ISTANBUL TİCARET UNIVERSITY
GRADUATE SCHOOL OF FINANCE
INTERNATIONAL FINANCE MASTER PROGRAM

THE EFFECTS OF PRIVATE EQUITY ON THE FINANCIAL PERFORMANCE OF THE FIRMS

Master Thesis

Mariam Robleh Farah

Istanbul, 2023

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Dedication

I dedicate all the required information in this title ‘The effects of private equity on the financial performance of firms’ has been written in accordance with academic manners and ethical commitment. I would clarify that all the materials, sources, data, and all extra inputs have benefited well throughout the writing procedure of this thesis. All matters contained in this thesis are my personal opinion and do not reflect the official view of Istanbul Ticaret University.

Mariam Robleh Farah

ABSTRACT

Private equity investments are taking a larger part in the finance world. Their role is of interest for both businesses and academicians. The purpose of this thesis is to see how private equity affects the financial performance of firms. In this thesis, an econometric model is used to evaluate the effect of private equity on the financial performance of firms. The random effects model is used to figure out how private equity works and what kind of relationship there is between private equity and how well small and medium-sized businesses (SMEs) do financially after receiving funding from private equity. The data used for this thesis comes from the Thomson Reuters Refinitiv database between 2012 and 2020, 181 unlisted companies backed by venture capital funds are collected. But due to insufficient financial information, only the study confirmed 54 unlisted companies, including 9 French, 9 Canadian, 9 American, 9 Mexican, 9 London, and 9 German companies that received private equity support between 2012 and 2020 on Thompson Reuters are examined in this thesis . This thesis looked at three independent variables - board size, number of deals, the amount of capital invested and a dependent variable - private equity return. The results of this thesis indicate that the number of transactions does not accurately predict the financial performance of the firm. This indicates that there does not appear to be a relationship between the number of transactions of the fund and the variable examined in this thesis. A firm's financial performance improves with the amount of capital invested , which is also what other researchers have predicted. Finally, board size has a negative effect on return of private equity. A firm's financial performance is not affected by board size.

Keywords*:* Private Equity; Alternative Investment; financial Performance; Venture Capital; Buyout

ÖZET

Özel sermaye yatırımları finans dünyasında giderek daha büyük bir yer tutuyor. Rolleri hem işletmeler hem de akademisyenler için ilgi çekicidir. Bu tezin amacı, özel sermayenin firmaların finansal performansını nasıl etkilediğini görmektir. Bu tezde, özel sermayenin firmaların finansal performansı üzerindeki etkisini değerlendirmek için ekonometrik bir model kullanılmıştır. Rassal etkiler modeli, özel sermayenin nasıl çalıştığını ve özel sermaye ile küçük ve orta ölçekli işletmelerin (KOBİ'ler) özel sermayeden fon aldıktan sonra finansal olarak ne kadar iyi performans gösterdikleri arasında ne tür bir ilişki olduğunu anlamak için kullanılmıştır. Bu tez için kullanılan veriler, 2012-2020 yılları arasında Thomson Reuters Refinitiv veri tabanından alınmıştır ve risk sermayesi fonları tarafından desteklenen 181 listelenmemiş şirket toplanmıştır. Ancak yetersiz finansal bilgi nedeniyle, çalışmamızda bu şirketlerden yalnızca 54'ü incelenmiştir. Bu tezde üç bağımsız değişken - yönetim kurulu büyüklüğü, anlaşma sayısı ve girişim sermayesi fonu - ve bir bağımlı değişken - girişim sermayesi getirisi - incelenmiştir. Bu tezin sonuçları, işlem sayısının firmanın finansal performansını doğru bir şekilde tahmin etmediğini göstermektedir. Bu durum, fonun işlem sayısı ile bu tezde incelenen değişken arasında bir ilişki olmadığını göstermektedir. Bir firmanın finansal performansı, diğer araştırmacıların da öngördüğü gibi, özel sermaye fonu ile iyileşmektedir. Son olarak, yönetim kurulu büyüklüğünün öz sermaye karlılığı üzerinde negatif bir etkisi vardır. Bir firmanın finansal performansı yönetim kurulu büyüklüğünden etkilenmemektedir.

Anahtar Kelimeler: Özel Sermaye; Alternatif Yatırım; Genel Ortaklar; Sınırlı Ortak; Finansal Performans; Risk Sermayesi; Satın Alma.

TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ARDC : American Research and Development Corporation

GDP :Growth Domestic Product

GPs: General Partner

IBOs. : Investor-Led Buyouts

IPO:Initial Public Offering

IRR. : Internal Rate of Return

LBD: Longitudinal Business Database

LBO : Leverage Buyouts

LPs. : Limited Partner

MBIs. : Management Buy-Ins

MBOs. : Management Buyouts

OECD. : Organization for Economic Cooperation and Development

OLS. : Ordinary Least Squares

PE: Private Equity

ROE. : Return On Equity

SMEs. : Small and Medium-sized Enterprises

TVE: Thomson Venture Economics

INTRODUCTION

Today, private equity has become one of the most discussed topics since its emergence in the investment sector, which has become a fundamental phenomenon for the successful development of unlisted companies, private equity has emerged as an attractive investment option for financial institutions such as banks and exchanges. Since the emergence of this investment trend, small and medium-sized companies are increasingly interested in this type of financing. Private equity differs from other traditional forms of financing in that it is based on an individual's knowledge, skills, habits, and worldview. This research focuses primarily on the impact of private equity on the financial performance of the firm.

