
Harmonogram:	• Zpracování cílů a metodiky do 30. 7. 2020 • Zpracování teoretické části do 30. 9. 2020 • Zpracování výsledků do 30. 10. 2020 • Finální verze do 1. 12. 2020
Vedoucí práce:	doc. Ing. Miroslav Špaček, Ph.D., MBA

prof. Ing. Milan Žák, CSc.
rektor

V Praze dne 1. 7. 2020

Prof. Ing. Milan Žák CSc.

Digitálně podepsal Prof. Ing. Milan Žák CSc.
DN: cn=Prof. Ing. Milan Žák CSc, c=CZ, o=Vysoká škola ekonomie a managementu, a.s., givenName=Milan, sn=Žák, serialNumber=ICA - 10393535

Table of Contents

1 Introduction 1

2 Theoretical-methodological part 4

2.1 Private equity as an asset class 4

2.1.1 Public versus private markets 5

2.1.2 Private equity strategies 6

2.1.3 Life cycle of PE firm 9

2.1.4 Phases of Private equity Life cycle 12

2.1.5 Investment process from a private equity firm perspective 16

2.2 Structure of Private equity funds 18

2.2.1 How is private equity performance measured 20

2.3 Value cretion in Private Equity 23

2.3.1 Team capabilities 23

2.3.2 How is value created 25

2.3.3 Deal sourcing 31

2.3.4 Exit preparation: Demonstration of value 32

2.3.5 Private equity fund due diligence 34

2.3.6 Consumer sector in Private equity 35

2.3.7 Managerial decision-making 37

2.4 Methodology 39

2.4.1 Quantitative research 40

2.4.2 Qualitative research 41

3 Analytical part 45

3.1 Introduction of Private Equity funds in the consumer sector 45

3.2 Analysis of returns of two different Private Equity funds 46

3.2.1 Data collection 46

3.2.2 Modeling of investor decision making 47

3.3 Analysis of the effectiveness of strategies 48

3.3.1 SF Private equity firm 48

3.3.2 C Private equity firm 52

3.4 Formulation of suggestions and recommendation 58

3.4.1 Results and their discussion 62

4 Conclusion 64

Attachments I

Table of Figures

Figure 1 - Types of private equity investments by company maturity 7
Figure 2- Pooled IRRs and TVPIs since inception by vintage year and strategy 7
Figure 3- Deal flow (#) by size 8
Figure 4 - Life cycle of a buyout fund 9
Figure 5 - Private equity funds closed by Time spent in Market 10
Figure 6 - J-Curve 11
Figure 7 - Fundraising activity 13
Figure 8 - Investment process and action items 14
Figure 9- Median private equity holding times (by size) 16
Figure 10 - The flows of revenues, profitability, cash flow, and investment in the six stages of a company's life cycle 18
Figure 11 - Structure of a typical private equity fund 19
Figure 12 - Investors in private equity 20
Figure 13 - Dispersion of returns by strategy, 1979-2011 vintage years 24
Figure 14 - Value creation framework 27
Figure 15 - Economic sensitivity analysis for 1,000 midsize US public companies 30
Figure 16 - Add-on acquisitions volume 31
Figure 17 - Primary sources of Investments for PE and VC investors 32
Figure 18 - Number of exits by exit type 33
Figure 19 - Exit flow 34
Figure 20 - Number of US private equity deals by sector 37
Figure 21 - SF Private equity deal sourcing 50
Figure 22 - All funds multiples divided by sector 51
Figure 23 - Winner & Loser performance analysis (SF Private Equity) 51
Figure 24 - C Private Equity deal sourcing 56
Figure 25 - Winner & Loser performance analysis (C Private Equity) 56

Table of Tables

Table 1 - Due diligence criteria 58
Table 2 - Multi-criteria analysis of two private equity firms 62

Table of Attachments

Attachment 1 – Data for modeling Private Equity firms I
Attachment 2 - Semi-structure interview questions II

List of Abbreviations

AUM	Assets Under Management
GP	General Partner
IM	Investment Memorandum
IPO	Initial Public Offering
IRA	Individual Retirement Account
IRR	Internat Rate of Return
LBO	Leveraged Buyout
LoI	Letter of Intent
LP	Limited Partner
LPA	Limited Partnership Agreement
MBO	Management Buyout
MOIC	Multiple of Invested Capital
PE	Private equity
PPM	Private Placement Memorandum
TVPI	Total Value Paid In
SEC	Securities and Exchange Comission
SPA	Share Purchase Agreement
VC	Venture Capital

1 Introduction

The topic of private equity was chosen because it is a relatively unknown asset class in Europe and the Czech Republic in particular. Even in the United States, where this asset class has been rapidly gaining popularity among investors, it remains mysterious for the public. The word „private“ in private equity comes with a portion of mystery as this asset class does not have the same reporting duties as public companies do, therefore the availability of information to the public about this asset class is limited. The main goal of this diploma thesis is to make an investment decision regarding the optimal private equity investment for institutional investors. This will be achieved through conducting due diligence on two private equity firms. The results aim to serve for institutional investors, including pension funds, foundations, endowments or high net worth individuals. The supporting goals of this diploma thesis are:

- introducing private equity as an asset class with its characteristics and value creation process that drives private equity returns in the theoretical part
- modeling the due diligence process through analyzing seven different due diligence areas of two private equity firms in the consumer sector
- concluding with suggestions and recommendations to investors

Private equity as an asset class is known for outperforming the public market, and therefore it is hardly surprising that the popularity of it is increasing worldwide. According to McKinsey Private Markets report (2020), in 2019, $3.9 trillion in assets under management were held by private equity firms, which reflected a 12% increase from the prior year. In the United States, private equity is increasingly gaining presence in all diversified portfolios. Though the premium returns in private equity come at a cost. The cost is reflected through illiquidity for long time periods as well as high fees and high minimum capital investments. Therefore, this long-term alternative class is particularly appealing to institutional investors with long-term time horizons that can afford the illiquidity for typically is 10 years or longer that comes with private equity investing. However, the United States is not the only region where private equity presence is growing. According to Deloitte and CVCA[1] 2019 private equity report, the number of companies funded by private equity and venture capital funds increased for the third consecutive year in the Czech Republic, generating almost EUR 100 million in 2019. Despite the slowly increasing popularity and the existence of the Czech Private Equity and Venture Capital Association (CVCA), there are few domestic sources and publications on private equity available, and those that are, tend to focus on private equity markets activity updates rather than research on the asset class as such.

While there is research available on private equity asset class, there are very little sources that focus on fund due diligence, or in other words, private equity from the viewpoint of its investors – the Limited Partners[2]. Most research is looking at private equity and selection of the investments, which is an important part of the process even for private equity investors, however, identifying the right private equity fund with the limited information available and less visibility in the market becomes a key question for the investors. Hence why the partial objective of this diploma thesis are to introduce private equity as an asset class with all of

[1] CVCA is Czech Venture Capital and Private Equity Association is a non-governmental organization which promotes the development of the Czech VC and PE industry. It represents member firms and individuals from venture capital and private equity firms, debt and equity providers, international investors, institutional funds, angel and family offices, and industry service providers.

[2] Limited Partner is the investor in private equity, typically institutional investor such as pension plan, endowment or insurance company.

the stakeholders involved in the theoretical part, and then also to model the fund due diligence and decision-making process for private equity fund investors in the analytical part.

To further define private equity, it is a type of financing companies that falls somewhere between internal financing and external conventional funding sources such as bank loans and public equity. This strategy has proven to be particularly well suited to companies that have a potential to realize a onetime, short- to medium-term value-creation opportunity, where buyers must take outright ownership and control. (The Harvard Business Review, 2007)

Private equity firms are characteristic in a sense that they form funds of collective investments. These funds throughout its holding periods drive value via industry expertise of its professionals and carefully developed value creation plans that lead to attractive returns that are thereafter distributed to the investors. Thus, the secret sauce for private equity success lays in combining the management of businesses of its portfolio companies as well as managing the investment portfolio in its entirety. These are the specific skills that need to be further explored in conducting private equity firm due diligence.

The diploma thesis is divided in two parts – theoretical-methodological part and analytical part.

The theoretical-methodological part comprises of findings and research on describing the asset class as such, the life cycle of a private equity asset class including all parts of the investment process, structure of private equity funds including the key stakeholders involved in the process, and describing the different strategies for value creation that can lead to a profitable or unprofitable exit. Thereafter, quantitative research and methodology is described that was used in this diploma thesis.

Private equity funds usually operate as a limited partnership, controlled by the private equity firm that takes the role of a general partner. Upon raising money from Limited Partners, private equity funds invest in non-listed companies which they provide significant capital to and implement strategic and operational support. Each portfolio company is held and managed for around four to six years until it becomes attractive for an exit once the private equity value creation plan has been achieved. The fund sells the company to a strategic buyer (another company in the industry), secondary buyer (another private equity fund), or lists it on the stock market through an initial public offering (IPO). Proceeds from these exits are thereafter returned to the investors after management fees and other fees have been deducted. In addition to the high performance of the industry, top-quartile private equity funds have found to outperform bottom quartile funds by 7 to 8% annually (Korteweg & Sorensen 2017) and generate internal rate of return (IRR) above 50% (Lopez-de-Silanes et al. 2011). Therefore, identifying these top quartile funds is the top priority for investors, especially since the competition in the private equity markets is increasing and it is getting more and more difficult for investors to pinpoint the suitable firms that will deliver superior returns. What makes this particularly difficult are the limitations of fund-level research, low availability of data and a significant lag of performance information. (Braun et al. 2017)

If it wasn't for the private equity investors, private equity firms would not be able to aggregate capital worth hundreds of millions of US dollars to bring their process to life and invest into companies to generate returns. The analytical part of this diploma thesis builds on the knowledge from the theoretical-methodological part and was written to examine the fund due diligence process and the different steps that private equity fund investors should undergo prior to committing the capital to private equity firms. Firstly, the consumer universe in private equity in the United States is introduced followed by an analysis of two firms. The objective of this part is to walk through the process for two anonymous private equity firms and formulate suggestions and recommendations for making the final decision. Majority of studies or research available are on private equity firm investing, fundraising, due diligence, monitoring, or other

areas from a private equity firm's perspective, but few uncover the importance of picking the right private equity firm from the investor's perspective, which is what the analytical part of this diploma thesis will assess.

As this asset class relies on large amounts of capital and has a high minimum capital investments requirement, it is important that investors allocate their money to the right private equity firms that will not only return the capital but bring back a significant premium to its investors. Even though it is impossible to predict the future performance of private equity firms there certainly are several factors that are important to consider that can signal the quality of the private equity firm, and therefore help to evaluate whether the private equity firm will be successful in the future. The fundamental question that investors should be asking private equity firms is what are the underlying factors of value creation in their portfolio companies that deliver superior returns. Through answers for these questions, investors can get a sense of whether this process can be replicable in the future.

Fund due diligence is a lengthy process, where investors look at several factors of private equity firms that are of interest and decide to which private equity firm they will commit capital based on their analysis.

2 Theoretical-methodological part

First, a comprehensive literature review is introduced through content analysis around the topic to offer a general understanding of the private equity area and especially to summarize the results of previous research in the areas of value creation. While most of the literature and studies do not focus on due diligence of private equity firms as this diploma thesis does, they provide a solid basis for this study as well as a way to connect the results to the general understanding of private equity. Additionally, databases Preqin Pro and Pitchbook were leveraged to provide deeper insights into current situation in private equity markets.

To elevate content analysis, comparative research was used to analyze the different sources of literature and synthesis of findings to arrive at conclusions.

2.1 Private equity as an asset class

First and foremost, it is important to introduce the asset class, specify its benefits and disadvantages, and place it in the asset universe to describe what makes private equity different from other asset classes. The private equity in the United States has been on the rise up until COVID-19 pandemic. The velocity of private equity deal making diminished in first half of 2020 as private equity managers felt the financial impact of the COVID-19 pandemic.

McDonald (2017) defines private equity is an alternative investment class that invests long term capital typically into private (non-listed) companies for which it receives an equity stake in the company. One of the first mentions of private equity was by Jensen in 1989. Per Metrick and Yasude (2010) private equity is considered a form of alternative investments which contrasts traditional investing in stocks and bonds. Contrary to this, Kaplan and Stromberg (2009) define private equity firms as leveraged buyout firms that buy majority control of an existing or mature company and is different from venture capital firms in that it does not invest in young or emerging companies or minority investments. Private equity is distinguished from most other asset classes due to its illiquidity that is given by the lifetime of private equity fund that is most commonly for ten or more years. Its life cycle begins with fundraisings and once concluded, PE funds start investing in portfolio companies which they manage throughout their holding period. In this period value is created and realized at exit.

As the asset class‘ name suggests, private equity invests capital in private assets like other private market‘s asset classes such as private debt, private real estate, or private infrastructure. While this might not be as popular or well-known asset class as some public asset classes, and investing in it is a privilege available to a few, its mysterious character, superior returns outperforming the public markets and limited information available publicly increases its attractiveness and prestige. Private equity typically orchestrates fundraises prior to closing a fund, where it markets its strategy and skillset of the team to raise capital from investors, who then become the Limited Partners in the fund. Private equity differs from public equity investing in many ways. They raise pools of capital from institutions such as pension funds, endowments, funds-of-funds, banks, insurance companies, high net worth individuals or family offices that is used for investments in targeted companies. As private equity fund investments are riskier and more illiquid than most other asset classes, it is only a suitable choice of investing for those who can afford to have their capital locked in for long periods of time and who are able to risk losing significant amounts of money. Moreover, as private equity funds are also less regulated than ordinary mutual funds, law typically requires that investors fulfill certain conditions, such as to qualify as an accredited investors in the USA, one needs $2.5 million of net worth exclusive of primary residence, $200 000 of individual income for two documented years and an expectation that such levels of income will continue. (Mathonet and Meyer, 2007)

According to SEC[3] (2020), retirement savings represent more than half of the assets under management (AUM) of asset managed in private equity in the United States. Individual Retirement Accounts (IRAs) and self-directed defined contribution plans, such as 401(k) continue to increase in size and relative share of retirement assets.

Once the capital is raised a limited partnership is formed that consists of limited partners (LPs), investors, and general partner (GP)[4], private equity firm. Capital is then invested in several portfolio companies that together form a fund and these are managed to create value during holding periods. Consequently, it is important for the General Partner to have performance incentivized motivation that benefits both the General and the Limited Partner. The alignment of interest between the two parties is also a big differentiator in private equity versus public equity. When managing a private equity firm, it is important to create a strategy and establish a value creation playbook that is repeatable across various portfolio investments. This process is similar to corporate restructuring, but it needs to be repeatable over and over again as each private equity fund consists of several portfolio companies that are typically chosen right when they are ripe for improvements. To enhance better returns, private equity managers typically aim to provide various resources to its portfolio companies, such as operating team and other specialists, and work closely with them to foster operational improvements.

To provide returns to its investors, once the portfolio companies mature, they are ready for liquidation. Since these are private companies and their shares cannot be publicly traded, private equity funds aim to liquidate its investment through various exit routes during the divestment period to realize returns to the investors (Zeisberger et al. 2017).

2.1.1 Public versus private markets

According to SEC (2020), another reason why private market is gaining attractiveness is that the public equity market, even though larger in market share, is more concentrated and has fewer listed companies. In recent years, companies are staying private for longer and getting larger while staying private, generating larger amounts of capital raised in private fundraising that it would during a public fundraising. As per The World Bank report (2019), the number of U.S. listed companies has been declining since reaching its peak of 8,090 in 1996. The number of publicly listed companies has been dropping gradually to reach 4,397 in 2018. This is shown through the median age of companies doing an IPO has been increasing. In 2019 the median age of U.S. companies going through an IPO reached 10 years.

The public corporation is often believed to have important advantages over its private counterpart. The benefit of stock market listing over private markets is that it allows firms to raise money in public capital markets, it offers relatively high liquidity for investors, company’s founders and entrepreneurs are able to diversify their wealth, and it is able to use public visibility and media exposure as a powerful marketing tool. However, the publicly quoted company with dispersed ownership may suffer from a high degree of managerial discretion resulting from a lack of monitoring, which may lead to „empire building“ to the detriment of shareholder value of which we can currently see an example of through companies like Amazon

[3] SEC is Securities and Exchange Commission, a U.S. government agency created to protect investors and the national banking system. It is responsible for enforcing the federal securities law, proposing securities rules, and regulating the stock and options exchanges as well as other activities and organizations in the United States.

[4] General Partner is the private equity firm (also „Fund Manager“, „Private equity manager“) which forms a partnership with its investors, called „Limited Partnership“.

that are becoming monopolistic in the market which is not good for the overall economy. (Cumming, 2012)

In the broad sense, private equity means a security that is not registered and not publicly traded on any stock exchange. As per Mathonet and Meyer (2007), it provides financing to private firms that are unable or aren't willing to receive funding through public equity markets or loans from banks and is usually considered one of the most expensive forms of finance.

2.1.2 Private equity strategies

Institutionally managed private equity can be divided into three main strategies: Venture Capital, Growth Equity and Buyouts[5]. As the needs of potential investments of private equity firms change according to what phase the companies are in, there are different subcategories of private equity firms that focus and specialize on different phases where they can add more value and make the investment more attractive. Venture capital firms specifically finance companies in the initial or growth phases and provides non-financial assistance to increase the chances of survival (Zacharakis and Meyer, 1998). The venture capital firms fill a void by providing a market for entrepreneurs that are looking for capital funding, investors that are willing to take on high risk for high returns, and investment bankers that need companies to sell. The investors of the venture capital funds are usually large institutions such as pension funds that only put a small percentage of their total funds into such high-risk investments and allocate larger portions to less riskier private equity funds (Zider, 1998).

The main distinction between venture capital and other private equity firms is generally a timing one; investing in ventures in an early phase or investing in more mature companies for growth equity or buyout. In the latter, a majority of shares are acquired and a minority of shares in the early phases (Gilligan and Wright, 2014). However, the different types of PE firms have the same aim of developing the businesses and creating value for the entrepreneurs by providing capital after negotiated terms between the investment professionals and entrepreneurs (EVCA[6], 2007). As Hassan and Leece (2007) note, it is essential for the investment professionals to have skills in identifying and selecting the right projects to invest in, keeping a positive track record and attracting more funds in the future. Such an assessment of information is however not easily done due to possible information asymmetries between the investment professionals and the company they are about to invest in. A detailed table describing the different types of private equity divided by the company stages is below.

[5] Buyouts represent investments that generally take majority control in the acquired company

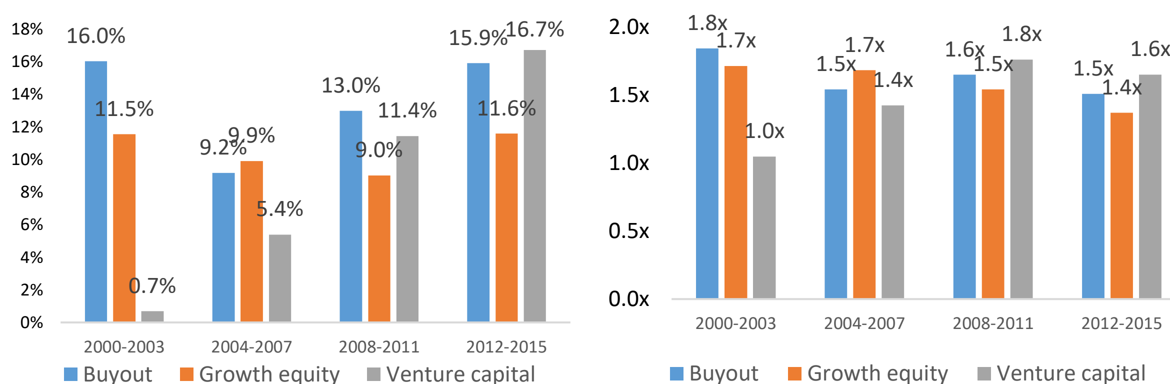
[6] EVCA is the European Private Equity and Venture Capital Association that promotes private equity investing and sets general guidelines and conditions for the industry in Europe.

Figure 1 - Types of private equity investments by company maturity

Type of PE	Company Stage (early > late)	Size of Typical Investment	Type of PE Firm	Description	Example Industry Focus
Venture Capital		$50,000 to $5 million	VC	Typically investments in companies that are early stage of development and are cash flow negative. Requires convincing market potential since not proven.	Life sciences; Technology; Software
Growth Capital		$5 million to $50 million	Small - Mid Tier	Typically investments in equity and/or debt instruments as these companies are growing and require increasing amounts of working capital, capital expenditures or an acquisition.	Most types
Mezzanine Financing		$5 million to $50 million	Small - Mid Tier	Typically subordinated debt or preferred equity investment into a company that falls between equity and senior debt on the balance sheet.	Manfuacturing; Consumer products; Real estate
Leveraged Buyout		$2 million to $200+ million	Buyout (all sizes)	Acquisition of an operating company with a significant amount of borrowed funds to create value by realizing opportunities and improving efficiencies, etc.(use debt as financial leverage)	Consumer products; Food manufacturing
Distressed Buyout		$2 million to $200+ million	Buyout (all sizes)	Typically investments in equity or debt securities of financially stressed companies. Investor can look for a corporate restructuring or turnaround of business, for example.	Paper & pulp manufacturing

Source: Street of Walls (www.streetofwalls.com)

Figure 2- Pooled IRRs and TVPIs since inception by vintage year and strategy



Source: Pitchbook (2020); Data is as of 9/30/2020

Note: TVPI is a total value paid in, a measure of private equity performance. It is the ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date.

Buyout represents investments that generally acquire majority control in the mature companies. (Kaplan Strömberg, 2008; Metrick, 2010) Historically, North American buyouts have outperformed other regions although returns have come more in line with the rest of the world in the past five vintages. (Preqin, 2020). In the US, buyout dominates most vintages. The vintage year in private equity is the year when the private equity fund was launched. As we can see on the Pitchbook (2020) graph above, buyout has outperformed growth equity in all vintages, except for 2004-2007 vintage years. There are several types of buyouts – leveraged buyout, management buyout and management buy-in. Leveraged buyout (LBO) is the most typical buyout and it uses a small portfolio of equity, generally 20 to 40 percent of the purchase price and debt to cover the remaining 60 to 80 percent of the purchase price, typically in form of outside debt financiang borrowed from banks, public markets and mezzanine investors.

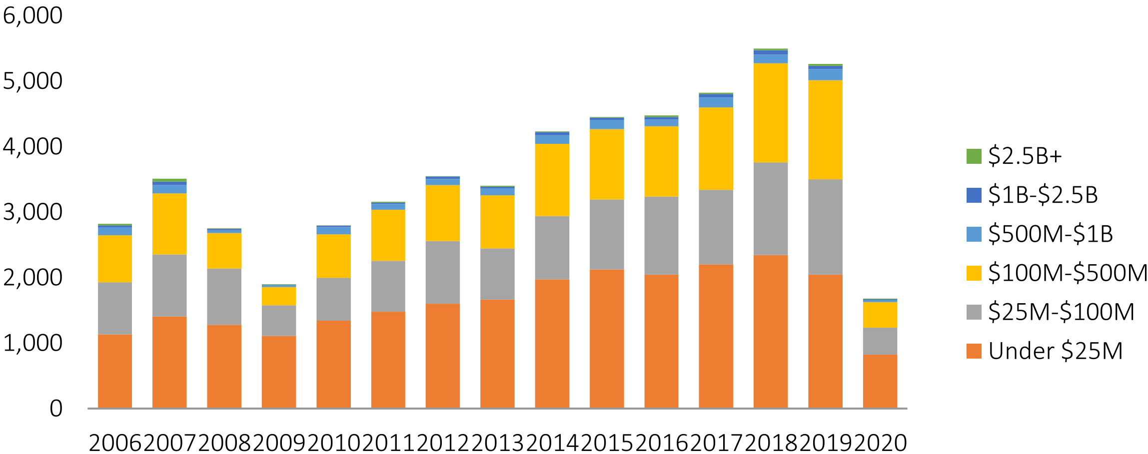
(Kaplan Strömberg, 2008; Metrick, 2010) Two other types of buyouts are management buyout (MBO) and management buy-in (MBI) that are typically selected when a private family firm owners don't have a suitable successor. Per Scholes et al (2010), management buyout is a transaction where the assets and operations of the business are purchased by the existing management team. Opposed to that, the defined management buy-in as an action in which outside manager acquires a controlling ownership stake and replaces the current management team.

Venture capital outperformed both growth equity and buyout in most recent vintage years 2012-2015 mainly given by the acceleration of investing in technology and SaaS given the technology trends such as digitalization.

However, as per TVPI results, Venture capital managed to outperform the other two strategies, buyout and growth equity, in two most recent vintage years, 2008-2011 and 2012-2015. Buyout again achieved better pooled TVPIs than growth equity, with the only exception being 2004-2007 vintage years, where growth equity performed better than buyout.