Private Equity is a financing tool that provides fundamental support to unlisted companies (hence the name Private Equity) throughout their life cycle, by financing the various stages of creation, start-up, growth, transmission and even takeover. This instrument is essential for the financial, strategic, and relational support it provides. It is not only a source of financing and support for unlisted companies throughout their existence, but also a real agent of change that helps to change mentalities, management, and the company as a whole.

On the macro-economic level, private equity also plays a crucial part in the development of nations. It contributes significantly to the increase in productive capacity and job creation. It also has the advantage of increasing tax revenues and saving foreign currency. The private equity industry is fairly recent, sixty years at most for the United States, a little over twenty years for France. It remained essentially national until the emergence of the "new economy" at the end of the 1990s and, more recently, the creation of regional and even global funds. To begin with, venture capital was the first type of private capital to emerge in the United States after World War II. This was possible because pension funds and insurance companies had access to long-term savings. The American association of reference is the NVCA (National Venture Capital Association) which is only interested in Venture Capital.

Investors in private equity look for new companies with competitive advantages and a presence in high-growth sectors. The purpose of these funds is to discover firms with arithmetic growth in order to provide the capital and experience required for exponential growth. Private equity investors are a feasible alternative to conventional financing since they are ideally suited to manage the risks associated with investing in companies. Moreover, PE investors employ distinct governance and control techniques (Sahlman, 1990).

For several years, private equity in unlisted growth companies has been the subject of numerous studies, particularly in North America, where this form of financing is mainly widespread, but also in Europe. A series of studies has focused on this particular form of equity investment in start-ups and developing companies. In particular, the contribution of private equity financing to value creation for early-stage companies has been the subject of much discourse by academics and experts.

To be more precise, several scholars have proposed that, in addition to financial support, private equity firms provide other services to private firms that can significantly increase the chances of success for those firms (see, for example, Casamatta 2003 and Schmidt 2003). Practitioners also assert that PE firms contribute significantly to the success of private firms in many other ways, including by helping them recruit qualified executives, offering better incentives for the management and staff of the company, in addition to providing access to their network of contacts with potential vendors and customers in the market for the product. The PE business stands out because it can find companies with high return potential and give them the money and skills they need to grow very quickly. The goal is to build a profitable portfolio or buy a company. Private equity funds distribute prospectuses to investors to support potential enterprises and make profits over time (Bolton, 2012). Debt or equity investments can provide these funds. Private equity firms and investors focus on corporate buyouts and private corporations. Private equity funds often put their money into unlisted stocks and need the company looking for investment to enter into a contractual funding agreement with the firm.

Many authors have explained private equity's risk-return characteristics, market economics, and regulatory issues. However, few of these authors discuss how well enterprises do financially after receiving alternative funding, and almost all disagree with the other method for evaluating success. Scholars criticize private equity firms. Jenkins (2013) investigated US venture capital governance and structure. Gakure and Karanja (2012) identified the most essential elements of private equity investment governance and structure in venture capital organizations. Gakure and Karanja (2012) analyzed the fundamental characteristics of private equity investments. Kung'u (2013) investigated the investment strategies, entrance channels, and overall performance of private equity funds. Thus, the corporate finance effects of private equity investments are unknown. The main problem of this thesis is to determine how private equity impact the financial performance of the firms.

Secondary data are utilized in the data analysis of this thesis. The random effects model is used to comprehend how private equity operates and the nature of the link between private equity and the financial performance of PE backed. The data used for this thesis comes from the Thomson Reuters Refinitiv database between 2012 and 2020, 181 unlisted companies backed by venture capital funds are collected. But due to insufficient financial information, only the study confirmed 54 unlisted companies, including 9 French, 9 Canadian, 9 American, 9 Mexican, 9 London, and 9 German companies that received private equity support between 2012 and 2020 on Thompson Reuters are examined in this study. This thesis looked at three independent variables - board size of director, number of deals, and the amount of capital invested and a dependent variable - private equity return. These variables lead us to formulate the hypotheses of the study: H1: There is no correlation between the amount of capital invested and the financial performance of companies.H2: Private equity has no impact on the corporate governance. H3: The number of transactions has a beneficial impact on the financial performance of the company.

The purpose of this thesis is to examine how private equity influences the financial performance of companies. This study also addresses private equity markets, players,

investment strategies and activities, funds, structure, and market growth and development. The study aims to understand the technical characteristics of private equity and to conduct a literature review to identify on the financial performance of companies. The growth of private equity firms and the development of the market are also examined ,this thesis explores private equity and its components.

The main contribution of the thesis is to help academics to understand how private equity affects corporate finances. It provides evidence-based research on private equity investments. It is expected that the study will contribute to a broader and more intensive knowledge of the empirically established relationship between private equity investment and financial performance of PE-backed firms. Other researchers can use the research results to ensure understanding of the issues highlighted and use them to reference their work or as a basis for any future studies. This thesis also provide clarity on the impact of private equity investments on company performance. Private investors will therefore use the study to assess the need to provide this type of financing - that is, whether the impact resulting from the study is positive. Small businesses that are not aware of private equity investments will gain knowledge and therefore consider private equity as a financing option to expand their business. Those with financial capacity will consider setting up private equity funds to finance companies in order to earn a good return and create jobs, which will result in better performance and development of the economy .

Private equity investors fund unlisted companies in this thesis. This thesis will exclusively examine venture capital firms (buyouts, for example). This thesis analyzes private equity-backed companies using Thomson Reuters Eikon and DataStream financial data. The empirical analysis includes only data-available companies.

The thesis follows this outline: The first chapter, after this introduction, provides a comprehensive overview of the private equity industry, the second chapter presents the literature reviews and the theory of this study, and the third chapter discusses the data methodology used to examine the effects of private equity on firm performance. Finally, the last chapter is devoted to the results obtained. In conclusion, Finally, we will conclude the study with a conclusion and then propose some recommendations for further research.

1. THE PRIVATE EQUITY INDUSTRY

1.1 Definition and Characteristics of Private Equity

The private equity market is an especially important sector for start-ups, private middle market organizations, financially distressed companies, and public companies looking to finance buyouts. Over the recent few years, business financing has grown significantly. In terms of growth, it has exceeded the public stock and bond markets as well as the private placement debt market. Moreover, it has also outpaced the private placement debt market.

Academic research has defined private equity differently depending on the economy. Institutions and wealthy people supply private equity to invest in and own businesses. Risky, successful, and long-term, private equity. Private equity, or "patient capital," prefers financial gains over short-term payments. This approach described involvement as temporary, minority, and focused on building the firm, increasing its worth, and maybe obtaining a substantial capital gain upon sale by combining financial and non-financial skills.

Heed (2010) says that private equity is "a merger-and-acquisition activity backed by large amounts of debt, mostly aimed at privately held shares with the help of professional management" (p. 26). PE is unlisted equity capital (Klein, Chapman & Mondelli, 2013). PE firms sell their portfolio companies after a certain time (Rossi & Martelanc, 2013). VC and LBO investments make up private equity (Portmann & Mlambo, 2013).

Pension funds, banks, insurance companies, mutual funds, HNWIs, the government, and businesses are LP investors (Giligan & Wright, 2010; Rossi & Martelanc, 2013). Most LPs are pension funds and life insurers. PE buys existing companies, while VC funds early-stage and high-growth startups (Latini, Fontes-Filho & Chambers, 2014; Portmann & Mlambo, 2013). Innovation drives startups and high-growth companies. Private equity buyouts, startups, and venture capital will be studied. Private equity firms link investors and portfolio companies (Cumming & Johan, 2007). PE firms manage investment funds, and "limited partners" (LPs) provide capital. General partners manage portfolio companies (Crifo & Forget, 2013). LPs do not manage PE. GPs are liable for all debt, their responsibility is fixed to the capital provided (Heed, 2010).

Private equity is an alternative investment for investors since it primarily serves companies whose investments are not stated on the capital markets, and it will be a source of alternative financing for small and medium-sized enterprises (SME), which drive our economy and entrepreneurship. Private equity investment focuses on small, technologically advanced businesses that can earn a high return on their investment (Tuncel, 2000: 6). Private equity is more than a risky investment. Innovation drives it (Ceylan, 2000: 306). Technology and innovative products and services can cover all industries.

Investors like private equity. Its main benefits are strong returns, portfolio diversification, and lower volatility. Legally accessing company data is vital (EVCA, 2004: 5–6). Insider trading is illegal in the stock market, as everyone knows. Private equity-backed companies are not publicly listed, so insiders can be questioned.

Private equity businesses' strategies depend on their investment money. (Heed, 2010): Generalist funds invest in venture capital, buyouts, and more. funds with a specific investing mission, such as technology, healthcare, or education; buyout funds, which buy equity in mature companies. Secondary funds and funds of funds allow investors to buy limited partnership shares in other funds.

"Growth capital" (or "expansion capital") is a private equity investment that helps a well-established company develop new goods or technology, enter new industries or markets, grow internally, or make foreign acquisitions. Despite the availability of information on the topic, venture capital activities can extend beyond seed, early-stage, and late-stage investments to encompass growth capital investments. Organizational structures can be changed with the help of private equity. The term "buy-out" refers to an executive change. “Replacement" is buying minority ownership to replace stockholders. Finally, "turnaround" refers to investments in non-normal and pathological company cycles like corporate reorganization. The private equity firm has become more diverse based on the reference business system and how the market is changing. This has allowed the company to offer more intervention options and business models. Banks are unable to provide most business and transactional loans following the 2008 financial crisis due to new regulations.

Many private equity industry pioneers have moved to other financial areas. This has allowed them to provide new products, especially in private lending, which helps businesses grow and is analogous to private equity.

Fund investment vehicles are more inventive and diverse. Direct participation by sovereign wealth funds or major institutional investors, non-conventional arrangements like club agreements, and co-investment between traditional operators and other subjects expand the definition of private equity (companies, family offices, etc.).Private equity has been rebranded as "private capital" to better represent the new industries' dominant position in the economy. The opening of the market is also good news for the business world. Overall, it is safe to say that institutional investors across the country place a high value on private capital. It is public and well-run by experts.

1.2 Private Equity Funds: Organizational Structure

Similarly to mutual funds and hedge funds, private equity funds are a sort of pooled investment instrument. The adviser gathers all of the investors' contributions into the fund and invests that money on the investors' behalf. When compared to mutual funds or hedge funds, public stock exchange trading is not something a private equity firm conducts.