Deal activity in the first half of 2020 slowed down nearly 20% compared to the first six months in 2019. In the second quarter, it was an even steeper fall compared to the second quarter in 2019 as deal valued was down more than a third. Despite several deals getting called off due to Covid-19-related uncertainty, deal activity remained above the low points of the Great Financial Crisis. Heading forward, Pitchbook (2020) is expecting General Partners to continue investing in the technology sector, which has proven to be resistant to recession. Through the first half of 2020, just under 20% of all private equity deals have been in technology sector, and they represent just over 30% of private equity deal value—both percentages on pace for annual highs. However, competition is likely to remain fierce because technology company valuations have held up better than other sectors, meaning fewer discounts are available. As seen on the Pitchbook chart below, deals in the size range of sub $25 million dominated the deal flow activity. There were 825 deals, double the amount of deals in the $25-$100 million size range. Seven deals above $2.5 billion were also closed in first half of 2020.

Figure 3- Deal flow (#) by size



Source: Pitchbook (2020)

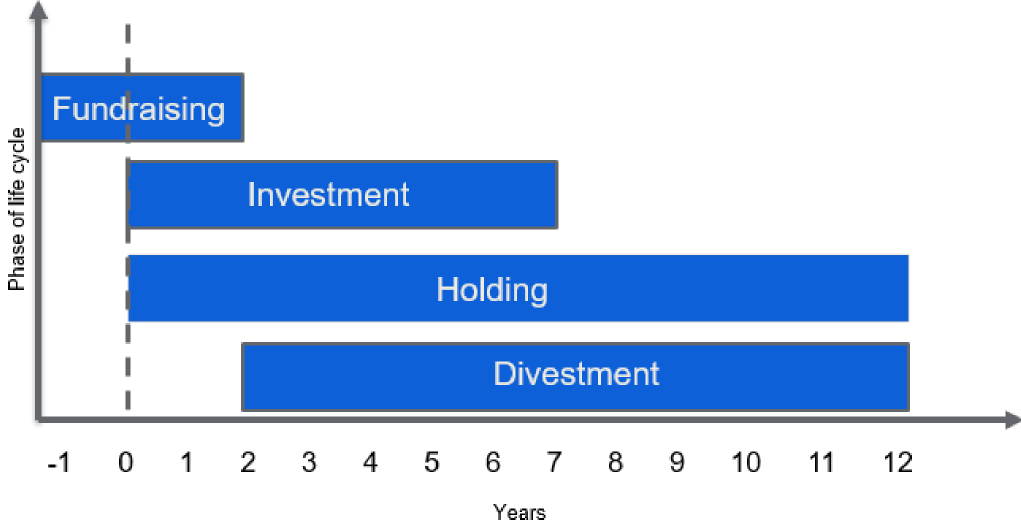
2.1.3 Life cycle of PE firm

Private equity funds aim to return capital to its investors within 10 to 13 years, as the terms funds are raised typically are 10 + 2 years. (Harris et al. 2014, Kaplan & Strömberg 2009) The General Partner has the option for two additional years when more time is needed to exit all investments successfully (Zeisberger et al. 2017). This means that fees are charged and terms negotiated in the Limited Partner Agreement apply for a time period of ten years, with the possibility for two one-year extensions subject to the approval of Limited Partners. After that, even if investments are not realized, fees typically cannot be charged.

Throughout the lifecycle of a buyout fund, the committed capital is invested in several portfolio companies depending on the size of the fund (Zeisberger et al. 2017). The average lifespans of buyout funds have been increasing from 11.5 years in 2008 to 13.2 in 2014, which in part can be explained by expected annual returns and challenging liquidation environment (Bollen 2015).

Zeisberger et al. (2017) divides the life cycle of a private equity fund into four stages: fundraising, investment, holding and divestment or harvesting period. Limited Partnership Agreement defines the terms between General Partner and Limited Partners. It is not unusual that different fees are charged on committed capital and different on invested capital. If so, lower fees are applied on invested capital as sourcing deals and due diligence is typically a more demanding and time-consuming process for private equity firms compared to managing the portfolio company thereafter.

Figure 4 - Life cycle of a buyout fund

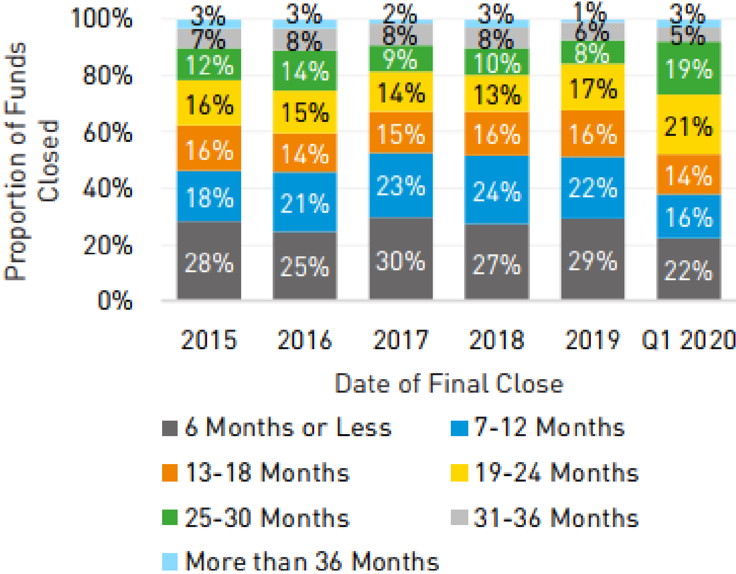


Source: Figure based on Zeisberger et al. (2017)

The figure above illustrates the typical length and timing of each phase in a 10 + 2 year fund as described by Zeisberger et al. (2017). The fundraising period often starts months before the first closing of the fund and continues for around a year until the final close. A fund can hold several closes as capital flows in, the reason for this is that the fund can start making investment and charging fees after the first close, even if it has not reached the target fund size it is looking to raise. The graph by Preqin (2020) illustrates the average time it takes for private equity firms to close funds. Highest percentage of funds manage to close in six months or less, which is mainly given by the large private equity firms that have a large well established Limited Partners base,which makes it easier and faster to close funds. However, fundraising is showing

signs of slowing. Around 52% of funds closed in Q1 2020 reached a final close within 18 months, in contrast to 68% of funds closed in 2019. In addition, 27% of funds closed in Q1 2020 spent more than two years on the road. On the other hand, the proportion of funds closing within six months has stayed relatively consistent, potentially indicating continued investor support for established fund managers.

Figure 5 - Private equity funds closed by Time spent in Market



Source: Preqin (2020)

After investors aggregate the target amount of capital for the fund in the fundraising stage, the fund can start incrementally calling this capital during the investment period, which typically lasts five years, meaning private equity fund takes capital from investors as needed for closing each investment, however, the Limited Partners need to have this capital available and ready to send to the General Partner. If delays occur, it is possible that the General Partner does not retrieve capital from the Limited Partners in time and loses out on the investment to a different buyer.

Blackstone (2020), the largest alternative investment firm in the world, has described the life cycle of a private equity fund in its Private Wealth Report. During the investment period, General Partner puts capital to work by sourcing deal flow and investing in suitable portfolio companies that are identified through rigorous due diligence process that typically lasts many months after the identification of the target company. Deals can be sourced on a proprietary basis, which is typically the best way as it does not involve additional fees to any third parties but at the same time, it is more difficult as it requires the private equity firm to have a strong go-to-market strategy and good relationships within the industry. Another, slightly easier but more expensive way to source deals is through an intermediary such as an investment bank that puts the company that is for sale in front of several potential buyers, who then compete among each other to win the deal.

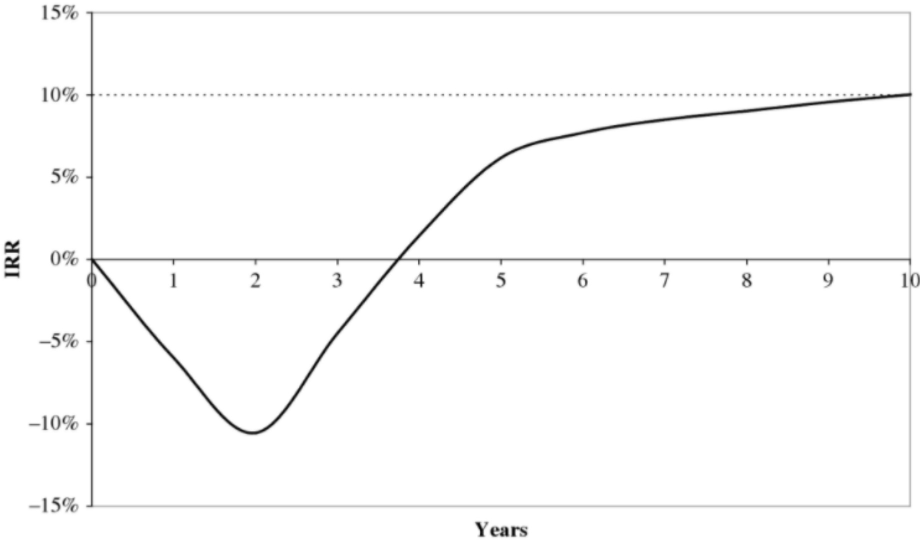
Simultaneously, as capital is deployed, existing portfolio companies need to be managed and value creation plans need to be put into work in order to start driving returns through the value add process. The time period between closing and exiting an investment is when the private equity firm quickly needs to create a record of excellent performance to generate returns for investors. This phase lasts from first closing until the last investment is exited. As per

Zeisberger et al. (2017), divestment starts after around three years of holding a company or as soon as private equity firm get a bid of its liking on its portfolio company. As investments are realized, and if the fund has turned out to be successful, the cash including the surplus generated by the General Partner is returned back to Limited Partners. If investments remain at the end of the official ten year term of the fund, there are several options: (1) the investment may be sold to a secondary fund, (2) the fund may be extended for anywhere from 1 to 3+ years, or (3) the fund can hold fire sales, meaning it will sell all of its investments for any return it can get in the market at that given time, even if it is below the cost of the investment. However, private equity firms aim to stay in business for long time periods and intend to raise several funds. Therefore, if they extend one fund will, it becomes will be more difficult to successfully raise a new fund. The different stages of private equity life cycle are further described in detail in the following subsections.

2.1.3.1 J-Curve

The European Venture Capital and Private Equity Association (EVCA) defines the J Curve as the "curve generated by plotting the returns generated by a private equity fund against time (from inception to termination). The common practice of paying the management fee and start-up costs out of the first drawdowns does not produce an equivalent book value. As a result, a private equity fund will initially show a negative return. When the first realizations are made, the fund's returns start to rise quite sharply. After about three to five years the interim IRR will give a reasonable indication of the definitive IRR. This period is generally shorter for buyout funds than for an early stage and expansion funds."

Figure 6 - J-Curve



Source: Mathonet and Meyer (2007)

The J-curve characterizes an investor's potential performance through the life cycle of a fund. In the first few years, investors are providing capital while also paying management fees but as the fund deploys the capital, returns are not high enough to overcome fees, which results in a negative return. As time passes and if investments are successful, returns can improve as mapped out in the figure by Mathonet and Meyer (2007). Since the investments are made within several years and parallel to exits from other portfolio companies that are in the fund, the cash flows of a fund formulate a "J-curve" (Aigner et al. 2008). Zeisberger et al (2017) points out that the reason behind negative cashflows during the first few years is the deployment of capital

into portfolio companies. At some point, cash inflow from companies' exits start to surpass cash outflows in investments, forming the bottom point for J-curve, which typically equals less than 80% of total committed capital. This is also the inflection point on the J-curve after which cash flows in the fund become positive. When all investments are executed, the remaining cashflows are typically positive, and at some point, cumulative cash flows reach a break-even point, and eventually define the total return of the fund.

2.1.4 Phases of Private equity Life cycle

Fundraising

Among the benefits that forming a private equity fund in place might have over investing on a deal-by-deal basis, can be the scale that fund provides with a larger and more secure capital base for prospective investments. This allows the private equity firm to have more resources for building out its team of full-time professionals in areas such as operations, talent and human resources, and business development.

Having a fund opposed to deal-by-deal investing also saves investors time, which is important in the competitive environment that there is today, so that investors can close deals quickly before a higher bidder comes in. Lastly, a fund with a diverse portfolio of investments can provide a more resilient and „all-weather" portfolio, that can withstand an occasional loss.

While it seems like fundraising is breaking records almost every year in terms of the amount of dollars raised for private equity investing, fundraising process itself can, in fact, be quite challenging for private equity firms that do not have an established base of Limited Partners. First time funds are in one of the toughest spots to raise capital. They are fundraising capital for their first fund ever, and have no prior investors who have backed them in the past and who can come back to re-up their commitments. According to a Pitchbook report (2020), first time funds usually emerge as a step upwards for many investment managers' at a time of their careers when raising their own fund becomes a logical move forward. These managers typically have three different backgrounds – they either have been working for other private equity firms as employees and now want to create their own firm and raise funds; they have been investing their own capital and are keen to raise outside capital; or they might have been investing outside capital on a deal by deal basis and they are looking to scale as the demand upticks.

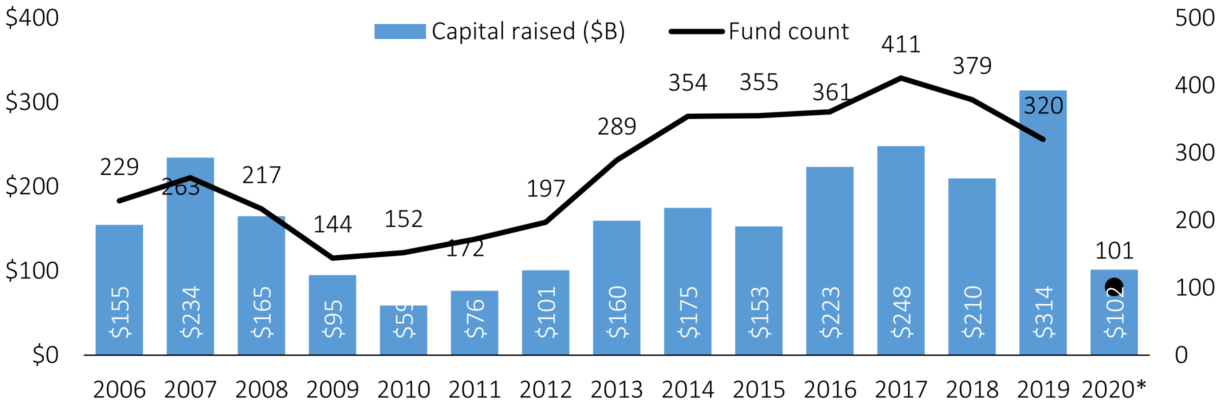
Due to the fundraising difficulties, private equity firms often hire a placement agent, who can introduce them to suitable investors. It is palpable that competition in private equity is ample, with the increasing number of funds coming to market to raise funds as well as existing private equity firms that continue to raise increasingly larger funds each year. As per Caselli and Negri (2018), fundraising involves suppliers and investors in venture capital and private equity, where the suppliers, or private equity firms, present issues where capital is needed to respond to specific needs of the subject involved. This issue is solved through providing capital from investors, or the Limited Partners.

It is essential for private equity firms to allocate large capital and internal resources in marketing efforts for fundraising. It is helpful if they are able to clearly communicate the fund's strategy, vision, and approach that they have for selecting investments to potential investors. The marketing strategy is therefore important but it also needs to be backed by experience and a positive track record. This becomes important particularly for large institutional investors, who are more demanding in terms of expectations from private equity firms and are naturally concerned more with General Partner's previous track record and experience of its investment professionals. Opposed to this, smaller investors, may not be as concerned with the General Partner's track record and might be more interested in being aligned with the professionals and

their private equity firm's approach. According to Preqin (2020), institutional investors are by far the most active investors in private equity. The three types of institutional investors who slice up to approximately 20% of the private equity pie are foundations, endowment plans, and private and public pension funds. These are followed by institutional investors who have approximately less than 10% of this private equity pie, and these include private equity fund of funds managers, insurance companies, family offices, wealth managers, and others.

In June 2020, when the National Bureau of Economic Research announced that the United States officially entered a recession in February 2020 capping off the 128-month expansion, the deal transactions pace has also unsurprisingly slowed down. Private equity fundraising momentum slowed down in 2020 from 2019's record setting pace, although it is on pace to achieve the 2018 fundraising levels. Through the first six months of 2020, private equity firms in the United States managed to close just over 2000 deals, that in total added up to just over $300 billion. The chart shows that the value of first six months of 2020 was down 20% compared to first six months of 2019, with second quarter deals showing the biggest difference between deals closed in those two years. Mega funds, which are funds of sizes $5 billion and above, had several closings in the first half of 2020, according to Pitchbook report (2020). This was mainly possible due to already existing established base of Limited Partners that these funds had. Their Limited Partners were comfortable with performing their due diligence meetings by video rather than in person, which is what would have been usually done. As seen on the graph by Pitchbook (2020), the deals transacted in first half of 2020 still remained above the low points of deals closed during the Global Financial Crisis.

Figure 7 - Fundraising activity



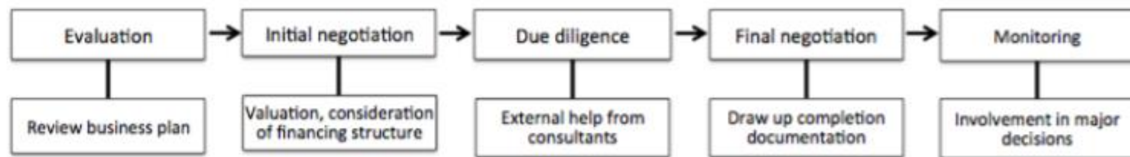
Source: Pitchbook (2020)

Investment

Private equity investment professionals' primary role is making investments in companies and managing them throughout the lifetime of a fund. The investment phase is guided by already pre-set strategy and criteria for each investment that private equity firm establishes before raising funds. The strategy should entail the types of investments the fund plans to make, criteria that portfolio companies have to meet in order to be considered for investment, circumstances under which investments are to be reviewed and reconsidered, and cases when exceptions or variances from the core strategy are allowed. Specifics of the strategy are described in detail in Limited Partnership Agreement (LPA) or Private Placement Memorandum (PPM).

The private equity investment process is described in EVCA (2007) and is broken down into different steps that the private equity firm undertakes. There are five different stages with specific actions that private equity firms engage in.

Figure 8 - Investment process and action items



Source: EVCA (2007)

In the first stage private equity firms review the business plan of the target company. This typically includes actions such as assessment of the target company in terms of its growth potential to project future growth, and review of skillset and experience of management of the company as good quality management is crucial for bring companies on a path towards growth. Based on this review evaluates private equity firms need to evalutate, whether it wants to retain the current management team of the portfolio companies or if it will need to put its hiring efforts to work in order to replace the current management team with a more suitable one. It is also important for private equity firms to determine the Return On Equity (ROE) for the fund's investors for each one of the target portfolio companies as the primary goal of private equity firms is to returns capital to investors with a premium. In the next stage initial negotiations take place between the private equity firm and the owner of the target company to conduct the valuation of the potential the valuation of the potential investment. At the same time when price of the company is determined, the private equity firm also needs to determine the form of financing structure it will use to finance the target company, which most commonly is either equity, debt or some combination of both. In some cases the financing structure can be more complex than that but this is not relevant for the purpose of this diploma thesis. After the initial negotiations, private equity firm sends out the offer letter on acquiring the target company in which it lays out terms and conditions for the next stage in the process, the due diligence. During due diligence stage, private equity firms might seek out external help from lawyers, tax advisors, consultants, or accountants, who can help the private equity investment professionals to analyze all aspects of the potential investment and also uncover potential setbacks during the initial stages of the process. It is important that red flags are identified early on as this process is costly and requires significant time allocation of the firm's human capital resources. In the final negotiation stage, investment decision process is completed by using all the information that has been gathered throughout the due diligence and other stages of the investment process as background for the contract that needs to be signed. After that the private equity firm moves into monitoring process which involves holding the company and entails heavy involvement and steering of the private equity firm and its professionals in what is now has become the portfolio company.

The investment process described by different sources is similar to a great extent, although the study of Fried and Hisrich (1994) indicates that some differences might exist, which can result in a different structure of the investment process. In this structure the evaluation and initial negotiation stages are divided in two stages respectively due to different underlying objectives of these stages. Van Osnabrugge (2010), also stressed out the importance of private equity firms needing to be able to prove to the owners of the target companies that they are capable of value creation to ensure that both of their interests align.

Another research by Yates and Hinchliffe (2010) on private equity investment process describes the main differences between an originated deal and an auction deal in their book Practice Guide to Private Equity Transactions. Their model provides a comprehensible timetable describing why buyer-led (originated deal) process is more appealing to private equity firms than a seller-led (auction) process where the seller usually controls the information that is available to bidders through a data room. The model is summarized here:

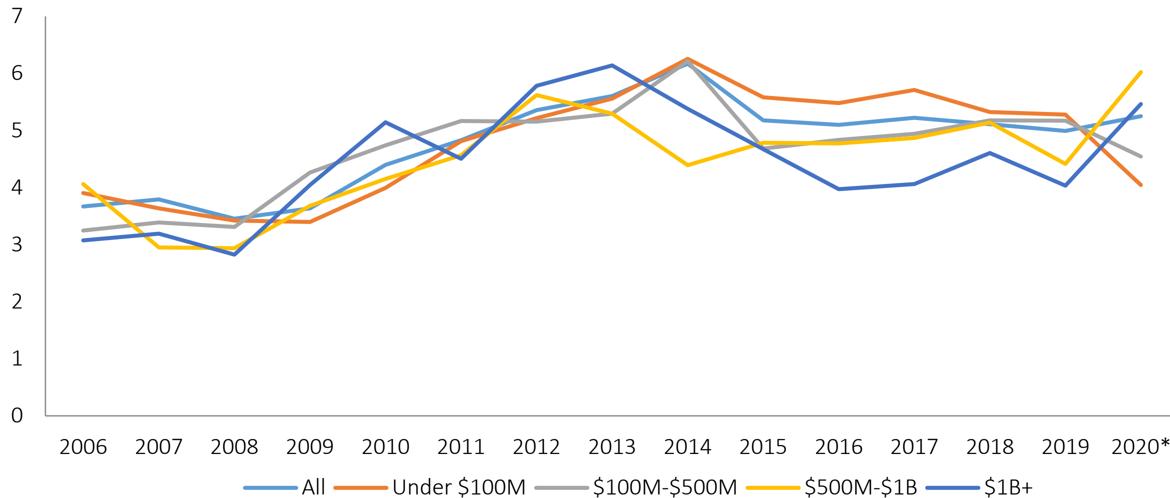
During the initiation of the buyer-led process, initial offer or Letter of Intent (LoI) is submitted versus information memorandum (IM) which is issued in a seller-led process. The following week, advisors are appointed in both deals. These advisors help with the acquisition process. In the third week, in buyer-led deals, heads of terms, which is a non-binding document outlining the main issues relevant to a tentative sale, are agreed on and exclusivity is granted, while in seller-led deal banks are approached by the seller, and bidders submit initial offers thereafter. The fourth week is represented by due diligence conducted by both parties, in buyer-led deal financial, legal and other due diligence is conducted but in seller-led deal vendor due diligence is released and data room is open to second-round bidder containing management presentations. Weeks five, six, seven and eight differ significantly. In buyer-led deal, banks are approach in week five and in weeks six and seven investors may issue equity term sheet and first draft of legal documents. Concurrently, in seller-led deal Share Purchase Agreement (SPA) and management term sheets are drafted and stapled bank offers are communicated to bidders. In week seven, bidders submit proposed management terms, and mark up of SPA. The next phase is the final stage of the process. In weeks eight to nine, legal documentation is negotiated and finalized. Simultaneously, in seller-led deal, heads of terms are agreed and exclusivity is granted to a preferred bidder, much later than it is granted in a buyer-led process. At this stage, SPA is finalized and equity or bank funding is documented. Weeks ten to twelve are identical as confirmatory due diligence work and business plans are finalized and deal is completed.

Holding period

The holding period is known as the period between private equity firm buying the business and selling it again. Private equity investments are known for long holding periods. In this phase, private equity firms specifically focus on increasing the value of the portfolio company in order to sell it at a profit and distribute the proceeds from sale to the investors. Therefore, managing investments often becomes difficult by manager alone and staffing a good quality operations team is crucial for private equity firms, or at the very least having a network of operational advisors who can advise or help out with portfolio companies.

Having a well-staffed team allows for a greater and sustainable scale, but at the same time becomes a management challenge as these professionals are full time and need to be properly identified, hired and incentivized. According to Preqin (2020) the average holding period for buyouts is between three to five years but private equity holding times tend to increase during economic downturns such as Covid-19 or the Great Financial Crisis due to uncertainty in the markets. Some companies can be held for as little as one year or as long as over 10 years if private equity firm is not able to exit the investment. As per Preqin report (2020), longer holding periods can be highly disadvantageous for private equity firms, as they might signal private equity firm's incapability of returning capital to Limited Partners, therefore make it difficult to raise new funds as investors lose confidence in the General Partner. The longer the private equity firm is holding the investment the less attractive it becomes because the Internal Rate of Return (IRR) is lower due to the discounts on cashflow. Shorter holding periods allow for higher IRR, explains Gottschalg and Phalippou in Harvard Business Review (2007). In this phase value creation occurs, which is discussed in chapter 2.3.