Private equity has evolved significantly in terms of size and sophistication over the past few decades. Large-company buyout funds and small- and medium-sized company buyout funds exist (medium company buyouts).There are other funds that focus on healthy and successful companies, as well as funds that focus on the turnaround of distressed companies. Expert "general partners" manage private equity funds. "Limited partners"—corporate and public pension funds, foundations, endowments, insurance firms, investment banks, and affluent families and individuals—invest in the funds. Due to its less predictability, private equity is considered riskier than public equity. In this market, private equity issuers, intermediaries, and investors are most important.

Another factor in market segmentation is size. Local funds invest in local companies and range from €50 million to €500 million, while global funds invest in companies in any market and range from €2 billion to €10 billion. figure 1 shows a typical PE fund and its stakeholders.

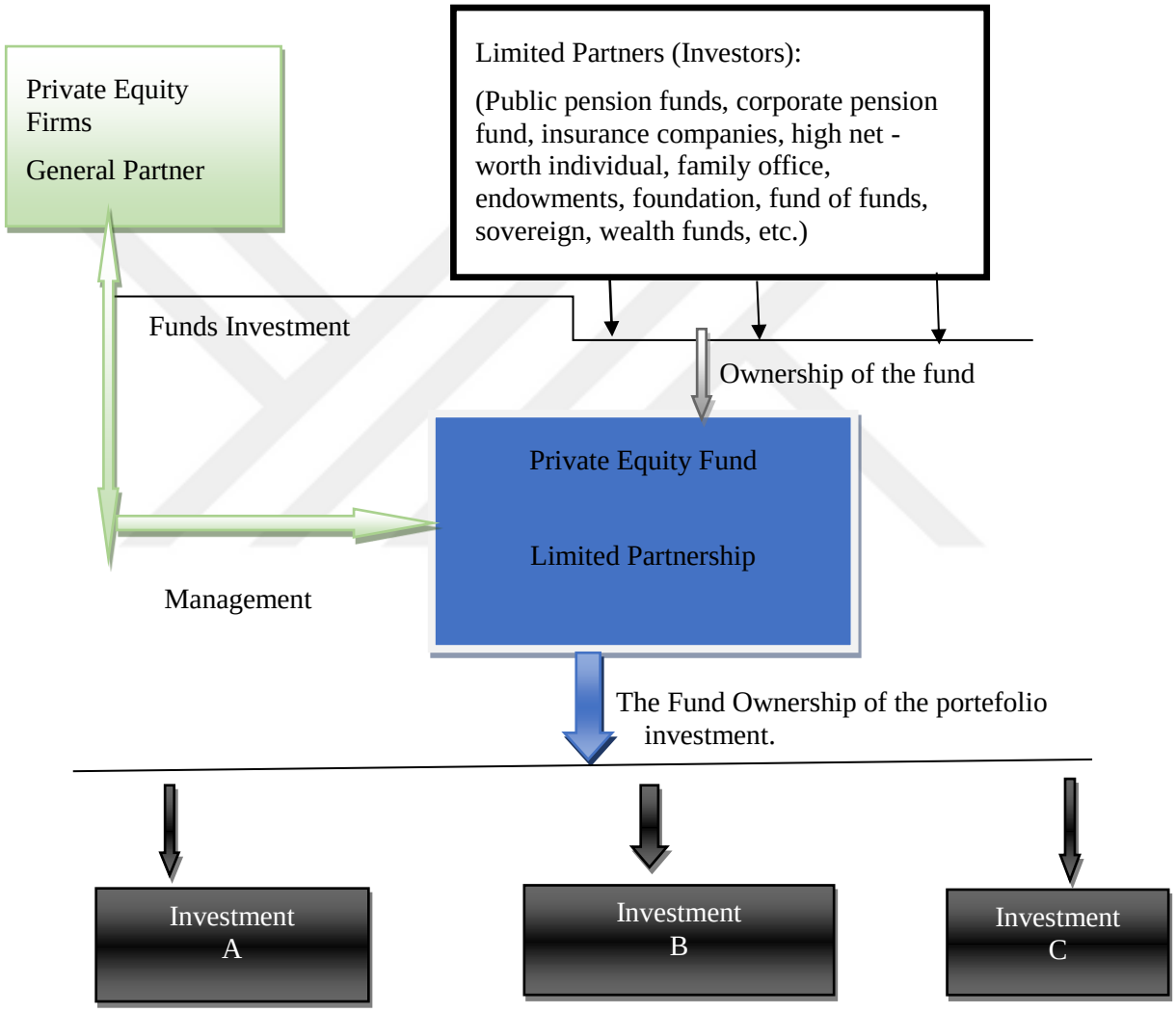

Figure 1:Structure of Typical Private Equity Fund
Source:(Gilligan/wrigh, 2010)

This method involves a limited partner (investor)-general partner agreement (the manager of the fund). The general partner (GP) is fully liable for the limited partnership's

obligations, including his or her own assets. LPs have liability limited to their capital commitment.

There are only a few unusual administrative and control rights that still belong to the limited partners. These rights include the power to decide how to get rid of the general partner, how to liquidate the vehicle, and whether or not to allow operations that could cause a conflict of interest. Limited partners also have the power to decide how to liquidate the vehicle. The provision of investment advice to the private equity fund that was founded by investors is the primary function of the private equity business. Since the corporation serves as the general partner of the fund and is responsible for making investment decisions and monitoring the fund's investments, it is likely that the company was rewarded for these activities.