Figure 9- Median private equity holding times (by size)



Source: Pitchbook (2020)

Exit

The concluding phase of owning portfolio company is exit. Despite this being the last part of the processes, it is also the most important one for generating cash for Limited Partners. The private equity fund portfolio consists of multiple companies, therefore each exit contributes to the overall fund performance. At the beginning of due diligence on each portfolio company, investors should have a plan on potential exit routes for each investment. The exit phase itself begins long before the liquidation actually takes place, sometimes as early as 10-18 months before exiting. The exit process is further described in section 2.3.3. Exit preparation.

Conclusion

There are sources and research that omit the holding period in their investment process structure, such as Gompers and Lerner (2006), who define the private equity (and venture capital) cycle into three standard phases: fundraising, investing, and exit. This could be given by the fact that this source is older and was written in a time when value creation in private equity was not yet considered of as high importance as it is today. This is mainly due to increasing competition in private equity that makes it difficult to find „easy“ deals for which investors don't need to do much value creation for premium returns. As there are few such deals left anymore, the importance of the holding phase has increased.

2.1.5 Investment process from a private equity firm perspective

A company in the earlier stages of life cycle involves thinking about a potential investment from a private equity firm, when the entrepreneur understands the need for capital for their company, or wants to step down and liquidate their stake. Most frequently, external investors come into company to support the owner with capital for expansion or transformation of the company. According to Caselli and Negri (2018), the drivers that measure the company's need for funding are investment, profitability, cash flow, and sales growth. These variables are linked together and evaluated for a long-term horizon showing investors which stage of company life cycle, the particular firm is in. Determining the stage of the company then helps

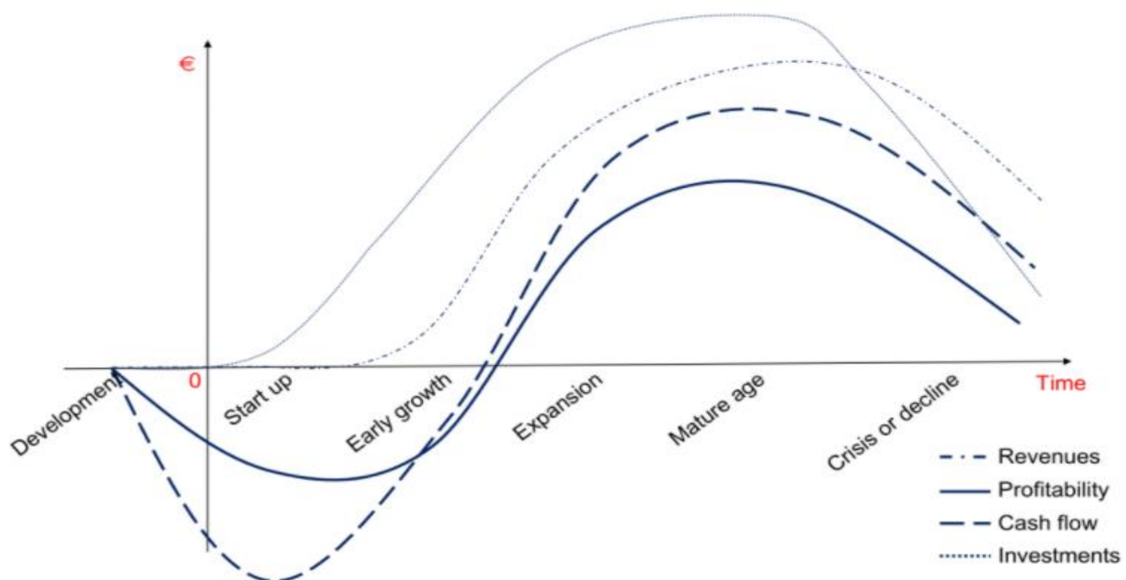
create the strategy and capital needs. Caselli and Negri (2018) divides the stages of the company into six following ones:

1. Development
2. Start-up
3. Early growth
4. Expansion
5. Mature age
6. Crisis and/or decline

The figure below describes what happens with the four drivers – investment, profitability, cash flow, and sales growth – in these six different stages. Through this analysis, the financial needs of a company can be obtained.

During the development stage of a company, the company is solely in the hands of the entrepreneur who is responsible for developing the business features. There are no sales in the company, profitability and cashflows are negative, and the entrepreneur needs to heavily invest in high unavoidable legal and advisory costs tied to starting a business, engineering development, and other costs tied to realization of the business idea. In the next stage, start-up stage, is when the company begins its operations. This stage is similar to the development stage with the difference of other costs related to the acquisition of productive factors, which are higher in this stage causing the cash flows and profitability to fall even deeper. After the initial investments have been completed, follows the next stage of early growth. The firm's needs for working capital decrease as the need for inventory increases. While all four factors start to rise, in this stage profitability and cash flow continue to remain below zero. The stage after early growth, is when all factors climb above zero and reach positive values. Investment needs are similar to what they were in the early growth stage, but sales, cash flow and profitability increase. Once the firm reaches maturity in the next stage, sales growth tends to zero while profitability and cash flows level off. In this stage, investments are spent on inventory, working capital, or both. At this point expenses for replacement of ineffective or unused assets must be considered as well. During this phase, sales, profitability and cash flow fall, and the company needs to decide what investments should be prioritized to position the company on a path towards growth.

Figure 10 - The flows of revenues, profitability, cash flow, and investment in the six stages of a company's life cycle



Source: Caselli and Negri (2018)

The equity investments matched to the stages of the company are, according to Caselli and Negri (2018), as follows:

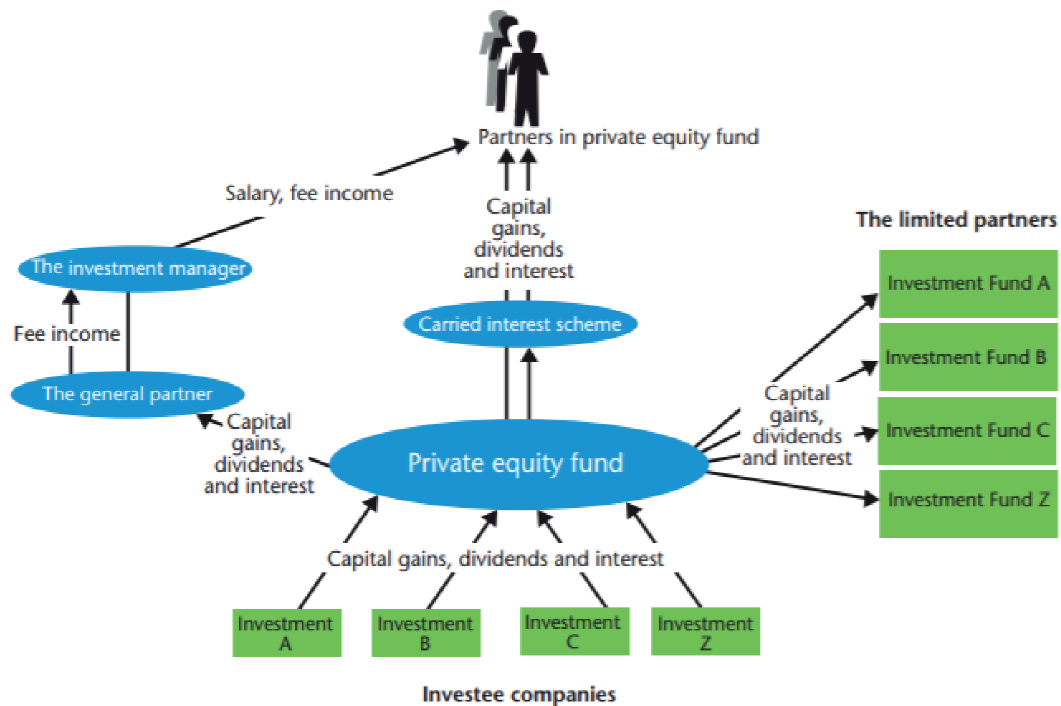
1. Seed financing in development stage
2. Start-up financing in startup
3. Early stage financing in early growth stage
4. Expansion financing in expansion stage
5. Replacement financing in mature age
6. Vulture financing in crisis and/or decline

The first three stages of equity investments are considered venture capital businesses, the latter three are private equity businesses. Every stage is characterized by a risk-return profile which relates to the four drivers – investment, profitability, cash flow, and sales growth. The earlier the stage of the company, the riskier it becomes. Every stage of the life of the company has risk measured as total or partial loss of invested sources, delays in project implementation, lower profits and an expected return usually measured as the internal rate of return (IRR).

2.2 Structure of Private equity funds

The private equity fund exists in a certain universe with multiple key stakeholders and established professional relationships between them, including pre-determined capital inflows and outflows between them.

Figure 11 - Structure of a typical private equity fund



Source: Gilligan and Wright (2014)

Private equity firms can invest through open or close ended funds, or even through a less traditional investment-by-investment basis. The funds that are a focus of this diploma thesis and the also most common are close ended funds. These funds are set for a certain number of years, typically ten years. The private equity firm begins the process by approaching investors and pitching them the strategy of the fund. Investors then go through due diligence phase until they decide on whether they will invest capital or not.

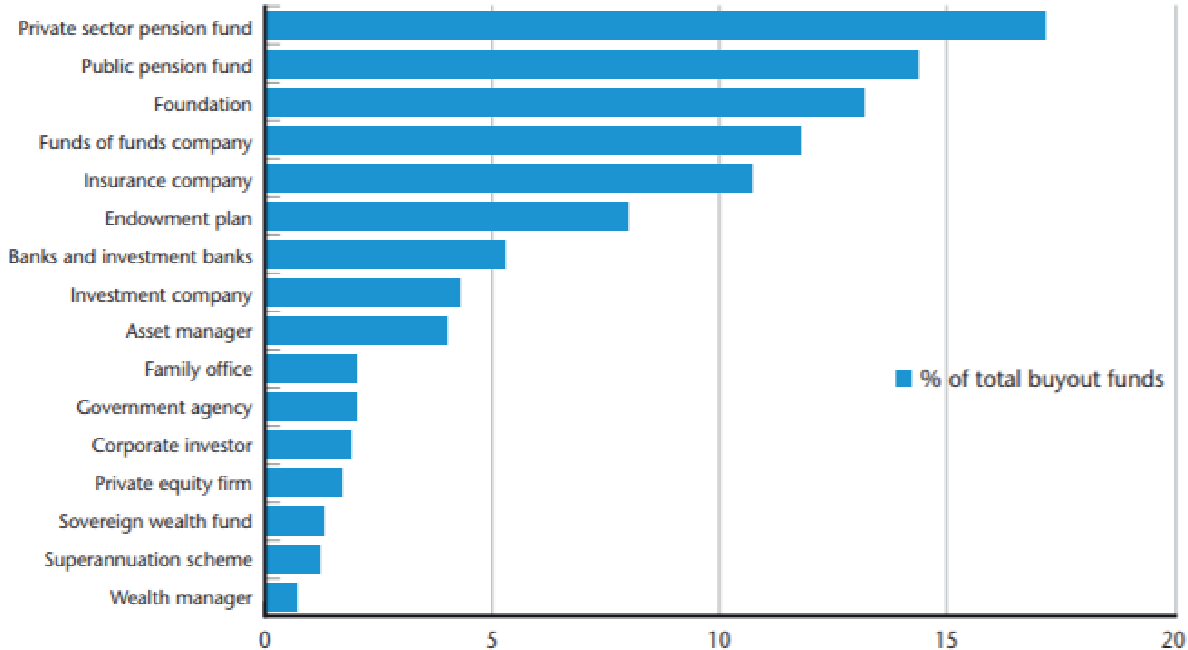
Once the fund is launched, the General Partner (PE firm) takes on responsibility for managing the funds and identifying investments, and within its forespoken strategy which had been communicated to the Limited Partners. Limited Partners are investors, who contribute their capital to PE funds, but do not have discretion over the choice of investments the General Partner makes. Any deviation from the strategy can cause misalignment between and General and Limited Partners and can create trust issues. Alignment between the General and Limited Partner is particularly important as Limited Partners will be reluctant to commit capital towards a General Partner is not credible.

The traditional private equity fund can be thought of as a financial intermediary that invests the capital of its owners, who are the Limited Partners, into discretionary selected company and distributes recovered capital together with income once a profit is realized in the form of interest, dividends and capital gains. Therefore, the external investors who provide capital are called Limited Partners (LPs) because their total liability is limited to the amount they invest. The manager is called the General Partner (GP) and has unlimited liability for the actions of the fund. (Gilligan, Wright, 2014) Caselli and Negri (2018) also describe the responsibilities of the General Partner, which include organizing the fundraising and managing the funds raised, and reimbursement of quotas to the subscribers at the expiry of the fund. The Limited Partnership vehicle presents two clearly defined categories of shareholders, the Limited Partners and General Partner. The interest cannot be transferred as it is limited by contract and the limitations of owning interest in private companies also make it difficult to sell to other investors. According to James Shell et. al (2006), the vast majority of private equity funds use

the limited partnership form of organization for the fund as fiscal transparency is an essential structural feature. The limited partnerships were originally established as a binding contract between investors who would avoid duplicating tax charges such as corporation tax liability as well as would have had to be solvently liquidated at the end of the investment period. Traditionally within each fund, General Partner commits a small amount of capital, typically 1-3% of the total capital contributions, and Limited Partners provide the remaining 97-99% of the total capital contributions. The General Partner contribution is important from a legal standpoint to ensure that the fund is considered a partnership, and also from an alignment standpoint as the higher the General Partner commits as a percentage of their net worth the more confidence the general partner shows in his ability to return capital.

Caselli and Negri (2018) note that almost all partnerships allow a single partner to close the partnership in case of a death or withdrawal of the general partners and/or in case of fund bankruptcy. The Limited Partners generally include some private terms on the legal agreement that allow them to dissolve the partnership and replace the General Partner if they are found damaging the fund. This clause is applicable if the Limited Partners own more than 50% of the fund.

Figure 12 - Investors in private equity



Source: Preqin (2014)

As per the data shown in the figure from Preqin, private and public sector pension funds are the largest investors in private equity funds. The limited partners pay a management fee, typically 1.5% - 2%, to the general partner based on the amount of capital commited up to the end of the investment period. This fee may be lower in the investment period, as less work is required by the general partner once capital is deployed.

2.2.1 How is private equity performance measured

Information about private equity performance is not publicly listed unlike public equity. It is typically only available to its investors or potential investors who need to sign an NDA (Non-Disclosure Agreement) before private equity firms disclose their current and previous performance. However, increasingly with the rise of digitization, services and domains that

look at private equity performance have started to become available to a wider audience. Some of these include Pitchbook or Preqin that aggregate information for alternative asset classes for investment professionals. However, as private equity is not regulated in a sense that public equity is, from experience, these data platforms are not always 100% accurate.

Private equity value creation is more than just looking at typical value return measurements. However, these are still quite significant in illustrating performance. According to KPMG report (2016), the two more typical private equity return measures are captured by internal rate of return (IRR) and cash multiple. Internal rate of return solves for the discount rate that make the net present value (NPV) of cashflows equal to zero. Therefore, IRR is sensitive to timing and favors early cashflows, meaning that investments which are held for longer might have lower IRR despite generating the same multiple on invested cash as they would if the investment was sold off earlier.

This fundamental model only shows half of reality, as it is unable to show what would have the company had achieved anyway through favorable industry tailwinds or other factors and what can be attributed to the private equity firm as value which it created. The model is accurate because it is mathematically true, however, it needs to be interpreted with additional qualitative data to understand the full picture. This model fails to reflect two important aspects: It does not take into account how much debt contributes to private equity returns. Secondly, it fails to measure if a company has been run more efficiently than its peer companies because it only looks at operating performance in absolute terms. John Gilligan, the co-author of Private Equity Demystified raises a point about debt affecting returns: . "Regardless of the amount of debt that gets repaid," he says, "there are good reasons to think that higher debt levels will increase a company's value anyway, by improving the level of cash generation." With this, he invokes a concept sometimes known as the "discipline of debt." Hence why, if the return from the investment has come from a general increase in company‘s profits, good market timing or financial engineering, then the result cannot be attributed to value creation by private equity firm. IRR and cash multiple are the most frequently used metrics by private equity firm to report the performance to LPs. Another work by Phalippou and Gottschalg (2007) draws attention towards the wrongly reported IRR and the fact that Internal Rate of Return implicitly assumes that cash proceeds have been reinvested at the IRR over the entire investment period. But in reality what happens is that investors are unlikely to fund such an investment opportunity every time when cash is distributed. Their study of IRR in private equity found that when using modified internal rate of return (m-IRR), that is similar to the regular IRR, but does not assume reinvestments at the IRR, highlighted a fixed rate of return for investing and borrowing, the m-IRRs while significantly lower, were also more accurate. Gottschalg and Phalippou (2007) provide an example of a private equity fund in their sample that had an impressive 464% IRR per year but when the modified IRR measure was applied and specified 12% per annum for borrowing and investing, the fund IRR came out to 31%, being significantly smaller than 464% and certainly a better representation of the fund's real return. Gottschalg and Phallipou (2007) also found that when applying net-of-fees, internal rate of return (net IRR), the results were much more in line with reality. The Institutional Limited Partners Association (ILPA) exists to advance private equity investors' interests. It has more than 300 members globally, who represent more than US$1 trillion in private equity investments — a substantial proportion of the market. The ILPA in 2011 issued a document Quarterly Reporting Standards Best Practices reflecting the preferred reporting, which was IRR and cash multiple. Therefore, the only real way to evaluate companies by using IRR and cash multiple is to benchmark them against other companies in the same vintage, using data collection platforms such as Preqin or Cambridge Associates.

Gompers, Kaplan and Mukharlyamov (2015) conducted a research across private equity firms to find that in order to evaluate investments, few of the private equity firms chose the financial tools that are widely taught at business schools such as discounted cash flow valuation methods or net present value techniques and instead rather relied on internal rates of return and multiples of invested capital. The research showed that limited partners in all of these private equity firms also preferred internal rate of return and multiple on invested capital (MOIC) over other valuation methods. Despite the bad reputation it receives and skeptical views on how accurate it is, this is a common theme that was found in many studies by private equity experts.

What is believed to be a better way to measure value creation in private equity is already in the academic publications. It starts from economics, not accounting, and breaks down the profit on a buyout into three main factors: the return on a stock market comparable, the impact of high debt, and a residual that may include the effect of running the company better relative to peers. Even though not everyone in private equity has an incentive to use this more meaningful approach investors and policy makers should take an interest in this.

Public market equivalent (PME) is another measure of private equity performance. Public market equivalent compares the returns of private investment to a public market benchmark. For example, it will compare the IRRs of the respective private equity firm to a comparable public market equivalent such as S&P500, MSCI World Technology Index or others, depending on what the private equity firm specializes at. According to SEC (2020), there are several variants on how to put together a public market equivalent analysis:

1. Long-Nickels index comparison method is considered to be the first of the PME approaches. In this approach, each capital contribution and distribution of the private equity investment is matched by an equal and timely investment and sale for the reference benchmark, respectively. Essentially, it compares a fund's IRR with a theoretical benchmark's IRR which mirror the cashflows of the fund with the index NAV at the end of a period being the future value of the index investment less cashflows. The resulting PME IRR provides a basis for appraisal against the investment's actual IRR. Private equity outperformance occurs if the estimated PME IRR is less than the Private equity fund IRR. Although this method is easy to understand, it does not liquidate as the private equity investment does. A strong outperformance or underperformance results in the reference portfolio carrying a large long or short position in later years. Also, as the investment approaches maturity, large swings in the benchmark may have no effect on the unrealized investments, while these swings may have a big effect on the residual value of the reference portfolio. These issues are corrected in the PME+ method introduced by Rouvinez and Capital Dynamics, according to Ramani (2014)[7]
2. Capital Dynamics PME+ addresses a shortfall of Long-Nickels PME which can result in a negative index NAV if there are substantial early cashflows in the private investment comparison by applying a constant scaling factor to ensure the index FV is equal to the private investment FV. Private equity outperformance occurs if estimated PME IRR is less than Private equity fund IRR, which is in line with the Long-Nickels method. One issue of this method is the effect of the fixed scaling factor on the calculated IRR, as IRR is very sensitive to early distributions as IRR tends to be higher for investments that have short-term hold periods, despite the cash multiple being the same. A down-scaling or up-scaling of distributions due to outperformance or underperformance has an inflating effect on the calculated IRR. PME+ cannot be replicated as it is not an investable methodology.

[7] https://blogs.cfainstitute.org/investor/2014/07/23/evaluating-private-equity-performance-pme-vs-direct-alpha/

3. Kaplan-Schoar is a method developed by PME compounds a private investment cashflow (both capital calls and distributions) based on a public market index performance. The fund's actual NAV + compounded distributions is then divided by the compounded capital calls to produce a simple ratio. This method's results are easy to interpret. Private equity outperformance occurs if the ratio is greater than 1, indicating the private investment outperforms the public index. The limitation of this methodology is that it ignores the timings of cash flows.
4. Direct Alpha is a new technique by authors Grendil, Griffiths and Stucke (2014). It is considered to represent the manager's skill and quantifies out/underperformance by calculating the IRR of the compounded cash flows plus fund NAV, rather than a multiple of performance. The main attraction of this method is that it actually formalizes the calculation of the exact alpha to a chosen reference benchmark by which it eliminates most of the issues and limitations that the other methodologies might have.
5. mPME method was developed by Cambridge Associates, one of the largest asset managers who among other asset classes invest in private equity. It is analogous to PME+ technique and uses a scaling factor but the scaling factor is dynamic rather than static.

It is important to note that the internal rate of return and cash multiple versus public market equivalent analysis can deliver very different results as there are differences between them. Absolute return measures, such as the internal rate of return or multiple of invest capital are no guarantee of future performance, but funds that have an above-average alpha, meaning they have better performance than other private equity firms that they are benchmarked against, generally tend to continue to produce above-average alpha with the next fund in their series. (DuPonte, 2016) The best approach would be to use a benchmarked internal rate of return and cash multiple as well as public market equivalent analysis to get a holistic picture. Moreover, public market outperformance is one of the primary benefits of why investors choose to invest in private equity.

2.3 Value cretion in Private Equity

The increase in volume of opportunities for institutional investors in private equity is correlated to the maturation of private equity. Increasing emphasis on value creation in holding period comes from investors who differentiate between the quality of General Partners based on the value creation they provide to portfolio companies to enhance the returns.

2.3.1 Team capabilities

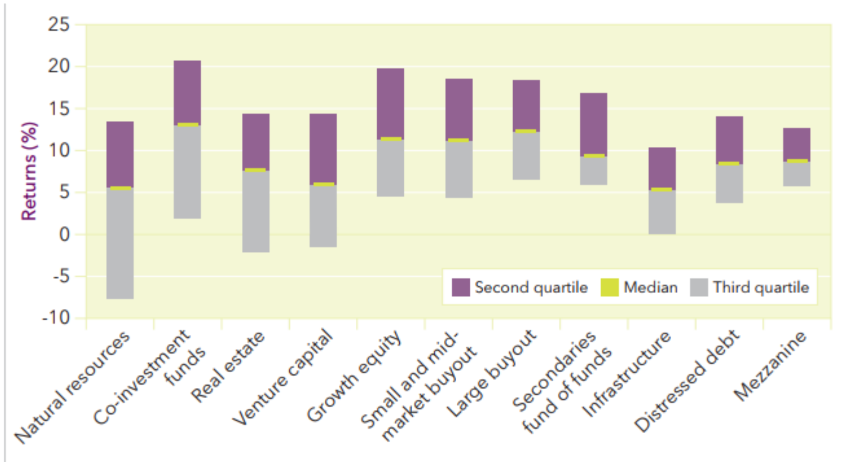
Private equity firms typically excel at putting strong, highly motivated executive teams together. This is important as they are responsible for returning capital to their investors who pay significant premiums. If they don't succeed, it is unlikely they would stay in business much longer after that.

Due to the intense pressure of delivery superior gains private equity firms spend significant time on putting together high quality teams and involving internal and external human and technological resources to meet their investing objectives, including different functional experts that will support that team and provide deep expertise in all stages of private equity investing.

Success of all private equity firms starts with sourcing opportunities. This is a demanding effort and a good quality team needs to be in place that focuses on building relationships in the industry, establishing a good reputation for the private equity firm and sourcing opportunities. The inflow from sourcing opportunities thereafter needs a team that will pick out

the exceptional ones that will deliver high premiums for its investors. It is more important in private equity than other asset classes to select a high quality firm as the dispersion of returns at the fund level is significant. To mitigate the risk, private equity firms need to be well staffed with investors and functional experts who possess deep expertise and long experience in their areas of focus. An experienced investment committee which consist of the longest-tenured members of the firm, who have the deepest knowledge of the industry and who are in position to provide governance over the selection of investments is a part of many institutionalized private equity firm.