Private equity professionals frequently possess a diverse set of talents and experiences, which is seen favorably by the majority of investors when assembling an investment team. Investors will only put their money into a company with a solid plan, the right people, and proof that they have had success with a comparable technique in the past. Not only must a fund's investment plan appear attractive for it to be a smart investment, but the limited partners must also believe that their interests and those of the general partner are aligned. There are numerous approaches to achieving proper alignment:-In order to obtain more funding, the GPs must establish a positive reputation. This is due to the fact that there are relatively few active participants in the market. The interests of the general partners are in line with the investors because they have an equity stake in the fund. It is believed that the GP has "skin in the game" because they are heavily involved in it.- GPs are paid based on how well they do their jobs.

Their primary source of anticipated income is "carried interest," or a percentage of investment gains. Investors set up partnership agreements with direct control mechanisms and sit on advisory boards. Private equity funds rely on investors for funding. The limited partners put up equity money and give the general partner (GP) the responsibility of putting the partnership's investment strategy into action and generating risk-adjusted returns in line with the limited partnership agreement. After a fund is established, limited

partners have no say in the management of the capital and are treated as mere financial backers. To counter this, a board of advisors is a common fixture in the fund industry. The largest and most seasoned limited partners (LPs) in the fund often make up this board. The advisory board usually has two annual meetings to discuss partnership operations and potential conflicts of interest and offer advice and support to the management team. Non-advisory board limited partners (LPs) are kept apprised of the fund's progress through an annual meeting and quarterly reports.

1.3 The Players of Private Equity

Private equity fund investors include pension and endowment funds, investment banks, insurance companies, banks, family offices, high net worth individuals, funds of funds and fund management. Figure 2 describes private equity issuers, intermediaries, and investors.

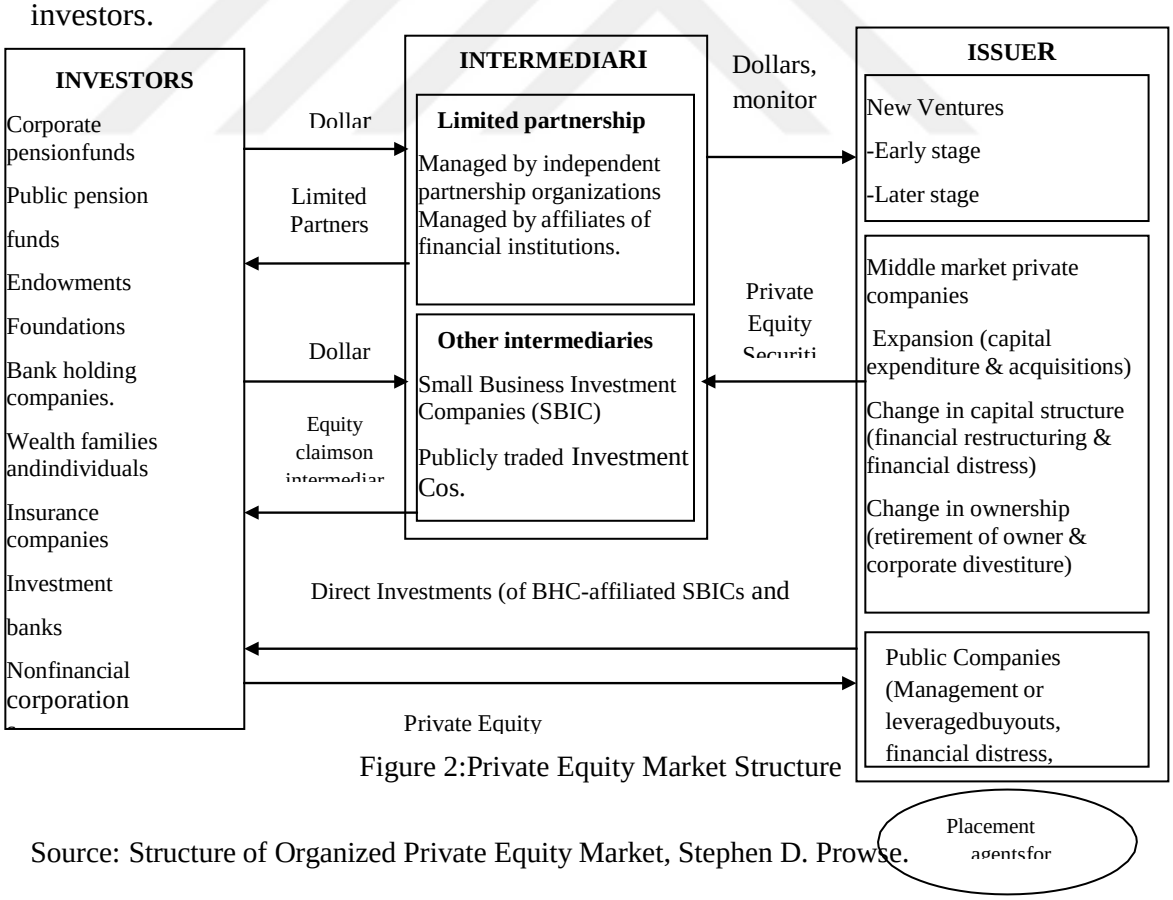

Figure 2:Private Equity Market Structure

Source: Structure of Organized Private Equity Market, Stephen D. Prowse.