Figure 13 - Dispersion of returns by strategy, 1979-2011 vintage years



Source: Hamilton Lane Fund Investment Database (as of 31 December 2015)

As illiquidity of private equity assets is one of the biggest risks associated with it, the holding period hence becomes an important part for value creation and therefore it is essential to have a well-staffed team who can attend to portfolio companies and experts to guide them towards enhanced value creation. Increasingly, private equity firms have started to build in-house operations team that engage with portfolio companies at all stages of investment, and provide deep expertise and guidance. A survey by DuPonte (2016) found that the number one criteria for investing in US middle-market funds is that funds focused on operating improvements are heavily staffed with professionals with operating backgrounds. However, having an operating team is expensive and takes away from the compensation received by the investment team. Another way is having a stable group of advisors consisting of external established C-suite level professionals and entrepreneurs, who, although not full time employees of the firm, have successfully worked more than once with the private equity firm on assignments. These are typically employed directly by the portfolio companies. This is justified by the literature works in private equity as Kaplan and Strömberg (2009) who have acknowledged in their research that private equity firms often hire specialists from outside the firm by using their network of contacts in various industries, whose expertise can be leveraged to benefit the transactions. Aigner et al (2008) also notes that private equity funds are often specialized within their organization. An example of this can be Francisco Partners private equity firm, that has partners who focus on different subsectors of software which the firm invests in such as healthcare, financial technology, consumer, etc.

The more diverse the background of skills is within the private equity area of focus, the better chance it has to succeed especially during times of economic downturns when increased governance becomes a key requirement. It is also important that General Partner communicates with Limited Partners regarding the performance of the portfolio companies. This communication is usually done through annual meetings and quarterly reporting.

2.3.2 How is value created

So, what really happens behind the scenes in the time period between acquiring a business and selling it? The only information that is visible to the public eye is when a private equity acquires a business and when it sells it. However, what happens in between is a mystery that not even the Limited Partners have full access to.

Private equity firms are well rewarded for what they do through an attractive fee structure and while some sources argue that private equity firms are overcharging investors, some continue to suggest that these high rewards that are collected through fees are essential to incentivize value creation in portfolio companies to generate high returns for investors thereafter. First and foremost, it is important to note that many private equity firms have different strategies in order to create value and there are few sources available that uncover the value creation techniques in detail given the exclusiveness of the asset class.

Gompers, Kaplan and Mukharlyamov (2015) conducted a survey of private equity funds, and by exploring related strategies, clustered the value creation techniques into three types of value increasing actions – financial engineering, governance engineering, and operational engineering. These actions are not mutually exclusive and private equity firms can use any combination of the three as they see fit.

Financial engineering used to be prevalent in the early times of private equity dating back to 1980s. It earned a bad reputation as in this strategy, private equity investors strongly incentivize management team of their portfolio company and at the same time put pressure on managers through putting debt on company's balance sheet to not waste any money. Financial engineering is also viewed badly among Limited Partners, as it does not help the portfolio businesses in ways that would put them on a path towards sustainable growth and the private equity firm invest solely with the intention of generating profit for themselves, misaligning interests between the firm and the business owners.

Another way private equity firm can create value is through governance engineering, which essentially means having a seat on the boards of their portfolio companies and being actively involved in governance. This was particularly used recently during the COVID-19 pandemic outbreak, when a lot of portfolio companies needed guidance and expert advice to get through the uncertainty in terms of having sufficient liquidity on balance sheet, implementing safety procedures at work place and often times accelerating the digitization of the businesses, which are activities that private equity firms assisted with through governance.

Operational engineering as a value creation technique has been gaining popularity. In this technique private equity bring value to its portfolio companies through industry and operating expertise. Gompers, Kaplan and Mikharlyamov (2015) looked to explore the correlation between value creation strategy and background of the private equity firm founder. The results showed that private equity firms founded by financial general partners are more likely to choose financial engineering as their value creation strategy and make no changes to the current management team in the portfolio companies. Opposed to that, private equity firms' founders, who have prior private equity experience appear to be more strongly engaged in operational engineering. They are more likely to invest in the attractive business models with the attention of adding value post-investment. Some of the most common value creation techniques for them include looking for operational improvements, changing the CEO or management team after the deal, and reducing costs. Lastly, private equity firms founded by general partners with operational backgrounds tend to have investment strategies that fall in between these two groups.

Private equity funds follow various value-creation strategies to improve the operations and profitability of their portfolio companies. According to Caselli and Negri (2018), the managerial involvement, or in other words the financial institution's contribution to the growth of the firm, can be either "Hands-On" or "Hands-Off". If the private equity firm in addition to the capital provided adopts a Hands-On approach, it commits to providing tangible support to the company's management team and operations. Oftentimes, it demands getting involved in day-to-day activities of the company and to provide additional support in all aspects of the business. As per Gompers, Kaplan and Mukharlyamov (2015), the common sources of value added in portfolio companies, in order of importance are increasing revenue, improvement incentives, strong governance, high value exit or sale, additional acquisitions, management replacement and costs reduction. It is common to commit meaningful internal or external resources to add value when required.

The EBDR Impact Brief (2019) studied the different value creation strategies and compiled the following most common value creation efforts followed by private equity funds: (1) optimizing capital structure and introducing financial incentives to senior management; (2) upgrading physical assets, reducing costs or improving information technology (IT) systems and logistics; (3) renegotiating terms with customers and suppliers; (4) pursuing mergers and acquisitions, changing product offering or pricing, or investing in marketing; and (5) replacing the CEO of a portfolio company. The study groups this information under five categories, which reflect the main value creation strategies followed by PE funds: financial engineering; operational engineering; cash management; top-line growth; and management and governance. This is an extension of the three value creation strategies that Gompers, Kaplan and Mukharlyamov proposed in 2015. EBDR (2019) also noted that in operational engineering, private equity funds actively engage in upgrading and investing in physical assets, cutting costs and improving IT systems or distribution and logistics at portfolio companies. This is the most popular value-creation strategy pursued by private equity funds with around 80 per cent of all deals initiated over the past three decades having involved one or more of these plans. All types of deal EBDR (2019) analysed – from early-stage to buyout – engaged in operational improvements.

Private equity funds create value by acquiring companies, holding them for a certain time-period and selling them at an increased valuation. According to Jensen (1993) during the beginning stages of private equity, the initial value creation drivers took advantage of tax reductions through the application of high debt levels to acquire portfolio companies. The value was created through a technique called financial engineering that relied on tax reductions provided by increased interest payments for the debt, and reduction of the agency problem prevalent in mature industries. After that followed operational engineering in the mid-1990s. According to research by Arundale (2010), this technique essentially implemented changes in portfolio companies in areas such as operational efficiencies and productivity to drive value for investors. According to Lieber (2004), another way to drive value for investors was through strategic changes by making changes in core business activities, and also by buying add-on companies via mergers and acquisitions. Most private equity firms today, focus on operational changes and add-on acquisitions. Majority of the successful private equity firms have a full-time operations team that engages with portfolio companies from the initial due diligence phase to all the way through the exit stage. Every limited partner should evaluate the drivers behind private equity value creation before committing capital to private equity firms.

In simplistic terms, the value created by the private equity firm during the holding period, can be calculated by taking the equity value of the firm at exit and subtracting the equity value at entry from it. Equity value represents the combined value of all outstanding shares, assets, short- and long-term investments minus all short- and long-term debt and minority interests.

In order to examine value creation in more detail, Grabowski, Harrington, and Nunes (2016) break down value creation into different segments in their research. According to this research, the conventional framework analyses transaction data to isolate three main drivers of value creation: change in operating cash flow at entry and exit, change in the valuation multiple applied to operating cash flows at entry and exit, and the net cash flow generated for shareholders during the holding period. The change in operating cash flows and change in the valuation multiple applied to operating cash flows are calculated from the change in company's enterprise value (EV) during the holding period which can be measured by the change in EBITDA (earnings before interest, taxes, depreciation and amortization) and a company's EBITDA multiple. The net cash flow generated for shareholders can be measured by the change in a company's net debt position over the course of the holding period. The relationship between them is summed up in the exhibit below:

Figure 14 - Value creation framework

Source: Grabowski, Harrington, and Nunes (2016)

As seen in the exhibit, value creation can come in terms of EBITDA, multiple, and net debt impact. The changes can result from number of intrinsic and extrinsic drivers that are not captured by the framework and due to these reasons, this valuation model can be misleading. EBITDA impact represents the value creation which come from the changes in operating performance during the holding period. This model does not provide a holistic picture of what parts of value creation can be attributed to the private equity firm. The impact generated from this model is misleading as it represents the company performance changes but does not take operating improvements in the industry as a whole into consideration. Additional limitations are that there is a lack of insight into the sources of changing operating performance, therefore it can result in this measurement overstating the operating improvements as it does not take into account organic and inorganic (through add-on acquisitions) growth.

Multiple impact is the change in the price paid per unit of operating cash flows at entry and at exit. This multiple is consistent with the private equity valuation of businesses on a comparable multiple basis as opposed to the DCF (discounted cash flow) analysis used in the context of acquisitions by strategic investors, academic finance, and public market. The limitation here is that it does not take into account changes in market cycles, industry performance or company-specific changes such as differentiating between organic and inorganic growth.

Lastly, the research by Grabowski, Harrington, and Nunes (2016) describes the net debt impact, that represents the free cash flow generated for shareholders during the holding period. Stable cash flow is generally produced by healthy businesses. The cash can be used to pay debt, pay out dividends to shareholders, or it can be kept on the balance sheet of the company. This is particularly important for leveraged buyouts, where cash flows from operations are used for

repayment of debt financing. The limitation of this measurement is that it does not take the direct impact of financial leverage on the returns on investment to investors into account.

During the holding period, private equity firms typically have a value creation playbook which, when applied to companies, improves them from the inside out by eventually creating value for investors. In their research, Kaplan and Strömberg (2009) point out that while private equity firms implement their value creation plans during the holding period, they also continue to monitor the company and track key performance indicators that enable them to make changes to the plans as needed. Private equity firms follow various value-creation strategies to improve the operations and profitability of their portfolio companies. This is apparent in Kaplan and Strömberg's (2009) research, which shows that in order to enhance returns, private equity firms use their industry expertise and operational know-how to source attractive deals, to develop value creation plans for each one of them, and through their implementation realize value for investors.

Value creation plans focus on operational changes at portfolio companies including areas such as cost-cutting and productivity improvements, strategic changes or repositioning, and management changes. The plan can include all of these initiatives, only some combination of them or also none of these mentioned as private equity firms can implement operational changes as they see fit. As private equity firms have different companies in their portfolios each time, the value creation process needs to be tailored precisely for each company individually. Having a value creation playbook with processes that can oftentimes be re-implemented is helpful. Frequently, private equity firms also focus on inorganic growth of portfolio companies through add-on acquisitions. PwC study (2019) surveyed 100 private equity firms regarding the value creation and uncovered that cost-cutting is no longer enough to drive return in today's all-time-high private equity investment capacity.

In the research by Biesinger, Bircan and Ljungqvist (2020), five main value creation areas were identified, including financial engineering, operational engineering, cash management, top-line growth, and management and governance. They found that some of the actions that private equity firms take on in operational engineering include upgrading and investing in physical assets, cutting costs and improving IT systems and distribution and logistics at portfolio companies. Another strategy that is widely popular among private equity funds is top-line growth, which is focused on increasing revenues or sales. Private equity funds target boosting top-line growth through actions such as pushing the mix of products and services offered by the portfolio companies towards higher-margin products, investing in marketing and sales teams, improving pricing and quality, or pursuing mergers and acquisitions. International expansion can also a be a part of the process, however, it is only undertaken by private equity firms that have a particular expertise in that area as this is a complicated process.

In their research, financial engineering was described as actions that make changes to management and governance through the use of debt. Debt is used to increase financial discipline in portfolio companies and to increase incentives as the portfolio company managers' performance is closely tracked by private equity firms. This can also be tied to companies' top-line growth or profitability by incentivization. Different to stock market investors, private equity investors acquire a significant equity stake that comes with rights to recommend directors and also assign operating partners. This leads to private equity investors engaging in a more hands-on approach when managing their investments. In the deals analysed by Biesinger et. al (2020), private equity funds were able to pursue all five value creation strategies in more deals when they had greater ownership of their portfolio companies.

Value creation plans vary based on deal type, fund ownership, growth strategy, and geographic focus. In their research on value creation in private equity, Biesinger, Bircan and Ljungquvist

(2020) found that private equity firms formulate plans that are more hands-on in buyouts than in early-stage deals or turnarounds, when they have majority ownership of the company, inorganic growth strategies, or manage a regional rather than country-focused fund.

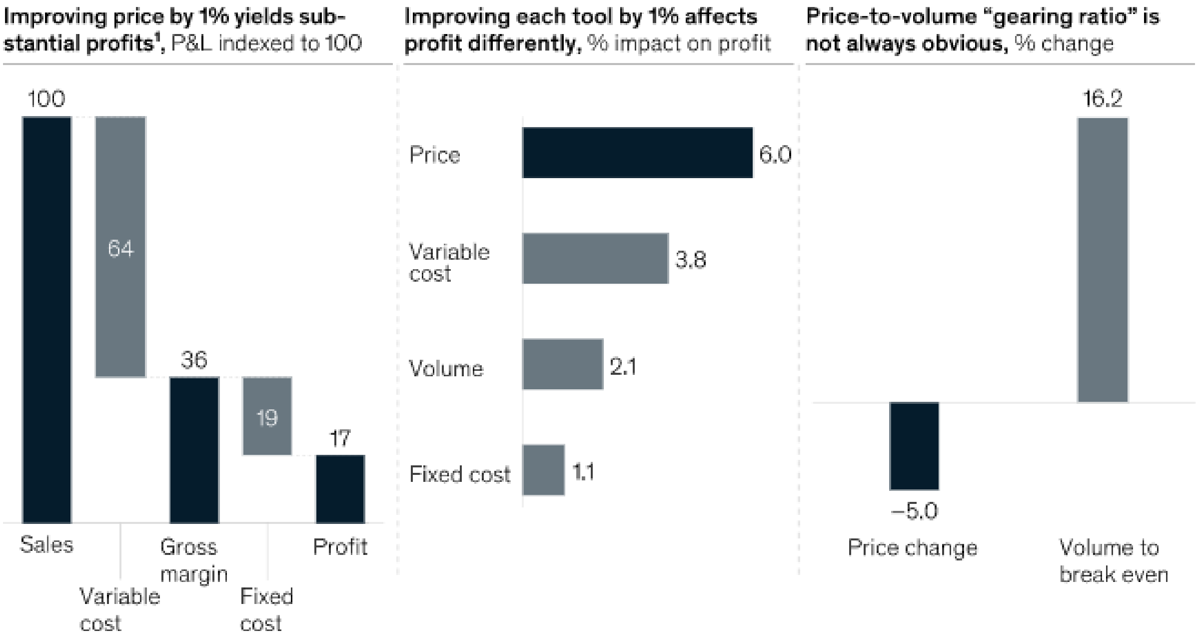
Strategies of value creation plans differ considerably across deal types. In the same research, Biesinger, Bircan and Ljungquvist (2020) found that operational improvements are popular in all deal types, while the popularity of top-line growth, governance engineering, and financial engineering varies significantly across strategies. The use of top-line growth, which refers to growth of sales or revenue, and governance engineering strategies increases in line with the maturity of deals. This translates to 56% of early-stage, 77% of growth, and 88% of the buyout deals adopting plans that target boosting top-line growth versus 39% of early-stage, 47% of growth, and 62% of the buyout deals focus their strategies on governance engineering. Out of all deals types, buyouts have the largest engagement rate on financial engineering strategies given that as much as 54% of buyout deals tends to focus on this strategy. Secondaries, which are existing commitments from Limited Partners who are looking to exit the primary private equity funds before they are liquidated, look similar to buyouts on most dimensions. However, the focus on financial engineering is not as dominant, and it is only present in 32% of all deals suggesting falling marginal returns to optimize capital structure and incentivize systems as buyout targets are sold on to the next private equity owner. Turnaround deals are the least focused on top-line growth at only 53% and plan on governance engineering as seldom as early-stage deals do which equals to 41%. Turnaround deals most largely focus on financial engineering strategies since as many as 59% of all deals pursue this path. Cash management in the portfolio companies does not vary significantly in popularity across deal types. Action items included in private equity firm's plans depends on the type of deal. Buyouts most frequently focus on optimizing capital structure, add-on acquisitions, changing the product or service mix, and replacing senior or middle management. Opposed to that, early-stage and growth deals implement strategies that focus primarily on capital expenditures. Other action items are pursued more opportunistically.

A survey of 79 PE firms by Gompers, Kaplan, and Mukharlyamov (2016) found that private equity funds focus their value creation activities on increasing growth rather than reducing costs. This research finding is supported by findings of Kaplan and Strömberg (2009), who categorize different value creation actions that private equity firms take on in their portfolio companies under financial, governance, and operational engineering techniques. Most recently, a survey of institutional venture capital investors by Gompers et al. (2020) showed that while deal sourcing, deal selection, and post-investment value-added are all believed to contribute to value creation, venture capital investors view deal selection as the most important driver of returns. This finding can partially be applied to private equity firms as well since deal sourcing has utmost importance in the investment process, with the difference that venture capital is considered to be a riskier asset class.

A McKinsey study (2020) found that pricing is by far the biggest tool for earnings improvement in private equity. It finds other commercial improvements such as customer and product mix or sales volume growth as factors that can also accelerate the value creation for both the portfolio company and the private equity owner. Nevertheless, when pricing in portfolio company is addressed, the margin expansion is between three to seven percent within one year. Pricing strategy might be one of the easiest strategies to implement, however, determining the appropriate pricing levels is incredibly important and if this is done incorrectly, it can have the opposite effect and can create significant issues for the company. According to McKinsey (2020), for a typical midsize US company, a one percent improvement in pricing raises profits by six percent on an average as seen in the chart below. To put this in perspective, a one percent reduction in variable costs yields an increase in profits of 3.8 percent and one percent reduction

in fixed costs yields an increase in profits of 1.1. percent. The McKinsey research on pricing sensitivity in public companies is summarized in the figure below, showing the effects.

Figure 15 - Economic sensitivity analysis for 1,000 midsize US public companies



Source: McKinsey report (2020)

Note: Midsize refers to companies of between $100 million and $1 billion in enterprise value.

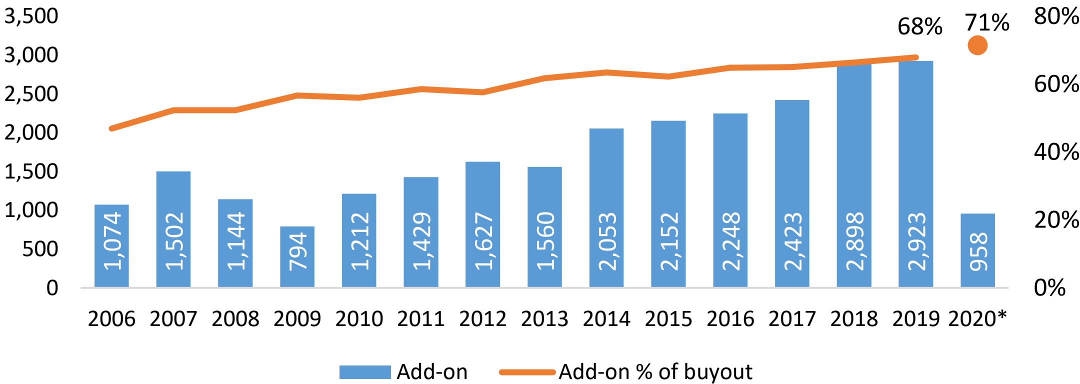
McKinsey (2020) continues to explain that pricing is attractive not only for the quick increase in margin expansion but pricing has an outsize impact on valuations given that the EBITDA multiple view that investors apply, any improvement from pricing flows almost entirely to the bottom line, net of any volume changes or investments made in tools and resources.

To conclude, it is important for each private equity firm to set some guidelines for the value creation process that should be aligned with its firm's mission. The process should also be aligned with their expertise that it has among its investment professionals and other resources such as an operating team or a talent team. It is helpful for investors to review value creation playbooks, if private equity firms have any. These playbooks should include techniques and resources that private equity firms will follow to create value within its portfolio companies. The value creation process of each private equity firm should be differentiated if they want to attract investors and aim for higher returns than their peers. Whether the value creation occurred through multiples expansion or if it was due to the result of true operational improvements rather than serendipitous market timing is for potential investors an important question to ask. De Ponte (2010) found that, especially in core private equity strategies such as buyouts, growth capital and venture capital, the best managers are the ultimate activist investors. Investment success comes not simply from deciding what company to invest in and at what price, but from serving on the company's board of directors. Managers take an active role in deciding company strategy, reviewing operations to make them more efficient, and firing and hiring company management when necessary.

Inorganic growth

Pursuing inorganic growth for portfolio companies through add-on acquisitions has been a popular value creation strategy in private equity and equally important one as well. Combining businesses and realizing value from synergies can enhance revenue and growth of portfolio companies significantly. On the graph below we can see that the number of add-on acquisitions in private equity has been steadily increasing. However, first half of 2020 experienced a slower start due to volatility in the markets and uncertainty created by COVID-19 pandemic. As managers are sitting on dry powder, which in private equity refers to the amount of uninvested capital firms have on hand, it is likely that more add-on acquisitions will be transacted in the second half of 2020 but whether it will be on pace for 2019 value remains uncertain.

Figure 16 - Add-on acquisitions volume



Source: Pitchbook (2020)

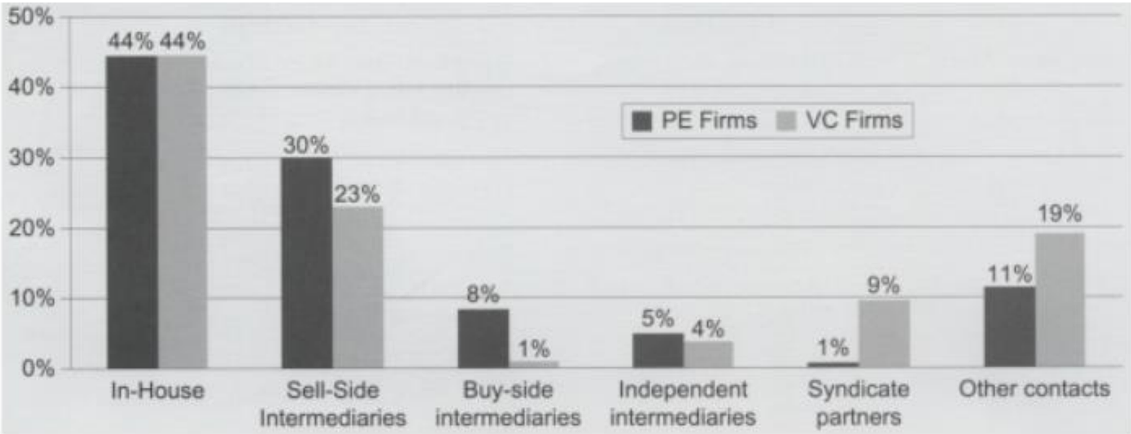
2.3.3 Deal sourcing

The primary goal in private equity is to get access to transactions that will generate profit for investors. It is so important, that many private equity firms have a separate team of one or more members that are responsible for this effort given that the process of sourcing transactions is an important component of the processes in a private equity fund. According to a report by PEHub (2018), an increased emphasis on deal origination is a core competency among private equity, and also one that differentiates the successful ones from less successful firms. Gilligan and Wright (2014) explain that significant amount of effort and resource is invested in prospecting for transactions and management of relationships with individuals who may provide access to deals. These can include intermediaries such as investment bankers, accountants, other advisers and senior figures in industry. Oftentimes, special team including professionals focusing on business development for deal sourcing is established. In many firms this effort is taken up by the junior team who are responsible for direct outreach, supplemented by relationships of the senior team.

Deal sourcing process is an extensive effort in private equity firms, and it is an essential function that well performing funds consist of. Generally, the better deals the private equity firms can source, the less complications they should encounter in the holding phase. For every deal a private equity firm closes, it proactively screens dozens and dozens of potential targets. According to research by Teten and Farmer (2010), the average private equity firm evaluates 80 opportunities before investing in a single one. The deal sourcing efforts in more institutionalized firms are managed in large databases of potential targets that come in

proprietarily or through an intermediary. The most effective firms build, maintain, and optimize a dedicated outbound sourcing program. Once the potential targets are identified, the private equity firms move onto the evaluation phase, which is a demanding process, which primarily involves the associates in the firm who perform financial modeling on each company and present the results to the senior team. Closing a deal requires, on average 20 meetings with management, four negotiations, three due diligence reviews, and three full-time investment team members that form a deal team. (PEHub, 2018) Deal team refers to the investment professionals who are working on a particularly transaction, and typically includes one partner, one principal and one associate level professional. The research by Teten and Farmer (2010) found that private equity and venture capital funds that employ a proactive deal origination strategy have consistently produced higher returns driven by both quantity of opportunities that come into the pipeline and their amplified relevance to the firm's strategy. The same research showed that person and professional networks together with the reputation of the General Partners and the principals in the firm are the most significant sources of deal origination which yielded the best returns. As shown in the exhibit from the research, Private equity funds heavily use buy side (paid) intermediaries, whereas this is not as common for Venture Capital. On the other hand, sell-side (unpaid) intermediaries are widely used by both. The job of a sell-side investment banker is to create an auction that forces buyers to compete for the company. Despite that, for PE firms, investment banks are by far the most important channel for deal origination as most selling companies with some scale will hire a banker in order to maximize its selling price. (same source) On the other hand, unpaid intermediaries are other investors, professional services providers, strategic corporates, nonprofits or LPs.