1.3.1 Investors

The private equity industry is made up of many different types of investors. Private equity offers higher risk-adjusted returns and more diversification opportunities than other investment options, which is why most institutional investors choose to put their money there, as reported by Povaly (2007).Strategically linked banks may participate in private equity and provide credit opportunities to paired enterprises. Non-financial firms are permitted to invest in startups whose strategic and competitive objectives align with their own. Investors from all sectors of society are attracted to the private equity industry. According to Povaly (2007), most institutional investors put money into private equity because it offers better financial returns than other investment options, while providing better diversification opportunities. Strategically linked banks may participate in private equity and provide credit opportunities to paired enterprises. Non-financial companies are allowed to invest in startups whose strategic and competitive objectives align with their own.

1.3.2 Intermediaries

Private equity firms, which are set up as limited partnerships and take care of about 80% of private equity assets, function as intermediaries (Prowse, 1997). In this model, the limited partners are institutions that invest money, and the general partners are a group of private equity managers with a lot of experience. IFSL Research (2008) says that only about a quarter of private equity investments go through specialized intermediaries. The rest are put directly into businesses through co-investments.

LPs last 10 years, investors have little control over how the partnership is managed, which could lead to a dispute with partnership managers. Two key methods can resolve these disputes. Partnership managers need an excellent record to build new alliances. Partnership profits make up a large part of their pay. Partnership managers participate in their investments. They can vote and serve on boards. Partnership managers help operate businesses, create corporate strategies, and discover suppliers. Because of the difficulty of active management, partnership managers specialize by investment type, sector, or region.

1.3.3 Issuers

Investors invest their funds in companies called "issuers" through private equity. Issuers are those who cannot get money from anywhere else, like a bank loan or the public stock market. Firms that want to raise capital have a wide range of sizes and reasons for doing so. Companies with high growth potential, such as those developing new technologies, may seek venture capital financing. Later-stage companies may benefit from growth capital when traditional sources of financing, such as public funds, are not feasible. Buyouts (through debt sales and private equity) and distressed financing are two options that a publicly traded company can explore when it is experiencing financial or operational difficulties. When a company goes public, it must raise private funds to cover the expenses associated with going public (registration, regulation, disclosure, etc.).

1.3.4 Agents and Consultants

Private equity information providers function as advisors. They analyze investment partnerships for investors, acquire funds, and provide investment advisory services, decreasing information costs. Advisors help investors with investment structure, timing, pricing, and contract discussions. Private equity firms hire agents to connect them to limited partnerships seeking institutional investors. (1997). Agents help private companies and limited partnerships decide how, when, and how much to sell private equity. The limited partnership analysis of advisors benefits private equity investors the most.

1.4 Types of Private Equity

There are four forms of private equity investing: venture capital, mezzanine, buyout, and distressed investing (sometimes known as exceptional situations) (Metrick, 2006).

1.4.1 Venture Capital

Venture capital helps companies succeed. Many of the funds are allocated to start-ups rather than established companies. Capital for expansion or innovation is known as "growth capital," and it typically takes the form of relatively minor investments in already-established enterprises. Growth capital is needed by companies that are already profitable

enough to pay for things like expansion and acquisitions but are not yet ready to take on further debt. Growth capital in the form of private investors purchasing publicly listed shares is known as "private investment in public equity" (PIPE). Historically, the disciplines of information technology and healthcare have been the primary targets of venture capital investments (Metrick, 2006; Zarutskie, 2008). The industries of communication, semiconductors, software, and hardware make up the first group. Second, the healthcare industry as a whole, including the biological sciences, medical technology, and related services.

1.4.2 Distressed Investments

Distressed investments are made in enterprises that are bankrupt or on the verge of bankruptcy. These investments are issued in the form of corporate restructuring and rescue money due to a company's inability to meet its financial and operational obligations. Startup companies can obtain funding from angel investors in exchange for convertible debt or equity ownership in the company. Angel investors invest their own money, whereas venture capitalists manage others'. Angel investors risk a lot and hope to make a lot.

1.4.3 Mezzanine Finance

The expansion of corporate activities can be financed through the use of mezzanine financing, which is a combination of debt and equity financing. It permits you to turn debt into equity if you are unable to repay your loan in full and on time. Mezzanine capital is a form of subordinated debt that is superior to ordinary equity and plays an important part in the overall capital structure of a company. Secured or other senior lenders anticipate a higher rate of return than mezzanine loan investors. Mezzanine financing, which combines debt and equity, can finance corporate expansion. Mezzanine finance is loan-equity financing.

1.4.4 Buyout

Buying out a company gives it majority control, which is different from venture capital. A standard buyout involves a small proportion of stock (20%–40%) and a lot of borrowed funding (from banks, public markets, and mezzanine investors) (Kaplan and Stromberg, 2008; Metrick, 2006; IFSL Research, 2008). Kaplan, Strömberg, Metrick, and Axelson (2008) Thus, these investments are called leveraged buyouts (LBOs). Buyout investments, unlike venture capital, typically target mature, capital-intensive enterprises (Kaplan and Stromberg, 2008; Metrick, 2006; Renneboog and Simons, 2005). Public mega-mergers get the most attention (e.g., Hilton Hotels, Chrysler). Public firm buyouts are a minor percentage of total buyouts (Wright et al., 2007). Distributors often come from huge company branches, family-owned firms, and secondary buyouts (Meuleman et al., 2008). Early 21st-century worldwide M&A activity was 25% buyout funds (Metrick, 2006).In 2007, global buyout investments totaled $634.2 billion. Buyouts comprised 89% of private equity transactions in 2007. The average deal size is much higher than other private equity categories (IFSL Research, 2008). In the first half of 2008, buyout activity was lower than in 2007. (2008). The subprime mortgage crisis froze credit markets, making it hard for buyout firms to get debt financing.

1.5 Advantages of the Private Equity Model

This business model is claimed to have various benefits. According to Froud and Williams (2007), PE is a new, purer kind of capitalism. In truth, private equity would bring management and shareholders' interests closer together, enhancing corporate efficiency and profitability and unleashing billions of euros in value for owners. Acquired companies would provide value by increasing their productivity. The advantages of the private equity market from both the supply (investors) and demand (investees) perspectives are listed below (target companies).

1.5.1 Investors' Perspective

Institutional investors, such as public and private pension funds, insurance companies, investment bank subsidiaries, etc., as well as wealthy individuals and families, are among the investors. Typically, their investments represent 95 percent or more of a fund's capital.

One of the primary reasons for the growth of the PE market is the expectation of substantially higher profits than are available in other sectors. Private equity investments are perceived to be significantly riskier and less liquid than regular investing. The high anticipated profits, however, draw institutional investors who are willing to accept such risk and illiquidity (Fenn et al., 1997).

Second, the investment process is fraught with ambiguous conflicts of interest for both investors and target companies (Cumming & Walz, 2010). The private equity firm is less likely to make decisions that hurt its investors since it has so much sway over the target company. Also, when a company is bought, the management of the company being bought becomes a shareholder. This aligns their interests with those of the other investors.

The target company's performance also affects his pay. Debt helps portfolio firm management be more diligent in collecting interest payments (Figure 1, point 3), which was previously difficult for unduly passive owners (Jensen, 1989). PE-owned companies have higher management incentives than comparable organizations, according to Cumming, Siegel, and Wright (2007) and Leslie and Oyer (2007). (2008). Finally, PE was founded because investors lacked time and knowledge to choose companies to invest in.

1.5.2 The Target Company's Point of View

Second, the investment process is fraught with ambiguous conflicts of interest for both investors and target companies (Cumming & Walz, 2010). The private equity firm is less likely to make decisions that hurt its investors since it has so much sway over the target company. Also, when a company is bought, the management of the company being bought becomes a shareholder. This aligns their interests with those of the other investors :

• Companies seeking growth capital: Most agreements are in the higher middle market (€50 million to €500 million) and lower middle market (€10 million to €50 million). These steady, prosperous corporations use the PE market to finance acquisitions or CAPEX Finally, they always have bank loans due to their significant asset base, such as inventories or receivables. Despite this, financial products rarely meet their financing demands (Fenn et al., 1997).

• Private enterprises seeking capital structure and ownership changes, most often due to retirement. Many family-owned firms do not want to be listed, thus more are selling to private investors (Ahlers, Hack, & Kellermanns, 2014). All family-owned private enterprises need management succession, usually the owners, or liquidity at some point.

• Financially distressed companies: The public and private PE markets invest in financially troubled companies .Turnaround firms fund most of the company to make it profitable and sell it. Financially distressed publicly traded corporations rarely offer public shares, even at a discount, and are often prohibited from debt markets. These companies can easily convince a financial actor who understands the investment's risks.

• Listed companies can buyout on the PE market. Some corporations issue finance and stock for management or leveraged buyouts. Others may seek private money to evade shareholder registration and public disclosure during financial difficulties (Fenn et al., 1997).

1.6 Different Stages of Private Equity

Figure 3 shows how the amount of capital required varies depending on a company's stage of development as well as the different kinds of private equity investments that are made.

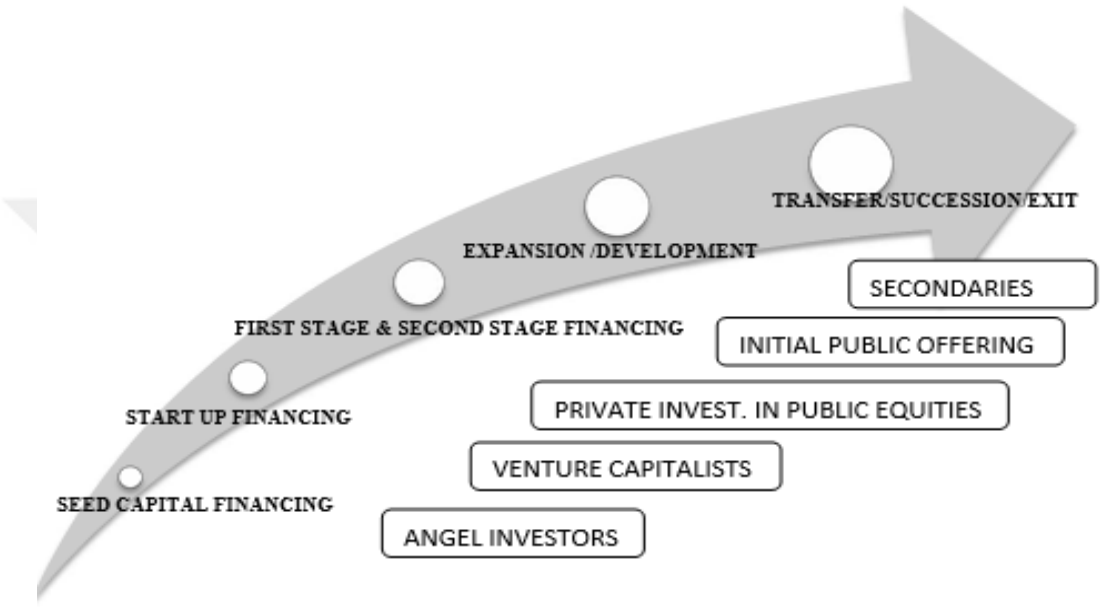

Figure 3: Private Equity Financing in Different Stages.