Figure 17 - Primary sources of Investments for PE and VC investors



Source: Teten and Farmer (2010)

2.3.4 Exit preparation: Demonstration of value

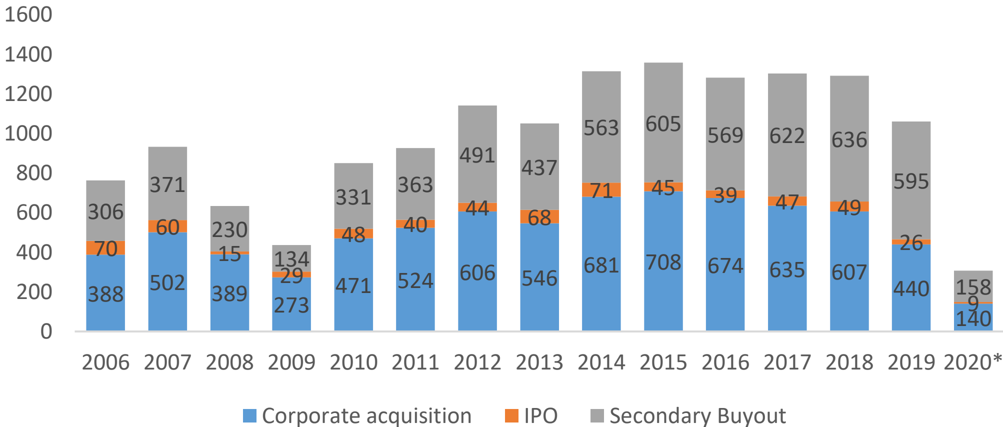
Following the holding period private equity firms start the preparation for exiting the portfolio company and returning capital back to the Limited Partners. This is a critical and oftentimes most difficult step of the investment process because even if the value has been successfully created in the portfolio company, low demand for the asset due to poorly prepared exit can turn out to deliver mediocre returns. Therefore, the ability to exit each portfolio company and harvest the value is an important skill of private equity firms that investors should consider prior to committing capital. The private equity firm should think about possible exit routes for each investment preceding making an investing, especially with minority participation where the team has to avoid any arbitral constraints connected with the financial partner's exit. (Caselli, Negri 2018) One aspect that needs to be taken into consideration is that private equity

operates as a fund of multiple investments, therefore each and every portfolio company exit has an impact on the total returns of the fund. Moreover, exits are not only tied to the external and internal factors of the company and the industry it operates in but also the financial markets.

There are multiple ways to realize returns from exiting the deal. These, according to Folus et. al (2015) include: (1) secondary buyout (sales to another General Partner); (2) sale of the portfolio company to another investor also referred to as trade sale; (3) an initial public offering (IPO), in which the portfolio company is listed on a public stock exchange for the first time; and (4) Dividend recapitalization in which the portfolio company issues new debt to pay stockholders, including the private equity firm itself, as a special dividend. Another analysis of exits is described by Caselli and Negri (2018). In the book, they described five exit strategies, including a strategy that results in a loss: (1) Trade sale, an exit to a corporation or an industrial shareholder, or corporate acquisition; (2) Buy back, an exit strategy when the stakes of the company are sold to already existing shareholders or other people they choose; (3) Sale to other private equity investors, also referred to as sale to financial sponsors; (4) Write off, the devaluation, partial or total, of the participation value as a consequence of the loss of money unrelated to a transfer of property; and (5) IPO.

In a different paper by Schwienbacher (2002), he was looking for a most common exit strategy and found that in Europe as well as in the United States, this strategy turned out to be trade sale, despite IPO being a more profitable route, resulting in a better reputation in terms of exit ability for the manager. That IPOs remain the most profitable and reputable exit route continues to hold true until today, but since 2018, secondary buyouts have been the most commonly used exit strategy. According to a Pitchbook report (2020), IPOs continue to be the most profitable exit route but as they come in short windows, secondary buyouts and corporate acquirers remain the most reliable exit targets. In the United States selling to secondary buyouts over corporate acquirers has returned higher median premium.

Figure 18 - Number of exits by exit type



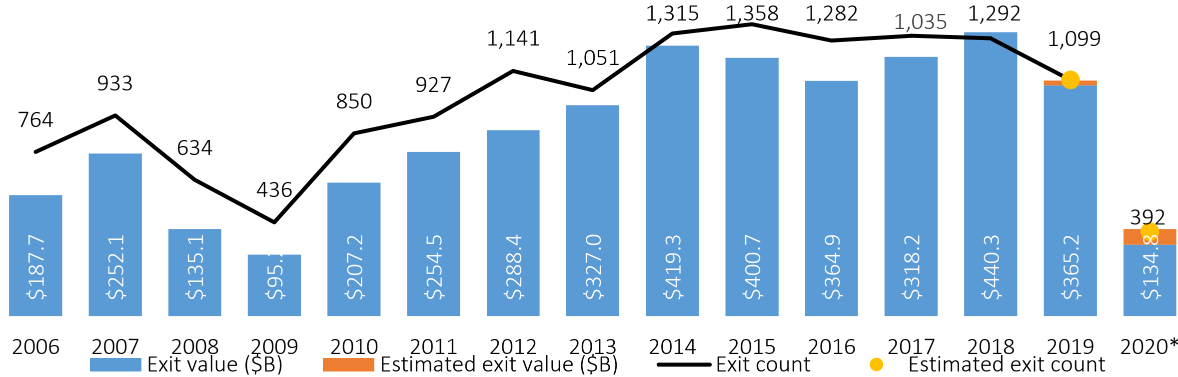
Source: Pitchbook (2020)

Private equity firms engage in numerous exit activities every year. In 2015, private equity in the United States reached an all-time high of 1,358 exits per year. However, data shows that exit activity is highly sensitive to economic conditions that largely determine the market timing of divesting activities. Growing public equity markets facilitate IPOs due to investor appetite for risky securities. For instance, the Great Financial Crisis affected both the number of exit deals and the chosen exit strategies and very few IPOs occurred during this time. The macroeconomic environment had the same effect on divestures since the outbreak of

COVID-19 pandemic. Exit activity in the second quarter was distorted as private equity firms sharply marked down their portfolio companies and decided to hold investments rather than sell. Once public markets rebounded, several companies went public in an IPO process but sales to strategic or other financial sponsors continued to lag. Secondary buyouts have also reached the lowest levels since 2009 while IPO numbers spiked up. However, the exits in the first half of 2020 already suggest that the exit activity won't decrease as low as in 2009.

As per Folus et. al (2015), multiple expansion is closely tied to the exit strategies. Valuation multiples, such as the EBITDA/earnings ratio, are tied to the conditions in market environment as well as company's performance and competitive landscape. He suggests that private equity firms should enhance a company's exit multiple than initially paid by selling in favorable macro-environment and portfolio growth trajectory. This partially explains why the exit activity has slowed down since the outbreak of the Covid-19 pandemic in most industries.

Figure 19 - Exit flow



Source: Pitchbook (2020)

2.3.5 Private equity fund due diligence

Investors who are involved in investing their capital in alternatives can face significant challenges, particularly when it comes to private equity and its secretive nature. It is an asset class with limited information available for public, therefore conducting due diligence can be more difficult compared to other asset classes. However, selection of the right private equity firm can drive superior return, and, on the other hand, a poor selection can result in capital losses.

In order to arrive at a decision on where to allocate capital and what are the right funds to focus on, high quality due diligence needs to be performed. Prior to starting the due diligence process, investors need to determine what are the best indicators of a fund's likely future success. The investors should aim t performing both, macroeconomic analysis of the firm's space as well as bottom-up manager analysis and throughout review of the firm's track record, human capital, and strategy.

According to Preqin (2014), conducted a research among private equity investors to find vital due diligence considerations. The research showed that among the most important traits that a fund manager needs to meet in order to meet its fundraising target are a returning base of Limited Partners, successful performance track record at team level and firm level, experience and expertise with the fund strategy, success raising previous funds and a differentiated fund strategy. However, DuPonte (2016) argues that conducting due diligence on less mature private equity fund's is more challenging than that. He continues to argue that it is essential for investors to carry out qualitative track record analysis not only at the fund level and portfolio

company level, but also at the individual team member level. In more detail, these due diligence areas would include the quality of portfolio companies in the previous funds, the strength and complementary skills of the fund management team while focusing on the competitive landscape in the geographical region and the sector within which the fund is operating, including benchmarking the firm against its competitors, analyzing the deal-sourcing capability and ability to generate proprietary deals, and the ability of the fund manager to add value post investment as well as the ability to exit investments successfully. Laven Partners (2016), additionally pointed out that understanding how portfolio companies are due diligenced and investments approved provides insights into whether a consistent methodology is applied across investment types and sectors, which is important for investors. Through the due diligence process including quantitative and qualitative analysis, investors have a difficult task to discern whether a private equity firm's investment returns are generated simply by being at the right place at the right time or rather by possessing true deal-sourcing capabilities, investment acumen, adding value to portfolio companies, or some combination of these.

2.3.6 Consumer sector in Private equity

While the research available on specialization within private equity has been growing, the overall effect of it still remains unclear which is largely affected by the confidentiality setting in private equity and reluctancy of private equity funds to make information available to outsiders. As the competition in private equity is increasing and the deal sourcing process is becoming more and more competitive, private equity firms with unique skillsets and more in-depth expertise have started to shift towards a specialized focus, rather than generalist. Specialization is one of the ways private equity firms can adjust to the increasing competition through which, if successful, can gain a competitive advantage and become more attractive for investors. For private equity firms having experts in the sector in-house is a big advantage in all areas but especially in deal sourcing and post-acquisition value creation process, which oftentimes leads to superior returns. On the other hand, specialization may also be a disadvantage when it comes to concentration risk and not enough diversification in the portfolio. For example, owning several restaurant businesses and brick and mortar shops, would cause severe troubles for private equity firms that specialize in this sector in times such as COVID-19 pandemic and related closures instituted by the government.

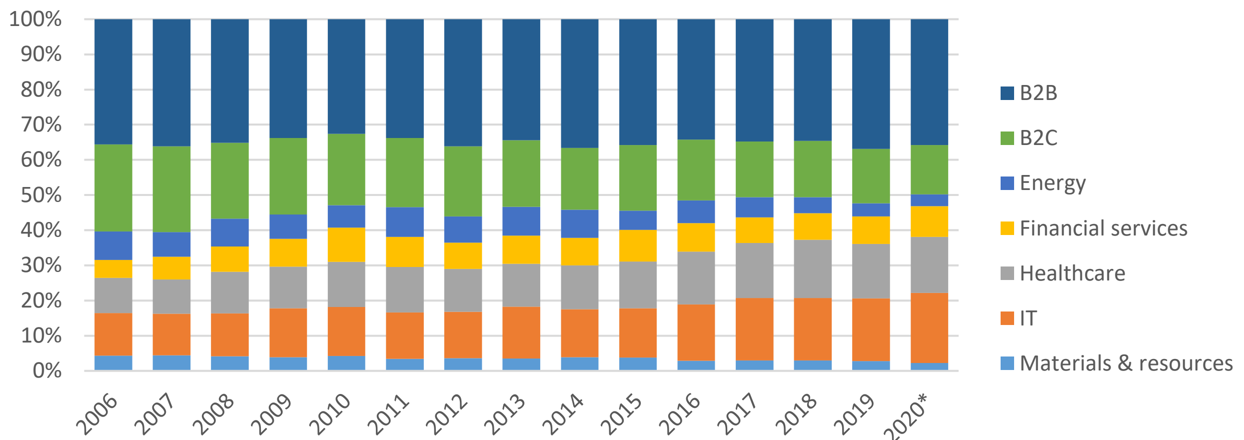
Sector specialization, while perhaps not as clearly defined is hardly new. Several private equity firms within the United States have had sector specialization since the 1980s, namely Providence Equity Partners, TSF Consumer Partners, and L Catterton, but even firms who referred to themselves are generalists have inclined towards aiming at specific sector, recognizing certain advantages that come with specialization, including credibility in the deal sourcing process, understanding, and executing value creation that came from the in-depth knowledge of the sector. Despite some of the clear advantages, not all research showed a positive correlation between private equity specialization and higher returns. Ljungqvist and Richards (2003) concluded that industry diversification does not have a significant effect on returns or the firm performance. On the other hand, Cressy et al. (2007) found that private equity firms that have specialized focus relative to their competitors have a deeper knowledge of the industry and the competitive environment where their portfolio companies operate, which they found was an advantage for identifying the strengths and weaknesses of the potential portfolio companies. In my own research, I found that private equity firms that tend to specialize in an industry tend to have more substantive relationships and wider network in the industry which oftentimes leads to access to proprietary deal flow and a better network of operating executives. Lastly, a research by Cambridge Associates (2014) found that investments executed by sector specialists who have historically invested more than 70% of

their capital in one of four sectors – consumer, financial services, healthcare and technology - returned an aggregate 2.2x MOIC and 23.2% gross IRR, have outperformed generalist investments that returned an aggregate 1.9x MOIC and a 17.5% gross IRR. The research showed that this was largely due to factors of advantage specialist private equity firms had, including sourcing, portfolio company selection, post-acquisition value-add, and exiting investments.

There seems to also be a correlation in rising number of specialized private equity firms and increasing value creation driven by operational improvements while moving away from financial engineering as the ultimate value-add strategy. This has started to happen as the number of firms and the amount of capital committed to private equity have grown exponentially, pulling the entry valuations higher and raising the bar to generate performance in line with the high historical returns, which is a benefit to those private equity firms that can repeatedly deploy a proven value creation playbook to drive the growth of portfolio companies during holding periods. (Private Equity International, 2019)

Private equity firms are typically generalists, focused on specific sectors or even just a single sector. In this theses, two consumer sectors will be further analysed, given the significant headwinds in this sector during the COVID-19 pandemic. Private equity firms focused on the consumer sector have had a challenging time over the years with innovation and technology disrupting the market as well as difficulties of the retail and casual dining sub-segments. However, in prior years, this sector was one of the fastest growing sectors, behind IT. According to Private Equity International (2020), the private equity companies focused on consumer sector that have been successful are the ones that have been willing to embrace the digital revolution and step away from the idea that expanding marketing and sales teams will be sufficient for value creation. Most of these firms are based in the United States as the investor's appetite for sector-focused funds such as consumer is generally more muted in Europe than it is in the United States. This is due to the geographical challenges of operating as a specialist in a pan-European context as well as the mixed performance of these funds. As seen on the chart below from Pitchbook report (2020), B2C (business to consumer) categories come third the number of deals done in the United States. In first half of 2020, private equity deals in the United States in B2C accounted for 14% of all deals compared to B2B (business to business) sector accounting for 36% and IT (information technology) accounting for 20% of all deals. However, while IT is without a doubt a very attractive area to invest for future growth, those deals also tend to be among the most expensive ones, therefore if company needs to be picked correctly and continue to grow in order to deliver returns to investors. To put this in perspective, according to Pitchbook report (2020), in first half of 2020, the dollar value of private equity deals in the United States in B2C it was $35.85 billion, compared to $60.89 billion in B2B and as much as $77.58 billion in IT invested across all deals.

Figure 20 - Number of US private equity deals by sector



Source: Pitchbook 2020

2.3.7 Managerial decision-making

The primary analysis used to answer the main goal of this thesis was multi-criteria analysis, introduced by Fotr and Svecova (2010). Decision making is without a doubt one of the most important responsibilities that managers have as it is the core of management.

Managerial functions are usually divided into two groups. The first are sequential managerial functions, which are implemented over a period of time and include planning, organizing, selecting employees, leading people, and controlling. The second are continuous functions, including analysis of activities as well as decision-making. Decision-making is therefore an integral part of managerial work and is applied in any managerial activities. It is most often applied during planning, because the core of planning is the decision-making processes. The importance of decision-making is manifested primarily in the fact that the quality and results of these decision-making processes fundamentally affect the efficiency of operation and the future prosperity of the organization. In the case of this diploma thesis, the decision-making process affects the returns of the investment made by the institutional investor. Poor decision-making is often one of the major causes of managerial failure. The essence of the decision-making process is the choice between two or more options. In managerial decision-making, various analysis are intertwined with the art of decision-making, i.e. with a smaller or larger share of intuition.

According to Fotr and Svecova (2010), the decision-making process is a process of solving decisions for problems that have two or more variants of solutions. The basic attribute is the process of selection, when the individual variants are assessed, and the selection of the decision, where the optimal variant is selected, which is intended for implementation. Decision-making and the whole decision-making process is influenced by a number of factors, which include 1. decision-making problems, in particular their nature and binding nature; 2. conditions for decision-making, in particular available time, degree of risk and uncertainty; 3. personality of the decision-maker, especially the approach to decision-making, decision-making style, but also his past experience.

The evaluation criteria represent the aspects chosen by the decision-maker based on his value system or the value system of the company. These criteria are used to assess the advantage of individual decision-making options in terms of achieving or degree of fulfillment of the objectives of the decision-making problem. The evaluation criteria are usually derived from the

set goals of the solution, and therefore there is a close relationship between them. Goals are usually expressed as maximization (e.g. profit, sales, profitability) and minimization (e.g. risk, loss).

The classification of decision problems and the decision-making process lies in their division in terms of their complexity and the possibility of automization. These are well-structured problems and poorly structured problems. Well-structured problems, which we also refer to as simple, programmed, or algorithmic, are usually repeatedly solved at the operational level of control, and there are routine solution procedures for them. It is characteristic for these problems that the variables that occur in them can be quantified and usually have only a quantitative evaluation criterion. The opposite extreme are poorly structured decision-making problems, which are characterized by solutions usually at higher levels, their novelty and uniqueness, the need to apply a creative approach, the use of extensive knowledge, experience and intuition, the existence of a number of factors affecting the solution of information for deciding variables describing the environment. The approach to solve these is usually unrepeatable.

Another way of classification is the division of the process into certainties, risks and uncertainties, where information on the state of the world and the consequent variants are compared with respect to individual evaluation criteria. In the case of complete information, this means that the decision-maker knows with certainty which state the world will occur in and what the consequences of the variants will be, is referred to as decision-making under certainty. If the decision-maker knows the possible future situations that may occur, and thus the consequences of variants in these states of the world, and at the same time knows the probability of these states of the world, then it is a decision-making process under risks. If the decision-makers are aware of possible future situations, but do not know the probabilities with which they may occur, it is a decision under uncertainty.

Deviations from the actual results in the choice of decision from the expected result are a manifestation of risk, as they have immediate effects on the decision-maker and his position, especially in the case of significant undesirable deviations, down-side risk, and thus the achieved adverse results. In this context, it should be noted that deviations from the actual results can be negative, referred to as down-side risk but they can also be positive, if they are desired deviations, which are referred to as up-side risk. In the economy, the risk is understood in various ways, the main concepts include the following three aspects: 1. the risk is identified with the cause of its occurrence; 2. the risk is understood as a measure of the danger of the given unfavorable situation, respectively the chance of the occurrence of a favorable situation; and 3. the risk reflects the values of the criteria chosen to evaluate the options for each situation.

Other types of decision-making processes are making decisions on the nature of the subject and can be classified into processes with an individual decision-making subject and with a collective decision-making subject. Furthermore, according to the number of evaluation criteria, decision-making processes are divided into processes with a single evaluation criterion and processes with a larger number of criteria, the so-called multi-criteria decision-making.

Empirical research into decision-making processes shows that the quality of decision-making is also negatively affected by certain systematic errors that managers make. In business activities, where the failures of an action are punished significantly more than the failures of the status quo, the preservation of the status quo is particularly attractive. The situation can be characterized by the statement "Let's wait until the situation stabilizes." Often, however, the right moment to change is wasted.

Information plays a key role in decision-making processes. Mainly because sometimes decision-making processes are understood as processes of obtaining and transforming input information into output information, including the interpretation of this information. An

important role in the processes of obtaining and gathering information is played by the decision-maker, whose knowledge, experience and judgment are essential for making better decisions. The significance of the decision lies in the importance of the problem. The more important the problem, the more information needs to be obtained to solve it. Therefore, the greatest demand for information will usually entail the decision-making problems of a strategic nature, which involve large volumes of resources and whose solutions have a significant impact on the organization. Another factor is the reversibility of decisions, as certain decisions can be revoked at a relatively low cost, but other decisions are irreversible. The more difficult the reversibility of the decision is, the more important it is to avoid making the wrong decision, and the greater is the amount of information required. The required accuracy and detail of the information also depends on the severity of the problem and its impact.

Thorough description of the problem and its exact formulation are considered to be the key components in the analysis of the problem, so the are given significant attention in theory. The description of the problem consists in the determination and descriptions of all of its features and the identifications of the symptoms of the problem.

The specific analysis used in this diploma thesis is multi-criteria analysis, introduced by Fotr and Svecova (2010). This method lies in the decision-maker selecting important criteria and assigning them points as per their relevance. The scale is 1-5 in this diploma thesis, 5 being the highest and 1 the lowest points. These points are then given a weighed significance. Each criterion is applied on the problem the decision-maker is solving, and whichever problem receives the higher sum of points, is the optimal decision. This method is further described in the methodology section.

2.4 Methodology

This section will explain how the research in this diploma thesis was conducted. The main goal was to choose a private equity firm for investment for institutional investors based on due diligence. It explored how investors in private equity evaluate the quality of the private equity firms given the rarely accessible data on them that is available. In order to do that, one of the key questions that needed to be answered was what are the topics and areas that investors need to focus on when due diligencing private equity firms. Without these, investors would not be able to determine the quality of the private equity firm and whether it is able to repeatedly deliver above average returns. To disentangle the answer to this question, seven qualitative and eight quantitative research areas were identified, based on professional experience, participative observation and available literature, in particular DuPonte (2016) offers research on the topic of private equity fund due diligence. Prior research within the private equity field has predominantly conducted comprehensive studies from a point of private equity firm's view and the decision making process for creating a portfolio of investments, yet there are limited studies that focus specifically on analyzing private equity firms from the point of limited partners and provided guidelines for the decision making process.

The diploma thesis was conducted based on the analysis of primary and secondary sources related to private equity and due diligence using six different methods – content analysis, participative observation, synthesis of findings, interview, modeling method and multi-criteria analysis. Author's own findings lay in selecting the seven relevant areas where due diligence needs to be conducted.

The theoretical part of this diploma thesis was devoted to content analysis and participative observation of the private equity field using professional experience and available secondary sources with the predominant function of description and explanation of issues, phenomena and concepts. As per Bengtsson (2016), the content analysis is to organize the elicit meaning from

the data collected and to draw realistic conclusions from it. A manifest analysis will be used in this thesis, which she refers to as a broad surface structure analysis. The scientific method of exploration will prevail for the description and classification of concepts and types of investment and private equity specifically as well as the definition of the investment process. The analysis of the current state of private equity in the United States and globally and the outlook for future development is based on empirical observations. This is complemented with participative observation, which per Schubotz (2019), includes a wide range of research methods that can be used in research projects such as interviews, observations as well as explorative methods including participatory mapping and story telling. The research findings are systematically concluded through synthesis, which is the practice of distilling and integrating data from a variety of sources in order to draw more reliable conclusions about a given question or topic. (Cooper et al, 2009)

In the analytical part, the study's methodological design will be based on modeling two case studies, in which two private equity firms are followed. Quantitative and qualitative research is mainly based on the data collected through interviews as well as participative analysis. This data was then used as an inspiration for fictional data used in order to conduct the analysis of the two funds and model due diligence process of investors. The elaboration on the main goal of this diploma thesis requires a detailed research, an analysis of the available literature, especially foreign sources, including scientific research, focused on themes related to private equity. Final analysis is determined through a series of factors and concluded through a loose SWOT analysis that highlights its strengths and weaknesses.

2.4.1 Quantitative research

This chapter provides a quantitative empirical research regarding process that investors conduct when analyzing private equity firms. This process is needed to drive a data-based decision on determining the quality of private equity firms and determining the suitability of its funds for investment. In order to show the modeling of the process, a detailed analysis will be conducted on two different private equity firms. In this diploma thesis, the focus is on due diligencing two fictional private equity firms that invest in the consumer sector and operate out of the United States. The main objective is to model the due diligence process that is foundational for investors‘ decision as it provides answers on what are the drivers of value behind private equity firm‘s performance. Once the analysis of each fund is complete, it will thereafter be benchmarked against each other in order to compare the findings and determine which firm is a more suitable investment.

The following set of performance indicators was identified through quantitative content analysis as factors affecting performance of private equity firm and is used for evaluation. The quantitative methodology identified factors to study the differences between the firms that were used for direct comparison analysis between the two companies which will be used as a foundation when analyzing the results. These factors were: (1) Geographical focus and industry focus; (2) Control vs. Minority investing; (3) Size and characteristics of target companies (in terms of revenue and EBITDA and use of debt, are they founder owned?); (4) Investment diploma thesis and targeted return drivers; (5) Average holding periods; (6) Loss ratios; (7) Previous performance; (8) Management team experience. For a part of this analysis, Microsoft Excel 2013 was used to display graphs and calculations for quantitative visualization of the results. This data provided the base for further evaluation.

2.4.2 Qualitative research

As defined by Bell and Bryman (2011), qualitative research is a research strategy that usually emphasized words rather than quantification in the collection and analysis of data. In their book, Business Research Methods, they outline how the qualitative research is conducted in several main steps. First step lays in developing research questions. The main research questions used in the theoretical part of this thesis include:

1. What is private equity as an asset class and why is it attractive for investors?
2. How do private equity firms generate returns?
3. What are the areas of private equity firms that need to be explored in order to conduct an efficient and thorough due diligence?

The answers for these questions were found through content analysis with focusing on key words such as „private equity“, „due diligence“, and „institutional investors“. The literature reviewed in this diploma thesis investigating the value creation process of private equity firms provides useful help in setting up an appropriate research methodology. However, there is little literature specific to the due diligence or decision-making process of investors within private equity, therefore the research design used in this diploma thesis is the author's work that was composed through primary professional experience and limited secondary sources.

Second step is selecting relevant subjects. In this thesis, two private equity firms that operate in the United States in the consumer sector were selected. They were chosen on the basis of this sector's attractiveness among investors under „normal“ market circumstances but they have been one of the most impacted sectors during the COVID-19 pandemic. It was expected that some companies are facing significant headwinds in this sector but will likely rebound as markets normalize.

Third step is collecting relevant data. Data for this thesis was collected through methods of *interview* and *participative observation*. The latter involved professional experience from the industry, having worked there full-time for two years, which involved meeting private equity firms, conducting due diligence and advising clients on appropriate investments. The participative observation served towards conducting due diligence of the two private equity firms, interpreting results, and formulating suggestions and recommendations. Throughout this fieldwork, extensive notes were written on private equity due diligence observations, as well as the asset class and its industry as a whole. The second approach to data collection was conducted through in-depth, semi-structured interviews of two private equity firms. As per Bell and Bryman (2011), semi-structured interviews refers to a context in which the interviewed has a series of questions that are in the general form of an interview schedule but is able to vary the sequence of questions and questions are typically more general and allows for in-depth interviews. Two private equity firms in the consumer sector were chosen, whose names will not be disclosed for privacy reasons. The two private equity firms were selected at random and contacted in the Spring months of 2020 to schedule a video call through which a 90-minutes semiformal interview was conducted. Prior to the call, seven topics for due diligence were identified to support the quantitative research on eight areas. Each due diligence topic has a series of complementing questions to prompt the appropriate answers that are needed to uncover the private equity firm's quality. The seven topics for due diligence were as follows: (1) value add strategy; (2) Analysis of the team and culture; (3) Additional resources in the firm; (4) Analysis of the opportunity set within the private equity firm's target sector which used a loose PEST analysis of the macroeconomic environment; (5) Portfolio Analysis; (6) Exit strategy; (7) Analysis of alignment between the General Partner and Limited Partner. The fourth area additionally used a loose PEST analysis as the performance of portfolio

companies is not only affected by the private equity firm, but also the macroeconomic factors of the environment it operates in. Furthermore, a loose SWOT analysis as strengths and weaknesses of each firm were drawn out.

Private equity firms typically possess very good marketing skills, and it is up to the investor to identify, whether the private equity truly possesses those skills it is marketing through a sophisticated due diligence process. These questions were compiled prior to the call to ensure this is a semi-structured interview and were based on findings from secondary research as well as professional experience in the industry. These calls were not allowed to be tape-recorded for security reasons but the answers to questions were collected through handwritten notes. A matrix that was created prior to the interview to collect the quantitative part of the research. The outcomes of the interviews were summarized in writing and split across seven relevant areas of due diligence. These notes were used to write up the analysis section, identify strengths and weaknesses using a loose SWOT analysis and compare the results of the two firms based on which the preferable one was picked out.

Fourth step is interpretation of data, which included analysis of the outcomes from the interviews. This included modeling of the two private equity firms. Briggs (2007) argues that while modeling is widely used in quantitative research, qualitative data can likewise be modelled to enable further analysis of the phenomenon investigated, to stimulate theorizing about the relationship of factors within the modeled system. Thereafter, a multi-criteria decision analysis was conducted. This analysis is used as two private equity firms are considered and an optimal one is pursued based on all the factors that are relevant to the analysis. As per Fotr, Svecova et al. (2010), multi-criteria decision analysis is an analysis based on several criteria. It has several benefits as they make the process of evaluation different criteria more transparent and reproducible as well as clearer for uninvolved subjects and they force the decision-maker to explicitly evaluate the importance of each criteria separately. This method requires first determining the weight of the individual evaluation criteria. The weight of the criteria, also referred to as coefficients of significance, are a numerically expressed reflection of their significance, or in other words, the importance of the objectives pursued. The more important the decision-maker considers the criteria to be, the higher the significance coefficient. On the contrary, less important criteria are given lower significance coefficient. Allocation of points 1 to 5, one having the lowest weight and five the highest, is the method chosen for this thesis. This is a method that attributes 1 to 5 points between different criteria as per their significance and after that standardized weight is computed so that the total weights of all criteria equal to 1. The procedure for determining the significance of the criteria in this method consists in assigning a certain number of points from the selected scale to each criterion, in accordance with how the assessor evaluates the significance of it.

To apply the methods of assigning significance of each criterion in terms of points, seven criteria were identified, based on the due diligence areas researched in the qualitative research:

1. Is the value add strategy of the firm proven, repeatable and differentiated from other private equity firms? (C_1)
2. Is the team experienced and the culture in the firm leads to incentivization of employees? (C_2)
3. Does the firm have additional resources besides the investment team such as deal sourcing team or operations team? (C_3)
4. Does the firm focus in investments in industries with favorable macroeconomic tailwinds? (C_4)
5. What is the risk appetite of the firm, including usage of debt? (C_5)
6. What has the performance of the firm been? In other words, has the firm been able to exit its investments at premium and are there any losses in the portfolio? (C_6)

7. What is the alignment between the Limited Partner and General Partner in terms of General Partner commitment? (C_7)

The fourth area additionally used a loose PEST analysis as the performance of portfolio companies is not only affected by the private equity firm, but also the macroeconomic factors of the environment it operates in. Furthermore, a loose SWOT analysis as strengths and weaknesses of each firm were drawn out.

The evaluation of the importance of the criteria is subjective as it is based on the evaluator's preference. First, the most and least important criteria was set out, which was the Opportunity set in the sector for the most important one and alignment between General and Limited Partner for the least important one. This step was repeated thereafter as again the most and least important criteria was picked out from the remaining 5, this time the most important one was exit strategy and least important one was portfolio analysis. This left three remaining criteria. From the last three, the most important one was additional resources in the firm and least important was value creation strategy. This least the last criteria, investment team and culture, right in the middle. As the last step of this analysis, standardized weights were assigned.

Step five is conceptual and theoretical work, the research in this thesis revealed all of the important due diligence areas that investors need to evaluate to conduct high quality investment decisions in private equity funds.

Sixth step is writing up findings and conclusions, where the optimal investment in private equity firm is chosen based on the analysis performed in previous sections, which includes content analysis, participative observation and semi-formal interviews, modeling two private equity firms, multi factor decision analysis, and synthesis of findings. A variety of institutional investors and asset management firms can benefit from the insights of this thesis, including the identified due diligence areas and their analysis.

This thesis adopts a mixed approach of both quantitative and qualitative methods. Using a mixed method research design is suitable for this study since the purpose is to evaluate the strengths and weaknesses based on data as well as deductive research to uncover the value drivers. Employing this method is most suitable as the quantitative method will enable to better visualize the results and differences between the two firms and the qualitative approach makes the data more meaningful and understandable.

The aim is to design a set of areas and factors that investors need to explore in the target private equity firms. These areas examine the drivers behind private equity firm's success and uncover potential issues, risks and red flags that can be overlooked without a thorough due diligence. Additionally, the focus is on exploring the different value creation methods of private equity firms, to examine whether there is a good quality value creation playbook in place.

While the definitive numbers and qualitative information used are fictional, they are inspired by the data the private equity firms provided, which cannot be publicly distributed as a Non Disclosure Agreement (NDA) had to be signed prior to the interview to protect the information provided. The findings of this quantitative search are shown and discussed in the analytical part, section 3.2 and 3.3. This is followed by suggestions and recommendations in section 3.4.

Secondary data used for the analysis was collected through online platforms, Pitchbook and Preqin, that specialize on collecting data regarding alternative asset classes. The data collected through these platforms was used in the theoretical part to describe the current private equity environment in areas such as fundraising, deal activity, exit activity, add-on acquisition volume, sector activity, holding times and performance, and in the analytical part to analyze the consumer sector and competition.

As Almalki (2016) and Creswell and Clark (2007) point out, it is beneficial to gather information utilizing quantitative and qualitative data for interpretation of results, however it may require further expertise. This is the most appropriate method, referred to as the triangular design as neither the quantitative nor the qualitative data provides a complete analysis of private equity firms on its own.

To arrive at recommendations and suggestions, the analysis of comparison between the two companies was used and in each section the explanation behind which firm is a more suitable choice was provided.

3 Analytical part

When committing capital to private equity firms, investors are giving up the control over the specific companies that they can choose to invest in. Instead, private equity firms have full discretion over picking the investments subject to terms and conditions in the Limited Partnership Agreement (LPA), a key legal document that's negotiated between the general partner and the limited partner at the time of fundraising. As per SEC website, this agreement defines, among other things, the maximum percentage of a fund that can be invested in a single investment, to eliminate concentration risks. The purpose of this diploma thesis is to model the decision-making process of investors, who are called limited partners, in private equity. The analytical part will in detail walk through the decision-making process, step by step, and point out what are all the different areas that investors should consider in their due diligence process prior to committing their capital to a private equity fund. This chapter will be divided into different parts. Firstly, an introduction into the U.S. private equity consumer sector universe, in order to introduce the sector in which the two funds that will be analyzed fall into, the will follow after this chapter. In the next chapter, the investors' due diligence process will be modeled on two different funds, whose names will not be disclosed for privacy reasons and these two funds only served as an inspiration for this diploma thesis and numbers used are fictional to serve the purpose of this diploma thesis. Complete analysis of the two funds including all the areas investors should explore in their due diligence will follow. As a part of the due diligence and decision-making process, strengths and weaknesses of each firm will be evaluated and outcomes of the analysis of each firm will be compared to arrive at the final chapter of this theses, formulation of suggestions and conclusions.

The combination of illiquidity, limited information publicly available and activist strategy needed from private equity firms means that fund manager selection drives investor's returns and investors cannot simply allocate capital to European lower-middle-market buyout or consumer-focused funds and expect success. For these reasons, intensive fund due diligence is necessary in private equity in order to target highest performing funds and avoid potential losses. It is more challenging to conduct due diligence in less mature funds than in those that have been established for years and have a track record in place, however, having a thorough due diligence process in place can ultimately lead to better returns for investors.

3.1 Introduction of Private Equity funds in the consumer sector

There are a number of firms that focus on the consumer sector, most of which are based in the United States.

Having used my professional experience, private equity firm's websites, Preqin database and Pitchbook online resources to map out the private equity consumer fund universe. There are generally five sub sectors that occur within the consumer sector – (1) consumer branded products, (2) retail, (3) food and restaurants, (4) media, and (5) consumer services. However, it is important to note that majority of private equity firms invest in a blend of these subsectors and there is no hard line.

Summarized below are some of the best-known private equity firms divided by sub-sector focus:

- Most of the subsectors – L Catterton, TSF Consumer Partners, Brentwood Partners
- Retail – Sycamore, Castanea
- Consumer Branded Products – Lion Capital, LNK
- Media – Shamrock, Raine Group

- Food and restaurants – e2p partners

Few firms focus on restaurants. Recently quick service restaurant ("QSR") franchisees has become a popular space within private equity (e.g. buying a chain of KFCs or Taco Bells). Retail and restaurants are a difficult sector to invest in, given its high capital expenditures and volatility as those are directly consumer-facing businesses.

3.2 Analysis of returns of two different Private Equity funds

The following chapter will focus on modelling two private equity firms and their due diligence.

3.2.1 Data collection

Private equity transaction data is not publicly available and rarely accessible. The data used for this purpose was gather through author's professional experience, the private market data and insights websites like Preqin and Pitchbook and for the purpose of the analysis, the numbers for each transaction are fictional figures put together taking into account the characteristics of the private equity firms. The two private equity firms are in the lower middle market, which describes fund sizes of $300 million up to $1 billion. These are characterized by making investments in the range between $20 million and $200 million. Therefore, the transaction data used in this diploma thesis is a mix of investments of those enterprise value sizes, with appropriately assigned a mix of values of MOIC. Values at exit of each fund transactions are fictional as well while assuming a diversified portfolio, macroeconomic trends and comparable public companies. A table of detailed values for each investment for each one of the two private equity funds can be found in Attachments.

Moreover, the analysis is concerning a consumer-focused firm and a double sector, consumer and software-focused firm. Both are based in the United States, one is investing in the United States only, one globally. They both have raised two consumer focused funds. For the purpose of this paper, the solely consumer-focused firm will be referred to as "C Private Equity" and the software/consumer firm will be referred to as "SC Private Equity".

C Private Equity firm is a private equity investment firm that invests through buyout structures in consumer-focused businesses including food, products, education, restaurants and retail companies. A private equity firm can buy minority or majority stakes in its investments, although it is more typical to acquire majority stakes for larger funds and minority for growth focused or small buyout funds. C Private Equity firm is a majority investor and acquires companies owned by either the founder or another private equity firm. Led by experienced professionals, it utilized its value creation playbook which it employs to drive value after initial investment. SF Private Equity firm focuses on growth and buyout investments in the technology and consumer sectors via both minority and majority investments. It is led by two founders with entrepreneurial background and focus in investing in "future" consumer trends.

For both of these firms, the following metrics have been collected:

1. Geographical focus and industry focus
2. Control vs. Minority investing
3. Size and characteristics of target companies (in terms of revenue and EBITDA and use of debt, are they founder owned?)
4. Investment diploma thesis and targetted return drivers
5. Average holding periods
6. Loss ratios
7. Previous performance

8. Management team experience

Additionally, I will summarize the strengths and weaknesses in each section to help better assess the investment opportunity with its risks and downside protection.

3.2.2 Modeling of investor decision making

Prior to making a decision of committing capital to a potential investment, investor should thoroughly analyze the opportunity. This is even more true for private equity, as the information does not come freely available as information on public market investments does. The illiquidity of this asset class makes it crucial to spend time on carefully selecting a suitable private equity manager through a high quality due diligence process as the investors will sign up their capital for 10+ years of illiquidity. There is an option for limited partners to sell off their share of the private equity fund at any point on the secondary markets, however, this option is usually not very favorable for the limited partner who is selling its part of the portfolio at a discount. However, I have come up with a set of guidelines that are important to evaluate before making the decision:

1. **Value add strategy**– Does the manager have high quality in-house resources for its value-add strategy such as a full-time operations team or does it rely on external advisors? Does it have a close network of CEOs in the target industry or other resources that will help with implementation of the strategy? How has the manager worked with portfolio companies to optimize functions such as sales, marketing, finance, operations, human resources and other key areas? Is the manager experienced in add on acquisitions and able to find the right targets for good valuations?
2. **Analysis of the investment team and culture** – It is important to analyze the backgrounds of the investment team including what relevant experience the decision-making members have. What the capacity of the team is, will they be able to allocate the neccesary time to each of the portfolio companies, will they be able to do a good job sourcing high quality deals, have these individuals worked together before? What is the culture of the firm and how are the employees incentivized? Does the firm culture promote an inclusive environment and is the structure of the team flat or hierarchical?
3. **Additional resources in the firm** – It is important to analyze if the manager has superior deal sourcing capabilities and will be able to deploy the capital in a timely adequate manner. Additionally, it is important to analyze if there's enough resources in house to conduct due diligence on potential investments and implement value creation plans effectively beyond the investment professionals.
4. **Analysis of the opportunity set within the private equity firm's target strategy** – This section needs to analyze the macroeconomic environment and determine whether the private equity firm operates in sectors or subsectors with headwinds or tailwinds.
5. **Portfolio analysis** – What is the manager's previous track record? How many funds has it raised, how did they perform, are they aiming for the same type of deals in the next fund that they've raised in the previous fund? Does the private equity manager have a differentiated strategy that is to the investor's liking, which could deliver superior returns? What type of market does the manager focus on – is it a generalist or a specialist? What industry is it targeting, wat geography, what deal size? How does the manager analyze risk, what is their risk appetite?
6. **Exit strategy** – What is the manager's track record and were they able to successfully exit companies? Have there been any losses in the portfolio? It is useful to perform an

analysis of returns without the biggest loser and/or without the biggest winner in the portfolio.

7. **Analysis of alignment between General Partner and Limited Partner** – How much is the general partner's commitment? What is the motivation of the general partners? How does the manager provide financial reporting of the fund's and the respective portfolio companies performance? Are they responsive and provide adequate visibility into the fund's performance? Are they investing from a one type of investment vehicles or do they have more strategies such as credit fund?

3.3 Analysis of the effectiveness of strategies

As stated in the introduction of this diploma thesis, this chapter will model the due diligence process on two private equity firms leading to investors' decision-making. The two private equity firms described here were inspired by two real private equity firms, whose names will not be disclosed for data protection reasons. The specific numbers are inspired by the respective private equity firms' strategies but are fictional for the purpose of modeling the decision-making process of investors in concrete detail. The due diligence process is a very important component for making the decision on which is one the right private equity firm that will generate premium returns for them. As shown earlier in this diploma thesis, the dispersion of returns between different private equity firms can be significant. This chapter will be divided into two parts and each subchapter will introduce one private equity firm at a time, including its background and evaluation of their strengths and weaknesses. As part of the background analysis, I will introduce a table with criteria that will be considered in the final decision-making process which is derived from chapter **6.2.2** where I introduced some of the criteria that are important to consider. This process will model the due diligence performed by institutional investors, when deciding which private equity firm they will commit their capital to. This is a demanding due diligence process, which typically lasts several weeks or even months, including in-person and on-site due diligence meetings and negotiations between the two parties, before arriving at a final decision

The structure of the subsequent chapter will be as follows. Each one of the two private equity firms will be introduced in terms of its background. Different components of the firms will be dissected and analyzed such as the value-add strategy, investment team and culture, additional resources, analysis of the opportunity set within the target sector, portfolio analysis including risk appetite, exit strategy and finally the alignment between the General Partner and Limited Partner. As a part of this analysis, strengths and weaknesses of each private equity firm will be analyzed. As the last step, the two private equity firms will be compared followed by suggestions and recommendations.

3.3.1 SF Private equity firm

Firm Background

The first private equity manager focuses on technology and consumer branded products. Within this sector it is aiming to identify premium products that have loyal followings. This firm was founded in 2005 by two founders who have backgrounds as entrepreneurs and successfully founded, built, and sold their business in the software and consumer space.

Once SF Private equity identifies the brands through its proprietary platform used for deal sourcing, its primary value-add strategy lays in aiming to help consumer branded product companies expand their online presence and help the technology companies build their brand. This is a unique strategy focused on creating strong brands that will attract consumers. It will

target buyout deals as well as growth equity deals that can be defined as companies with more than $10 million in revenue and no debt and will engage in both control and minority investments. However, as it is looking at growing fast companies as well, it does not required earnings before interest taxes depreciation and amortization (EBITDA) to be positive as it often isn't in non-establishes, growth companies.

Value add strategy:

The manager uses very little or no leverage in its investments. Leverage levels are typically between 1.0x to 3.0x net debt at entry, suggesting most value creation comes from sources other than financial engineering. Low leverage levels also tend to be an advantage during downturns like the Great Financial Crisis or COVID-19 pandemic, as companies don't have to face covenant pressures or loan defaults.

To further examine manager's value creation capabilities, several areas have been identified from how value was added in its previous portfolio companies:

1. Augmenting management teams: The manager has proven to be successful at sourcing and recruiting c-suite management in several of its previous portfolio companies, putting them at a route for further growth.
2. Adding internal resources and managing talent: The manager has proven to be succesful at building out teams and creating functions at the companies that are neccesary for the next stage of growth that have not been done before, e.g. building out the sales team, adding talent management specialists, etc.
3. Strategic guidance: The manager is active in helping the management team with strategic initiatives in the companies in areas such as increasing distribution channels, increasing brand awareness through advertising, social media, and creating a better user-friendly experience.

Once value creation has been implemented in portfolio companies, the private equity firm will aim to exit through a sale process to a strategic company or have an IPO on public markets. Thinking of an exit strategy while conducting due diligence is crucial for this firm's process, as it aims to look for company that will have be attractive to potential buyers. However, this manager has raised two funds to date and has only realized one company that it sold to a strategic company.

Investment Team and Culture

The background of the founders is differentiated from other private equity founding partners. While they might not possess as many years of experience in investment banking or private equity as other private equity firms, both founders have entrepreneurial background, having founded, built and sold companies in the past. Therefore, they pride themselves on being able to resonate with founders of businesses they acquire, which can be viewed as a strength for deal sourcing and alignment of interests between the private equity firm and the business owners.

This private equity firm does not dwell on professionals obtaining an MBA degree for promotion. It supports professional who decide to pursue this path but does not require MBA for professionals to move up the ladder, if they possess the right skills and experience.

There has been no senior level turnover on the management team to date, which is viewed as a strength. However, partners are strict on promoting individuals from within and have high expectations. Therefore, shall there be an individual that does not make it to principal level within an expected timely manner, they will be moving these professionals out of the firm, which is encouraging as founders are willing to go through tough actions to ensure the firm's well being. The culture is relatively flat and start-up-like, oriented to appeal to younger

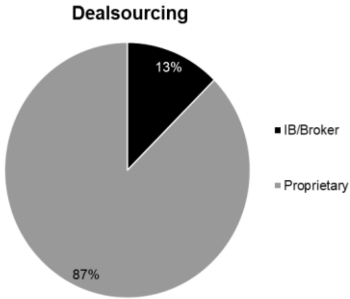
professionals. The founders themselves are relatively young compared to other private equity firms as well, being in their forties, which could prompt a concern on whether they are experienced enough. However, the firm is set up to have an entrepreneurial mindset, as do the founders from their previous professional experience.

The culture of the firm also puts emphasis on continuous improvement. All professionals are encouraged to come up with new ideas and processes for improving the firm. The firm does not believe in annual reviews or structured feedback, rather it has a more casual culture, where people are encouraged to speak up. The professionals are also incentivized appropriately as the carry is split between the founders, who receive the largest piece of it, but all other professionals of the investment team, from analysts up, which is rarely seen in private equity firms. This is viewed as a plus as all members of the investment team are incentivized to deliver returns for investors.

Additional Resources

SF Private equity does not have any additional resources, however it has a priorietary deal sourcing engine that is built on a data analytics principles that track consumer trends. This engine identifies companies through online search and flags them for review for the firm's senior professionals. As seen on the chart below, 87% of all deals across the funds have been sourced proprietarily, through their sourcing engine.

Figure 21 - SF Private equity deal sourcing



Source: author's work

Analysis of the opportunity set within the private equity firm's target sector

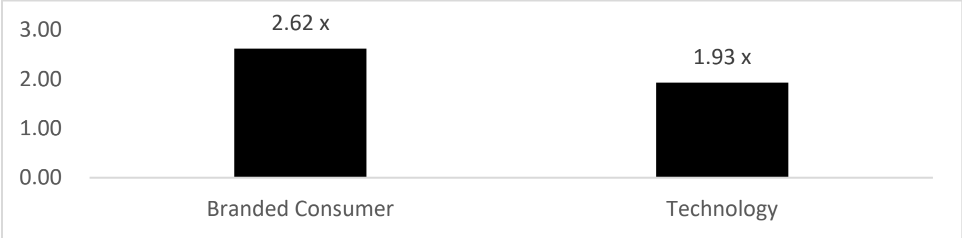
There are favorable tailwinds in the target industries of SF Private equity firm, that were accelerated by the macroeconomic environment induced by COVID-19 pandemic and the trends following thereafter. Software sector has experienced strong growth for several years, while many software subsectors experienced additional boost of growth in 2020, particularly software following the trends of the „future".

As per Pitchbook (2020), Information Technology sector continues to see the highest number of deals even further accelerated by the coronavirus pandemic. Particularly in subsectors like cybersecurity and remote working as digital transformation within businesses has been accelerated by at least three to four years. Looking at the effects on this sector in the Great Financial Crisis, the highest returns were in the software and technology industries, generating returns above 2.5x. There has no doubt been an acceleration of digitalization across many industries. Businesses that once mapped digital strategy in one to three year phases were forced to adapt in a matter of days or weeks. Tech companies saw the fastest digital transformation, followed by energy, healthcare, construction and retail businesses. Within tech it was primarily the trend of working remotely, contactless payments and rise of automation.

Portfolio Analysis - Investment strategy fit

The consumer branded investment show better performance than technology investments. Technology investments were accelerated by favorable tailwinds due to COVID-19 pandemic.

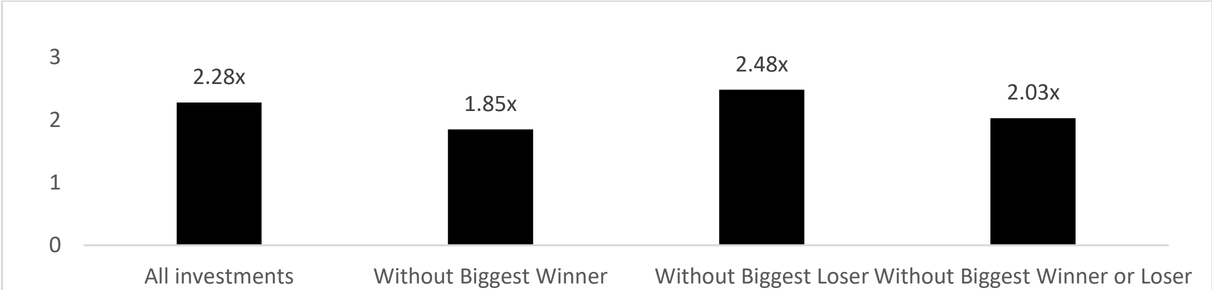
Figure 22 - All funds multiples divided by sector



Source: Author's work

On the Winner & Loser analysis below, we can see that the performance without biggest winner or without biggest loser would remain of high quality, however, this strategy of focusing on high growing companies and targeting clear winners with occasional loses seems to have proven that it generates higher returns than if the returns were more equal across the portfolio. This can be seen on the graph below, where all investments generated 2.28x MOIC but if the portfolio returns are evaluated without biggest winner and loser, they only generate 2.03x MOIC.

Figure 23 - Winner & Loser performance analysis (SF Private Equity)



Source: Author's work

Risk appetite

It is also important for investors to evaluate the risk appetite of the manager and whether it aligns with the risk appetite of the investor given the illiquidity of this asset class. It is typically preferred for institutional that private equity managers look to have downside cushions for each investment that protects them of losing all capital in case the investment doesn't go as planned internally or is effected by unfavourable macroeconomic environment. This ensures a kind of protection for institutional investors who, with downside protection, are less likely to lose their capital and are more willing to trust the fund managers.

While SF Private equity requires significant operational control for its minority investments, it does not negotiate downside protection as much as its peers. As it focuses on high growth companies, SF believes that by trying to negotiate too strict downside protection terms, it could lose out on some high-upside deals.

Exit strategy

The funds are relatively young, however, Fund I has already been fully realized as all investments have been exited. There have been two investments written-off one in Fund I, one in Fund II, however, there were two realized investments in Fund I for 6.0x MOIC and in Fund

II, one investment is held at 7.1x MOIC. This is due to the fact that SF Private Equity Firm is looking for exceptional companies that are positioned to be clear winners in their respective industries, therefore if things don't go according to plan and it makes a mistake in identifying these companies, it can result in losses across the portfolio.

Alignment between General Partner and Limited Partner

The General partner commitment to each fund is 5% of the fund that is split between the partners. This is above the industry standard. Any professionals below the partner levels do not have to participate in the general partner commitment, however, all of the senior level professionals in the firm choose to participate in it.

SF Private equity firm does not have any other product lines, therefore can fully focus on the private equity funds.

S&W

Strengths

1. No turnover and strong culture with motivating incentivization
2. Carry split is distributed across all investment professionals
3. Favored tailwinds in focus sectors
4. Operational value creation comes from strategic guidance and building out human capital
5. Proprietary deal sourcing platform is very differentiated to other private equity firms
6. Single product firm
7. Above average General Partner commitment

Weaknesses

1. Low downside protection
2. Two investments were written off to date
3. No dedicated operations team

Opportunities

The strong industry tailwinds signal favorable return on investments that are conducted in SF Private equity firm's target subsectors. Additionally, proprietary deal sourcing platform is differentiated and can potentially save the investor's money.

Threats

The major threat is the low downside protection on deals that can be threatening to investor's returns.

3.3.2 C Private equity firm

Firm Background

The second manager has a more traditional private equity buyout strategy. It was founded in the 1980's as a generalist firm but defined its focused towards the consumer sector over time. The last two funds were only investing in consumer-focused companies. For this analysis, only

the last two funds will be considered to provide a more accurate comparison between the two private equity firms and stay within the consumer sector.

C Private Equity manager believes in strong consumer loyalty being a differentiator in consumer companies‘ success. Customer loyalty is deeply considered it in its process when sourcing deals. To be able to measure customer loyalty, it monitors long-term sales growth outperformance and reduced sales volatility, which C Private Equity firm believes are the metrics most correlated to customer loyalty.

Its investment diploma thesis is to invest in companies which have developed an extremely loyal customer following but have not yet developed a strategic orientation, management infrastructure, and marketing expertise to fully achieve its full growth and profit potential. C Private Equity firm‘s investment strategy also seeks to leverage the firm's expertise in relevant sub sectors, particularly:

- Brick-and-mortar retailers
- Restaurants
- Direct-to-consumer marketers

Consumer sector focused private equity firms more commonly tend to target consumer-packaged goods, however, this manager is differentiated shifting its focus away from consumer-packaged goods companies. This is an area where businesses are closer to the consumers in the value chain and have less susceptibility to disintermediation or competitive substitution. C Private equity firm is unique in that it invests in a differentiated space. Throughout the research of consumer private equity space, I found that it is rare that private equity firms would focus on this space solely.

As mentioned above, this private equity firm process fundamentally stems from an understanding of a potential portfolio company's customer loyalty. To understand whether a company has high customer loyalty, the private equity firm performs quantitative analysis and considers the Net Promoter Score or Likelihood to Recommend Score. The analysis allows to determine whether the company has a sticky core customer base. Additionally, it seeks to analyze data in order to diligence and understand the operations of the companies. Through this process, it can also identify areas for the value-add plan. This firm has developed and refined analytical techniques to evaluate customers over the past 14 years and employs professionals with a background in data science and analytics, who helped developed these techniques. Having such analysis and professionals with such backgrounds in-house is a highly differentiated approach to private equity.

Value Creation strategy

C Private Equity firm takes a long-term approach to value creation. The firm believes in implementing a value creation strategy that will set the portfolio company for a path towards sustainable growth in later years of the holding period and even post-exit. It is fundamental for its investment philosophy that, in the case of a growing businesses, exit value is maximized by creating and building out the team and the processes for enduring growth in the company beyond C Private Equity firm's ownership. In order to do so, C Private Equity firm will oftentimes slow down portfolio company's growth in the first 12-24 months until it has implemented its value creation strategy. The firm has developed a disciplined approach to achieving accelerated growth in its portfolio companies, which typically consist of:

- Advising on company's strategy for sustainable growth
- Management and organizational developments

- Operational improvements

Organizational development and operational improvement are the primary areas of focus during the early hold period of an investment. C Private Equity firm believes that by creating a stronger management team and implementing processes to create a more efficient organization in the early stages of ownership allows for more accelerated revenue growth during the later stages of ownership. The firm also believes that this approach minimizes the execution risk by establishing a solid foundation early in the investment and thereafter monetizing the value creation from predictable and rapid growth in the remaining years.

Organizational Development: Typically, the portfolio company owners and C Private Equity firm begin working together at a time when the business is facing two issues – 1. strain from rapid growth, and 2. personnel decisions that must be addressed to enable continued growth. The team that has been able to start the firm and bring it through the first stages of growth doesn't necessarily need to be the team that is able to bring it to the next stage of growth. Organizational development opportunities are for this reason usually the first part of C Private Equity firm's due diligence process. After that the firm will work with management in order to augment and deepen management teams. It will usually use its network or a retained search firm for hires at portfolio companies.

Operational Improvements: As early as during the due diligence on each company, C Private Equity firm will identify opportunities to improve operations by working with its operations team, the internal expertise of the investment team, and previously proven third-party experts. Given the firm's investment strategy focus, it has a playbook of operational improvement initiatives which it has been developing since its founding. Additionally, it is able to benchmark operational metrics versus its other investments where appropriate. Key operational initiatives include:

- Improving reporting and data analytics to facilitate better decisions through investment in ERP systems and customer databases
- Improving efficiencies and increasing scalability by investing in distribution operations, generating cost savings across shared vendors, and building more efficient sourcing operations and supply chains

Strategy for sustainable growth: A significant part of C Private Equity firm's value creation comes from adjusting the company's strategy for accelerated revenue growth. Specific strategic initiatives can include:

- new location growth and geographic expansion
- new product category or version development
- accelerated investments in marketing and branding
- add-on acquisitions

There are long-term growth strategies that can continue beyond the C Private Equity firm's ownership because they are the result of systemic plan that is difficult to execute, hence why C Private Equity originally designs it already during due diligence.

It is supported by the organizational development and operating enhancement initiatives once the company is acquired. C Private Equity also addresses an issue where companies often do not market themselves effectively because it does not have a marketing or sales team, or its go-to-market strategy is inefficient.

C Private equity will assign one of its operating partners to each company already in the deal sourcing stage, so the operating partners can oversee the investment and the value creation strategy and take a "hands-on" approach at the early stages of the investments. This partner typically sees the company through the whole process until exit.

While C Private Equity firm has a solid strategy with many years of experience implementing it, it is not a particularly differentiated or innovative strategy. Many firms aim to augment management teams and target greater operational improvements. C Private Equity firm has greater experience enacting these improvements in its target companies, but these initiatives are not differentiated themselves.

Investment Team and Culture

C Private equity firm believes in true partnership and has a flat ownership structure, where every partner has equal percentage of the ownership. This firm was founded in 1980's and has a great experience investing in private equity. The tenure of this firm is impressive as there has been very little turnover on the senior team. Only one partner left, as he believed the future of consumer investing lies in e-commerce businesses and taking a heavy data-based approach in investing which is not the focus of this firm and the firm views these businesses as expensive and risky. E-commerce businesses are companies born on the web, that sell exclusively on the internet, and then aim to expand to other retail channels.

The professionals are incentivized through carried interest[8], which is split primarily between the partners who have 80% and principals with 15%, 4% goes to the operations team and 1% to Vice Presidents. Associates, analysts and the non-investment professionals do not participate in the carry pool.

C Private Equity prides itself on being a close-knit firm that aims to have a flat organizational hierarchy. It has one investment committee process where everyone in the firm participates in the investment committee and everyone is expected to contribute their opinion to each investment, including associates and analysts which is highly unusual in the industry. Additionally, junior members of the team are encouraged to pursue their own initiatives.

C Private Equity firm has a highly structured review process. It promotes professionals to provide feedback to the firm as well and it evaluates it thoroughly. Additionally, it performs annual reviews as well as immediate feedback after each specific project.

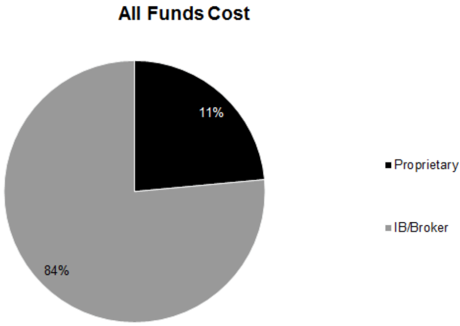
Additional Resources

C Private equity firm has a full-time operations team of three professionals in place. These professionals have prior experience as executives in companies in consumer sector. C Private equity firm picked these individuals according to the subsector focus it has. Therefore, one operating professional is an ex- restaurateur, one is ex-retailer, and lastly a former entrepreneur in the direct-to-consumer market.

Dealsourcing through network of relationships with intermediaries or executives in the consumer industry where it has operated since 2006. C Private Equity firm maintains a database to catalog meaningful conversations held with deal sources and executives. It doesn't have a preference in pursuing proprietary versus auction investments. As seen on the chart below, this looks quite different in comparison to SF Private Equity firm, where the ratios were reverse. C Private Equity fim sourced 84% of its deal flow through an investment bank.

[8] Carried Interest is a fee private equity firms collects from Limited Partners upon realization of investments.

Figure 24 - C Private Equity deal sourcing



Source: Author's work

Analysis of the opportunity set within the private equity firm's target sector

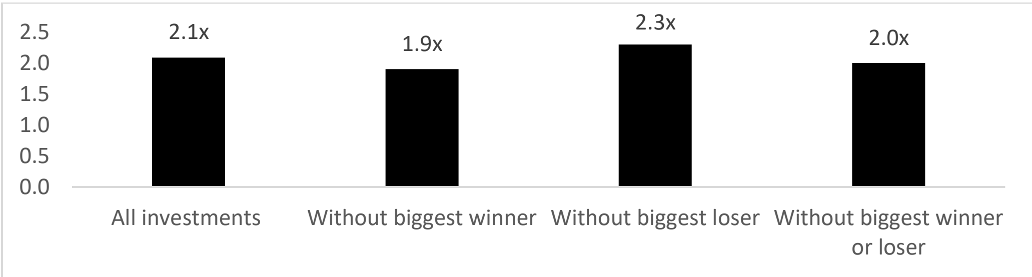
C Private Equity firm is currently facing strong headwinds as majority of its portfolio companies were forced to close during COVID-19 pandemic. Through that time the companies were burning through cash reserves on their balance sheets and some of them were facing loan defaults and covenant issues.

While the number of people filing for unemployment benefits in the United States are rising, the effects of COVID-19 pandemic on the economy continue to remain uncertain. The U.S. Department of Labor, announced that the number of Americans receiving unemployment benefits rose to 29.2 million in the first week of September and nearly one million of Americans a week are still losing their jobs. Consumer confidence has been volatile in this macroeconomic environment, and closures of the businesses directed by the governments also provide large complications in this industry. The country is facing urgent questions about how much stimulus is needed for reeling consumers and businesses and what a recovery might look like. Looking at the recovery post the Great Financial Crisis, affected industries could take more than five years for the most affected sectors to get back to 2019 level contributions to GDP.

Portfolio Analysis - Investment strategy fit

On the Winner & Loser analysis below, we can see that the performance without biggest winner or without biggest loser would be largely unaffected.

Figure 25 - Winner & Loser performance analysis (C Private Equity)



Source: Author's work

Risk appetite

Financial structuring will vary on a deal-by-deal basis. C Private equity firm has been using relatively higher debt in its transactions compared to SF Private equity. This firm likes to use 3.0-7.0x net debt at entry, which is not high for the industry but could be riskier in during macroeconomic downturns. In fact, during the Great Financial Crisis, several portfolio companies of this firm were struggling with debt covenants and C Private Equity firm was forced to inject additional equity into the portfolio to avoid breaches.

The geographical diversification of the fund is a concern as well as it has a single sector focus within the United States. While C Private Equity firm is very skilled and experienced in this sector and geography, there is a concentration risk on a standalone basis.

Exit strategy

There have been no exits in the prior funds, which is a concern. There have been no written off investments in the portfolio, therefore the returns are quite consistent, although, there are no clear winners either.

Due to a more time-consuming value creation strategy, the average holding period across companies has extended over 6 years, which is longer, compared to the average 3-5 years mentioned in the theoretical part of this diploma thesis. C Private Equity firm is focused on Multiple on Invested Capital (MOIC) as a metric for valuing its investments rather than Internal Rate of Return (IRR) because due to its long holding periods, IRR can decrease.

Alignment between General Partner and Limited Partner

The General Partner commitment is 2.0% which is not high but in line with the industry standard for lower middle market private equity firms. This is not uncommon, however, having more professionals participate in the general partner commitment is favorable.

C Private equity firm does not have any other product lines, therefore can fully focus on the private equity funds.

S&W

Strengths

1. Solid value creation strategy that focuses on truly improving the business that will position it on a path towards sustainable growth even in years post-exit
2. Dedicated team of operations professionals
3. Single product firm
4. Very limited turnover on the team

Weaknesses

1. Subsectors that C Private Equity firm invests in are relatively cyclical because they sell directly to the consumer
2. Deal sourcing is not an advantage as majority of its deal flow comes from investment banks which are usually deals with high fees tied to them
3. Single geographical focus on the United States
4. Junior team members do not receive carried interest and carried interest is largely distributed among partners

Opportunities

The strong expertise among C Private equity firm's operations team is appealing to investors looking for solid value creation strategies in private equity firms. This strength can be turned into opportunity in each portfolio company.

Threats

The industry headwinds caused by COVID-19 pandemic, create significant complications for the businesses targeted by C Private equity. This unfavourable environment could be harmful for investor's returns even in high quality businesses.

3.4 Formulation of suggestions and recommendation

Investors commit capital to private equity funds in search of financial returns. Private equity funds promise to deliver returns for their investors by following various value-creation strategies. Whether they actually create value – and if so, how exactly they do it – has been elusive so far. Hence why, two private equity firms were modeled in the previous chapter and investor's due diligence process was modeled. This chapter will explore the findings and focused formulating suggestions.

The purpose of this study was to improve understanding of value creation behind private equity performance as well as to examine the factors that investors need to explore to uncover the skills of General Partners to create persistent value with particular value creation drivers.

I have designed a table of important factors that investors should consider when evaluating a private equity firm:

Table 1 - Due diligence criteria

Criteria	SF Private Equity	C Private Equity
Focus	Consumer and Technology (specialist)	Consumer
Control vs. Minority	Both	Control
Geography	Global with majority in the U.S.	U.S. solely
Size	Fast growing companies Revenue: \$10 - \$30 million EBITDA: negative/positive	Buyout companies Enterprise Value: \$100 - \$400 million EBITDA: \$5 - \$50 million
Previous Performance	Fund I: 2015 vintage, 2.12x net MOIC; 25,3% net IRR Fund II: 2018 vintage, 1.08x net MOIC, 13% net IRR	Fund I: 2010 vintage, 2.1x net TVPI, 15.1% net IRR Fund II: 2017 vintage, 1.2x net TVPI, 10.4% net IRR
Average holding period	3 years	6-7 years
Loss ratios	2 losses	No losses
Debt usage	1-2x net debt	3.7x net debt

Management team experience (track record, background)	Strong background and experience although relatively young age of founders	Long tenure of senior team and vast experience in the consumer sector
Other product lines	No	No
Return drivers (use of debt, arbitrage, operational improvements, growth, synergies, add-ons?)	- Building out strategy - Focus on growth - Building out management teams	- Occasionally some level of debt - Operational improvements - Add-ons
Founder owned companies?	Yes, looks for companies at growth stage which are often founder owned businesses	Yes, first institutional capital in companies.

Source: Author's work

While previous performance is not an indicative of future performance, this metric is something every Limited Partner should consider in its due diligence process and figure out the underlying factors behind the performance. Strong performing funds are typically performing strongly for a reason and through a rigorous due diligence the Limited Partner can identify the underlying reasons of the strong performance of private equity firms. Among the factors that drive performance could be: 1. Value add strategy; 2. Analysis of the team and culture; 3.Additional resources in the firm; 4. Analysis of the opportunity set within the private equity firm's target strategy; 5. Portfolio Analysis; 6. Exit strategy; 7. Analysis of alignment between General Partner and Limited Partner

All of these areas have been examined through a loose SWOT analysis in the previous chapter for each one of the private equity firms.

The analysis documents that these private equity firms follow a number of value creation strategies, and most of the times manage to implement these strategies in their portfolio companies and generate financial returns for their investors by increasing operational efficiency and revenue growth within the companies they support.

Seven key implications emerge from this analysis.

1) Value Creation Strategy

Value creation strategy can be differentiated between private equity firms even within the same sector.

While SF Private equity uses little to no leverage, and focuses on relatively short-term augmenting management teams, adding internal resourcing and managing the talent as well as providing guidance in its portfolio companies, C Private equity approaches value creation through a long-term strategy and higher leverage levels. It applies all of its value creation levers in its portfolio companies right after acquiring the company, initially slowing down the growth until the changes made are fully implemented and take companies towards sustainable path of growth. Moreover, it focuses on advising the company on its strategy, consistent with SF private equity, however it goes on to focus on management and organizational developments with a high emphasis on operational improvements implemented through its experienced operations team. C Private equity firm is also experienced with add-on acquisitions for its portfolio companies.

From a value creation standpoint, C Private equity firm's strategy is more established and institutionalized, opposed to SF Private equity which appears to be more opportunistic.

2) Analysis of the team and culture

The investment team behind private equity fund is a very important asset of the firm. A high quality, experienced team can be one of the key differentiators behind the selection of attractive investments that deliver superior returns. Not only are the investment professionals important as individuals, but what is equally important is how they are structured and incentivized as a team.

The founders and partners at SF Private Equity do not possess as many years of experience as is common in private equity firms. They have entrepreneurial backgrounds which is favorable when partnering with founders of businesses as they can relate to them better than a typical private equity firm. SF Private equity firm also does not required an MBA degree for individuals to be promoted, which is a requirement at most Private equity firms, but prides itself in having high expectations for individuals to be promoted from within. The culture is also flat with casual culture and no turnover to date.

Opposed to that C Private equity firm also has a flat ownership structure and impressive little turnover that suggests this firm treats its employees well and they don't have a reason to leave. The carried interest is split equally between senior leadership and while associates and analysts do not receive carried interest, this is not uncommon as those are the most junior members and their role is to support the senior management team. They are incentivized in other ways, such as being encouraged to contribute their opinions during investment committee meetings and provide feedback to the firm on regular basis.

Due to the experience levels of partners at C Private equity firm, this firm is perceived as favorable. The length of experience is an important factor as these individuals have likely invested through downturns and have the experience of managing a portfolio in unfavorable environment.

3) Additional resources in the firm

Additional resources in private equity firms can be a financial burden but also a big advantage. It all comes down to all the levers private equity firms have on creating value. Having a full-time operations team is a big advantage for value creation in firms that primarily focus on operational improvements. However, SF Private equity targets companies in earlier stages of growth versus in buyout stages like C Private equity, therefore the need for a full-time operations team is not immediate and would only cause SF Private equity firm increases fixed expenses. Additionally, SF Private equity invested in developing a proprietary deal sourcing platform that through data analytics principles tracks consumer trends and companies in the industry. C Private equity relies on sourcing its deals the "old-fashioned" way through maintaining a database of intermediaries and executives which it has built relationships with over the years of the firm's presence. It sourced 84% of its deals through an intermediary, which is largely different from SF Private equity firm's proprietary process, and these deals could be more expensive, given the competition in the auction process and fees paid out to intermediaries. SF Private equity firm is likely getting deals at cheaper entry valuations as it has a proprietary deal sourcing process in place, which suggests less competition.

C Private equity has an advantage as it has a full time operations team, however, deal sourcing is an advantage for SF Private equity, therefore, there is no clear winner in this category.

4) Analysis of the opportunity set within the private equity firm's strategy

The macroeconomic environment in the sector or subsector private equity firms focus is at, can largely affect the returns of the fund.

This is a clear differentiator between the two firms. While SF Private equity firm focuses on subsectors with favorable tailwinds that became even more favorable after COVID-19 outbreak, C Private equity firm's subsectors were largely affected. SF Private equity is in clear advantage over C Private equity which focuses in subsectors that are affected in recession. SF Private equity's risk is even further mitigated by diversifying 50% of its portfolio away from purely consumer towards consumer software, which is an industry that has been on a rise for the past decade.

SF Private equity operates in more favorable sectors.

5) Portfolio analysis

While previous performance is not a guarantee of future performance, it is important to evaluate as well and the risk appetite that is behind generating those returns. C Private equity firm uses relatively higher debt in comparison to low or no debt for SF Private equity. The low debt levels for SF Private equity mitigate the risk from low downside protection. Diversification of the portfolio is also an advantage of SF Private equity, as SF Private equity invests globally across two sectors – consumer and technology – and C Private equity invests only in the United States and only in the consumer sector.

The Winner & Loser analysis also showed that SF Private equity firm, while having two losses in its portfolio, its winner investments generate superior returns. Opposed to that C Private equity firm has no losses but no clear winners either, therefore the performance does not generate outstanding returns and the performance without biggest winner or without biggest loser would be largely unaffected.

SF Private equity delivers superior returns at lower risk levels.

6) Exit strategy

The ability to exit portfolio companies and return capital with premiums to investors is the single most important differentiator between private equity firms. It is a significant risk to invest in private equity firms which have not realized any investments yet, as this ability is unclear. This is the case with C Private equity which has not yet had any exits in its portfolio.

SF Private equity realized all of its investments in its first fund, of which one was a write-off, but two investments realized 6.0x MOIC.

SF Private equity is better suited in this category.

7) Analysis of alignment between the General Partner and Limited Partner

Lastly, the alignment between the General Partner and Limited Partner is vital as it shows the General Partner's confidence in delivering returns and dedicated focus on the fund. SF Private equity favored in this section as it contributes 5% of committed capital to each fund and all partners and senior level professionals participate in the GP commitment. C Private equity has an industry standard level of GP commitment, 2.0%, but only professionals on the partner level participate in it.

Therefore, SF Private equity dominates this category.

3.4.1 Results and their discussion

The analysis above shows that SF Private equity dominates three out of seven due diligence categories and in one category, there is no clear winner. This can be seen in the multi-criteria analysis table.

In order to make the best informed decision, multi-criteria analysis was conducted. The goal was not to pick the investment that will have highest return, but the best risk adjusted investment. The best risk adjusted return was picked by analyzing seven different criteria that were assigned a significance factor. Each criteria was assigned points 1 to 5, with one being the lowest and 5 the highest. The assignment of points is largely subjective as the decider selects the importance of each criteria. Once the points were assigned, the standardized weight assignment was conducted.

Criteria for multi-criteria analysis:

1. Value creation strategy - Is the value add strategy of the firm proven, repeatable and differentiated from other private equity firms? (C_1)
2. Investment team and culture - Is the team experienced and the culture in the firm leads to incentivization of employees? (C_2)
3. Additional resources - Does the firm have additional resources besides the investment team such as deal sourcing team or operations team? (C_3)
4. Analysis of the opportunity set within target strategy - Does the firm focus in investments in industries with favorable macroeconomic tailwinds? (C_4)
5. Portfolio analysis - What is the risk appetite of the firm, including usage of debt? (C_5)
6. Exit strategy - What has the performance of the firm been? In other words, has the firm been able to exit its investments at premium and are there any losses in the portfolio? (C_6)
7. Alignment between General and Limited Partners - What is the alignment between the Limited Partner and General Partner in terms of General Partner commitment? (C_7)

First, the most and least important criteria was set out, which was the Opportunity set in the sector for the most important one and alignment between General and Limited Partner for the least important one. This step was repeated thereafter as again the most and least important criteria was picked out from the remaining 5, this time the most important one was exit strategy and least important one was portfolio analysis. This left three remaining criteria. From the last three, the most important one was additional resources in the firm and least important was value creation strategy. This least the last criteria, investment team and culture, right in the middle. As the last step of this analysis, standardized weights were assigned.

The points from 1-5 assigned to each criterion can be seen in the table below.

Table 2 - Multi-criteria analysis of two private equity firms

Criterion	**C_1**	**C_2**	**C_3**	**C_4**	**C_5**	**C_6**	**C_7**	**Total**
Points	3	3	4	5	2	5	1	**23**
Standardized weight	0,13	0,13	0,17	0,22	0,09	0,22	0,04	**1**
SF Private Equity			0,085	0,22	0,09	0,22	0,04	**15/0,655**
C Private Equity	0,13	0,13	0,085					**8/0,345**

Source: Author's work based on Fotr & Svecova

Based on the multi-criteria analysis, SF Private equity obtained 15 points out of 23 total points or 0,655 points in standardized weight which totaled 1, therefore this is the optimal investment.

To summarize the findings, SF Private equity would be a more suitable firm to invest in. This is also influenced by the current macroeconomic environment with favorable tailwinds towards software and omni channel consumer brands as well as more diversified portfolio in the case of SF Private equity firm. While SF Private Equity firm invests approximately 50% in software and 50% in consumer sector, C Private Equity firm has high concentration risk due to having 100% of its investments in the consumer sector. Another factor for concentration risk that was being considered is that SF Private equity firm invests globally instead of having 100% of its investments in the United States.

Macroeconomic tailwinds play a significant role in determining the appropriate private equity firm and a loose PEST analysis needs to be performed to determine the macro-environmental factor that could influence the firm's performance. As C Private Equity firm focuses on are traditionally consumer companies such as restaurants, retail and brick and mortar businesses, most of which were adversely influenced by the COVID-19 pandemic and related business closures. Opposed to that, SF Private Equity firm focuses on investing in consumer brands of future that are particularly favored by younger generations and sold through omni channel platforms, which in the majority of cases experienced accelerated growth due to the COVID-19 macroeconomic environment and consumer shift towards online shopping. These businesses weren't tied by large fixed costs such as rent expenditures unlike brick and mortar or restaurant businesses, where the primary source of revenue was coming from in-person visits. Additionally, SF Private equity firm also has approximately 50% of the portfolio invested across software businesses, which is the sector that experienced the largest growth during the COVID-19 pandemic so far.

4 Conclusion

The diploma thesis is focused on modeling the due diligence process that investors undergo in private equity. This is asset class is specific in its character and has yet to gain on popularity in Europe, however, it has become very prevalent in the United States. The primary goal of this diploma thesis is to introduce this asset class and subsequently uncover the topics, areas and factors that investors should consider during due diligence on private equity firms, when they are deciding on allocation of their capital.

This conclusion summarizes the most important findings that came across, based on the research undertaken for this thesis. In the first part, the theoretical-methodological part, he concept of private equity was introduced, placed it in the capital markets universe as an asset class, described how it functions in the entire ecosystem of public and private markets and touched upon the roles that different stakeholders in the process play. It was found through the research that due to the private equity's illiquidity and high minimum investments requirements, this asset class is rarely available to high net worth individuals and most commonly the investors are pension funds, insurance companies, and foundations that are looking for diversification of their portfolios and superior returns but can afford the long term illiquidity. Following the introduction of private equity, the main types of private equity investments by stage of company's life cycle were set out which most commonly are divided in three - venture capital, growth equity and buyout.

Subsequently, the private equity fund's life cycle is introduced, and is divided into four stages - fundraising, investment, holding and exit. The key takeaways from this section are the different actions that take place in each one of the stages in detail. Each of these phases carries significant importance and is essential for the completion of a successful fund. The organizational structure of the fund with all of its participants is also introduced to further complement the research. These include the General Partner, Limited Partners and the portfolio companies whose capital needs are the purpose why the two other parties come together. Value creation in private equity as set out in this diploma thesis, is an important topic that continues to reoccur in many studies, however, the research showed that the definitive answers are yet to be found. In the last subsection, the value creation process is illustrated and numerous studies found that that human capital resources are a significant differentiator in terms of the impact they have on the firm, the deal sourcing process, exiting companies and realizing returns for investors.

Private equity's popularity has been rapidly growing in the recent years as top quartile private equity firms tend to outperform public markets despite the high fees. According to Pitchbook (2020) data, in 2019, $1.47 trillion of investors‘ capital was deployed worldwide. It is clear in my findings that the popularity of this asset class is increasing, causing competition in the market to rise, which is putting higher pressures on private equity firms to achieve superior returns and continue to outperform the public markets and at the same time also deliver top quartile returns to its investors. The answer to how can investors distinguish between the private equity firms is explored in the analytical part of this diploma thesis which found seven areas in private equity firms that are the common differentiators to determine the quality of the private equity firm and its processes.

In order to model the decision-making process of private equity investors, due diligence was conducted on two fictional private equity firms in the consumer sector in the analytical part. The chapter describes the due diligence process that institutional private equity investor undertake when analyzing potential investments in the private equity funds. This part starts off by describing the private equity consumer sector universe, which includes mapping out the sector trends, its main actors and the subsectors that they typically focus on within consumer

sector. This is typically additional information that institutional investors gather on top of the due diligence. The analysis of two fictional firms that are based on real private equity firms comes thereafter. Through detailed analysis of each firm, a summary of findings for each one of them is compared to the other one and each section of due diligence is discussed to arrive at the final chapter, where suggestions and recommendations are formulated based on the findings from the due diligence process.

The firm due diligence modeling identified seven areas that were important to dissect. These were value-add strategy, analysis of the private equity team and culture in the firm, whether the firm has any additional resources such as operations team or deal sourcing team, a sector analysis of the opportunity set within the firm's target sector to uncover the potential headwinds or tailwinds, analysis of the portfolio of the firm, exit strategy and lastly the alignment between the General and Limited Partners to ensure proper incentives from the General Partner who has discretion over all the capital. Each firm due diligence is concluded with a loose SWOT analysis including the strengths and weaknesses of each firm. The SWOT analysis highlighted strong and weak areas and helped identified deal-breaker factors for investment decisions.

This modeling is very representational, and it is the biggest contribution of this diploma thesis as it sheds light on the real-life due diligence process from a point of view of the investors. Based on this process, they make final investment decisions. In the analytical part, it became apparent that all of these due diligence areas together are needed to conduct a well-informed decision on investments. Each area that was analyzed, brought up a different of strengths and weaknesses, and shall one of these areas be missing in the due diligence, the investor might decide for the wrong General Partner. It was found that while the value creation process of a particular private equity firm might be strong, it is not the only factor contributing to the superior returns and macroeconomic environment together with industry tailwinds proved to be of high importance.

Based on the modeling seven areas of due diligence were identified which were used in the multi-criteria analysis that further showed the optimal investment for institutional investors between the two private equity firms analyzed. The optimal investment was the SF private equity firm, as it dominated four out of seven due diligence areas, and additionally collected 15 points out of 23 total points or 0,655 points in standardized weight which totaled 1 in the multi-criteria analysis. This investment is suggested for institutional investors and was found to be more suitable as it operates in an industry with favorable tailwinds, has a low-risk appetite, possesses ability to exit investments and realize superior returns and is better aligned with Limited Partners due to is high and equally distributed General Partner commitment to the fund.

The diploma thesis introduced readers with the private equity universe in the United States and dove deep into the consumer sector due diligence in the practical part. The primary finding showed seven areas and their subsequent analysis that investors should consider in their due diligence process when committing capital to private equity that need to be research in their entirety to yield accurate results.

References

Internet sources

DOL: Department of Labor in the United States official website [online]. United States of America, 2020 [Retrieved 2020-10-20] Available from: www.dol.gov

GHERINI, A. *Private Equity Deal Origination Tips*, *According to Research* [online]. [Retrieved 2020-10-20]. Available from www.affinity.co website: https://www.affinity.co/blog/private-equity-deal-sourcing-tips

GOOLD, M., & BARBER, F. (2014, August). The Strategic Secret of Private Equity. Retrieved from Harvard Business Review website: https://hbr.org/2007/09/the-strategic-secret-of-private-equity

Gottschalg, O. F., & Phalippou, L.*The Truth About Private Equity Performance* [online]. Harvard Business Review, 2007. [Retrieved 2020-10-01] Available from: https://hbr.org/2007/12/the-truth-about-private-equity-performance

MALIK, N. *Better deal-sourcing trend continues* [online]. PE Hub, 2018. [Retrieved 2020-09-30] Available from: https://www.pehub.com/better-deal-sourcing-trend-continues/

Preqin | Alternative Assets Data, Solutions and Insights[online]. [Retrieved 2020-10-25] Available from www.preqin.com

RAMANI, P. *Evaluating Private Equity Performance: PME vs. Direct Alpha* [online]. CFA Institute, 2014. [Retrieved 2020-10-10] Available from: https://blogs.cfainstitute.org/investor/2014/07/23/evaluating-private-equity-performance-pme-vs-direct-alpha/

LAVEN PARTNERS. *The Value of Operational Due Diligence on Private Equity Funds* [online]. [Retrieved 2020-07-10], Available from: https://www.lavenpartners.com/thought-leadership/value-operational-due-diligence-private-equity-fun/

PEI, *Sector specialisation: Long delayed in Europe, now gaining traction* [online]. Private Equity International, 2019. [Retrieved 2020-08-03], Available from: https://www.privateequityinternational.com/sector-specialisation-long-delayed-europe-now-gaining-traction/

SEVC, D. *Czech Private Equity and Venture Capital Market: Growing Activity of Local Players* [online]. Deloitte, 2020. [Retrieved 2020-10-15], Available from https://www2.deloitte.com/cz/en/pages/press/articles/cesky-trh-private-equity-a-venture-capital.html#

THE PRIVATE EQUITEER, *4 Stages in the Life of a Private Equity Fund* [online]. Seeking Alpha, 2009. [Retrieved 2020-07-30] Available from: https://seekingalpha.com/article/172992-4-stages-in-the-life-of-a-private-equity-fund

THE WORLD BANK [online] [Retrieved 2020-10-20] Available from: www.worldbank.org

U.S. Securities and Exchange Commission (SEC) [online]. [Retrieved 2020-09-29]. Available from www.sec.gov website: https://www.sec.gov/Archives/edgar/data/1403256/000119312519032705/d696214dex101.htm

ZWEIG, J., & AUERBACH, A. *Latest Research & Perspectives* [online]. Cambridge Associates, 2014. [Retrieved 2020-09-30]. Available from: https://www.cambridgeassociates.com/insight/declaring-a-major-sector-focused-private-investment-funds/

Report

COURTOIS, Y. *Evaluating private equity' s performance* [online]. KPMG, 2016. Available from https://assets.kpmg/content/dam/kpmg/pdf/2016/06/evaluating-private-equitys performance.pdf.

EVCA, *Guide on Private Equity and Venture Capital for Entrepreneurs* [online]. EVCA, 2007. In *https://www.investeurope.eu/media/1809/guide-on-private-equity-and-venture-capital-2007.pdf*. Available from https://www.investeurope.eu/media/1809/guide-on-private-equity-and-venture-capital-2007.pdf.

INSTITUTIONAL LIMITED PARTNERS ASSOCIATION (ILPA) *Quarterly Reporting Standards* [online]. ILPA, 2016. Available from https://ilpa.org/wp-content/uploads/2016/09/ILPA-Best-Practices-Quarterly-Reporting-Standards_Version-1.1.pdf.

MACARTHUR, H. *Global Private Equity Report 2019* [online]. Bain & Company, 2019. Available from: https://www.bain.com/contentassets/875a49e26e9c4775942ec5b86084df0a/bain_report_private_equity_report_2019.pdf.

MCKINSEY. *Private markets come of age*. (2019). Retrieved from https://www.mckinsey.com/~/media/McKinsey/Industries/Private%20Equity%20and%20Principal%20Investors/Our%20Insights/Private%20markets%20come%20of%20age/Private-markets-come-of-age-McKinsey-Global-Private-Markets-Review-2019-vF.ashx

BLACKSTONE. *The Life Cycle of Private Equity PRIVATE WEALTH SOLUTIONS*. (2020). Retrieved from https://pws.blackstone.com/wp-content/uploads/sites/5/2020/09/the_life_cycle_of_private_equity_insights.pdf

Literature

Books

BELL, E. & BRYMAN A. *Business Research Methods.* England: OUP Oxford, 2011. 808 pages ISBN 978-0199583409

CASELLI, S. & NEGRI, G. *Private equity and venture capital in Europe : Markets, techniques, and deals*. Second edition. London: Academic Press, 2018. 350 pages ISBN 978-0128122556.

CRESWELL, J. W. & PLANO, L. V. *Designing and conducting mixed methods research*. Third edition. Los Angeles: Sage Publications, 2017. 544 pages ISBN 978-1506386621

CUMMING, D. *The Oxford handbook of private equity*. New York: Oxford University Press, 2012. 768 pages ISBN 0195391586

FOTR, J. & SVECOVA, L. *Manažerské rozhodování: postupy, metody a nástroje.* Prague: Ekopress, 2010. 474 pages ISBN 978-8086929590

GILLIGAN, J., WRIGHT, M., & ENGLAND, I. *Private equity demystified : an explanatory guide : third edition : abstract*. London: Icaew, 2014. 221 pages ISBN 978-1783631681

GRABOWSKI, R. J., HARRINGTON, J. P., NUNES, C. *2016 Valuation Handbook : Guide To Cost Of Capital : Market Results Through 2015*. Hoboken, New Jersey: Wiley & Sons, 2016. 384 pages ISBN 978-1119109761

GOMPERS, P. & LERNER, J. *The venture capital cycle*. Second edition. Cambridge, Mass.: Mit Press, 2006. 582 pages ISBN 978-0262572385

MATHONET P., & MEYER, T. *J-curve exposure : managing a portfolio of venture capital and private equity funds*. Hoboken, New Jersey: John Wiley & Sons, 2007. 476 pages ISBN 978-0470033272

METRICK, A., YASUDA, A. *Venture Capital and the Finance of Innovation*. Second edition. Hoboken, New Jersey: John Wiley & Sons, 2010. 576 pages ISBN 978-0470454701

SCHELL, J. *Private equity funds : business structure and operations*. Revised edition. New York: Law Journal Press, 2020. 1808 pages ISBN 978-1588520883

SCHUBOTZ, D. *Participatory Research: Why and how to involve people in research.* First edition. United Kingdom: SAGE Publications, 2019. 264 pages ISBN 978-1446273364

YATES, G., & HINCHCLIFFE, M. *A Practical Guide to Private Equity Transactions*. Cambridge University Press, 2010. 416 pages ISBN 978-0748777914.

ZEISBERGER, C., PRAHL, M., & WHITE, B. *Mastering private equity ; Private equity in action*. Hoboken, New Jersey: John Wiley & Sons, Inc, 2017. 368 pages ISBN 978-1119327974

Journal Articles

AIGNER, P., ALBRECHT, S., BEYSCHLAG, G., FRIEDERICH, T., KALEPKY, M., & ZAGST, R. What Drives PE? Analyses of Success Factors for Private Equity Funds. *The Journal of Private Equity*, 2008. vol. *11*, no. 4, p. 63–85. https://doi.org/10.3905/jpe.2008.710907

ALMALKI, S. Integrating Quantitative and Qualitative Data in Mixed Methods Research—Challenges and Benefits. *Journal of Education and Learning*, 2016, vol. *5*, no. 3, p. 288. https://doi.org/10.5539/jel.v5n3p288

BENGTSSON, M. How to plan and perform a qualitative study using content analysis. *NursingPlus* Open, 2016. vol. 2, p. 8-14. https://doi.org/10.1016/j.npls.2016.01.001.

BIESINGER, M., BIRCAN, C., & LJUNGQVIST, A. Value Creation in Private Equity. *SSRN Electronic Journal, 2020*. https://doi.org/10.2139/ssrn.3607996

BOLLEN, N. P. B., & SENSOY, B. A. How Much for a Haircut? Illiquidity, Secondary Markets, and the Value of Private Equity. *SSRN Electronic Journal, 2015*. https://doi.org/10.2139/ssrn.2608549

BRAUN, R., JENKINSON, T., & STOFF, I. How Persistent is Private Equity Performance? Evidence from Deal-Level Data. *SSRN Electronic Journal*, 2013, vol. *123*, no. 2. https://doi.org/10.2139/ssrn.2314400

BRIGGS, A. The Use of Modelling for Theory Building in Qualitative Analysis. *British Educational Research Journal,* 2007, vol. 33, no. 4, p. 589-603. https://doi.org/10.1080/01411920701434102

COOPER, H., HEDGES, L., & VALENTINE, J. Handbook of Research Synthesis and Meta-Analysis. *The. Russell Sage Foundation*, 2009. http://www.jstor.org/stable/10.7758/9781610441384

CRESSY, R. C., MUNARI, F., & MALIPIERO, A. Playing to their Strengths? Evidence that Specialization in the Private Equity Industry Confers Competitive Advantage. *SSRN Electronic Journal*, 2007, vol. *13* no. 4. https://doi.org/10.2139/ssrn.964367

FOLUS, D., & BOUTRON, E. Exit Strategies in Private Equity. *Private Equity*, 2015, p. 215–236. https://doi.org/10.1093/acprof:oso/9780199375875.003.0013

GOMPERS, P. A., KAPLAN, S. N., & MUKHARLYAMOV, V. What Do Private Equity Firms Say They Do? *SSRN Electronic Journal*, 2015, vol. *121*, no. 3. https://doi.org/10.2139/ssrn.2600524

GREDIL, O., GRIFFITHS, B. E., & STUCKE, R. Benchmarking Private Equity: The Direct Alpha Method. *SSRN Electronic Journal*, 2014. https://doi.org/10.2139/ssrn.2403521

HARRIS, R. S., JENKINSON, T., & KAPLAN, S. N. Private Equity Performance: What Do We Know? *The Journal of Finance*, 2014, vol. *69* no. 5, p. 1851–1882. https://doi.org/10.1111/jofi.12154

HASSAN, A. E., & LEECE, D. Agency and Information Problems inVenture Capital Markets. *The Journal of Private Equity*, 2007, vol. *10* no. 2, p. 93–112. https://doi.org/10.3905/jpe.2007.682349

KAPLAN, S. N., & STRÖMBERG, P. J. Leveraged Buyouts and Private Equity. *SSRN Electronic Journal*, 2009, vol. *23* no. 1. https://doi.org/10.2139/ssrn.1194962

KORTEWEG, A., & SORENSEN, M. Skill and luck in private equity performance. *Journal of Financial Economics*, 2017, vol. *124* no. 3, p. 535–562. https://doi.org/10.1016/j.jfineco.2017.03.006

LIEBER, D. Proactive Portfolio Management. *The Journal of Private Equity*, 2014, vol. *7* no. 2, p. 72–82. https://doi.org/10.3905/jpe.2004.391051

LJUNGQVIST, O., & SØREIDE, E. Preoperative fasting. *British Journal of Surgery*, 2003, vol. *90* no. 4, p. 400–406. https://doi.org/10.1002/bjs.4066

LOPEZ DE SILANES, F., PHALIPPOU, L., & GOTTSCHALG, O. Giants at the Gate: On the Cross-Section of Private Equity Investment Returns. *SSRN Electronic Journal, 2009*. https://doi.org/10.2139/ssrn.1363883

SCHWIENBACHER, A. An Empirical Analysis of Venture Capital Exits in Europe and the United States. *SSRN Electronic Journal, 2002*. https://doi.org/10.2139/ssrn.302001

SCHOLES, L., WESTHEAD P., WRIGHT M. Strategic changes in family firms post management buyout: Ownership and governance issues. *International Small Business Journal*, 2010. vol. 28, no. 5, p. 505-521. doi:10.1177/0266242610370390

TETEN, D., & FARMER, C. Where Are the Deals? Private Equity and Venture CapitalFunds' Best Practices in Sourcing New Investments. *The Journal of Private Equity*, 2010, vol. *14*, no. 1, p. 32–52. https://doi.org/10.3905/jpe.2010.14.1.032

VAN OSNABRUGGE, M. A comparison of business angel and venture capitalist investment procedures: An agency theory-based analysis. *Venture Capital*, 2000, vol. *2*, no. 2, p. 91–109. https://doi.org/10.1080/136910600295729

Attachments

Attachment 1 – Data for modeling Private Equity firms

SF Private Equity Firm data used in:

- Winner Loser Performance Analysis data
- Deal sourcing pie chart
- Sector chart

Note: The analysis is an average of all multiples and then deducting biggest winner, biggest loser, or both.

Fund	Multiple on Invested Capital (MOIC)	Deal source	Sector
1	6.00x	Proprietary	Branded Consumer
1	0.00x	Proprietary	Branded Consumer
1	6.00x	IB/Broker	Technology
1	1.40x	Proprietary	Technology
1	1.00x	IB/Broker	Branded Consumer
1	1.20x	Proprietary	Technology
1	1.60x	Proprietary	Branded Consumer
2	1.00x	Proprietary	Technology
2	0.00x	Proprietary	Branded Consumer
2	7.10x	Proprietary	Branded Consumer
2	1.00x	Proprietary	Technology
2	1.00x	Proprietary	Technology

Note: Information above is model for the purpose of this diploma thesis and does not reflect real values

Source: Author’s work

Attachment 2 C Private Equity Firm data used in:

- Winner Loser Performance Analysis data
- Deal sourcing pie chart

Fund	Multiple on Invested Capital (MOIC)	Deal source	Sector
1	3.1x	Proprietary	Consumer
1	1.1x	IB/Broker	Consumer
1	2.3x	IB/Broker	Consumer
1	2.0x	IB/Broker	Consumer

1	2.0x	IB/Broker	Consumer
1	2.8x	Proprietary	Consumer
1	2.0x	Proprietary	Consumer
1	4.9x	IB/Broker	Consumer
1	7.8x	IB/Broker	Consumer
1	1.0x	IB/Broker	Consumer
1	3.3x	IB/Broker	Consumer
2	1.4x	IB/Broker	Consumer
2	1.3x	IB/Broker	Consumer
2	1.0x	Proprietary	Consumer
2	1.4x	IB/Broker	Consumer
2	1.4x	IB/Broker	Consumer
2	1.2x	Proprietary	Consumer
2	1.0x	IB/Broker	Consumer
2	1.0x	Proprietary	Consumer

Note: Information above is model for the purpose of this diploma thesis and does not reflect real values

Source: Author's work

Attachment 2 - Semi-structure interview questions

1. Does your firm have in-house resources such as a full-time operations team ?
2. Does your firm have external resources such as a network of external advisors or CEO's that help with deal sourcing or strategy implementation?
3. How has your firm worked with portfolio companies to optimize functions such as sales, marketing, finance, operations, human resources and other key areas?
4. Does your firm have experience with add on acquisitions to platform companies?
5. What are the background and past experience of the senior professionals on your team?
6. What is the capacity of your team in terms of time they can allocate to each investment?
7. How would you describe the culture in your firm?
8. What is the deal sourcing process at your firm like?
9. Do you have any internal human capital resources for specificaly focused on deal sourcing?
10. What kind of trends are you seeing in the market right now?
11. What is your past performance?
12. What is your sector, sub-sector, or specific company focus?
13. What is your exit strategy like?
14. Have you had any losses or outstanding winners in the portfolio?
15. How much is the GP commitments?
16. How do you incentivize the team members?