Source: Private Equity Stage 2012

1.6.1 Seed Capital

Before a company can get to the "start-up" phase, it needs seed funding to research, evaluate, and develop its first idea. Most investors are angel investors, business owners, or people who used to own businesses (EVCA, 2007). It means giving a business idea a small amount of money to help it grow.

1.6.2 Financing for Start Ups

Financing is the money saved for product development and the first marketing efforts. Businesses are still making plans and have not yet opened their doors. When the business idea or plan is developed and finalized, a number of risk-takers help the entrepreneur set up the business. These projects are high-risk and only need money for research and

development.

1.6.3 Financing for the First and Second Stages (Post Creation Financing)

After a business is started, it needs money to sell its products and make more of them. As the business grows, it will need money to keep running.

1.6.4 Financing For the Third Stage (Expansion/Development)

For a growth company to grow, it needs capital. During this time, the company will have reached its breakeven point and will need bridge financing, rescue financing, or turnaround financing to boost production, increase sales, introduce new products or services, or make deals with other companies to merge with or buy them. PIPEs, Leveraged Buyout (LBO), Management Buyout (MBO), and other types of transfer, succession, and exit PIPEs, which stand for "Private Investment in Public Equities," are deals in which common stock, preferred stock, or convertible securities that are traded publicly are sold to private investors.

1.7 Evolution of Private Equity in the Worlds

During the early part of the twentieth century, private equity was mostly a practice of the wealthy. During the early half of the century, investors included the Vanderbilts, Whitneys, Rockefellers, and Warburgs. In 1901, J.P. Morgan acquired the pioneering firm. With his money, he purchased Carnegie Steel. Cumming called the second quarter of 2007 the "golden age" for private equity markets. Hedge funds, sovereign wealth funds, and other factors have made private equity businesses more appealing than public enterprises. US and European private equity developed after WWII.The merging of venture capital firms American Research and Development Corporation (ARDC) and J.H. Whitney & Company in 1946 created private equity. The 1958 Small Business Investment Act gave U.S. startups federal funding. Private equity funds were standardized in the 1960s. McLean Industries, Inc. bought the Pan-Atlantic Steamship Company and Waterman Steamship Corporation in January and May 1955. first leveraged acquisition signs. 1960s McLean agreements proliferated.. Similar strategies were used in other

buyouts, making them "leveraged." About 2,000 leveraged buyouts with a total estimated value of over $250 million occurred between 1979 and 1989. A rise in the number of leveraged buyouts has benefited the private equity industry. Bain Capital, Chemical Venture Partners, Hellman & Friedman, Hicks & Haas (after Hicks, Muse, Tate & Furst), The Blackstone Group, Doughty Hanson, BC Partners, and The Carlyle Group were founded at this time. Private equity is funded by venture capital and buyout mezzanine funds. Private equity in the United States increased from $1 billion in 1979 to $60 billion in 1988. The markets for high-yield trash bonds made this possible. In 1988, Kohlberg Kravis Roberts purchased RJR Nabisco with the help of high-yield financing. The expansion of Canada's VC industry is subsidized. Canada's private equity sector has expanded in recent years because of the emergence of cutting-edge innovative firms and bold investors. Until the 1980s, the private equity industry in the United Kingdom encountered political, social, cultural, and financial difficulties.

The unlisted securities market, lower tax rates, and other developments have helped the UK venture capital industry grow halfway through the 1980s. Private equity investments comprise 1.5% of GDP. The Brazilian private equity sector initially received little government support. Brazil had one private equity worker from 1992 to 1994. As other industries' rules relaxed, the industry expanded. Brazil's economy was in crisis between 2000 and 2002 due to a falling currency and other major difficulties. Drexel Burnham Lambert's bankruptcy and the high yield market's shutdown in 1989 and 1990 ended the buyout market. 1992 brought improved venture funding and leveraged buyouts. Investor commitments increased the most, from $20.8 billion in 1992 to $305.7 billion in 2000.

In the 1990s, many U.S. private equity funds entered Mexico. Production, communications, and entertainment were major investments. In Mexico, Chase Capital Partners, Blackstone Group, and Bank of America Private Equity Partners had the most money. Private investments surged in other industries, but when many economies fell, the technology bubble burst in 2000, and Brazil had a crisis, they left the information technology and telecommunications sectors. Thus, institutional investors and foreign high-net-worth individuals funded local private equity funds. Singapore's private equity

industry enjoys official government support.

In 1985, the Economic Development Board (ECB) created a venture capital fund to help businesses become self-sufficient. Singaporean venture capitalists helped Malaysian private equity firms The government subsidized venture capital ownership and provided tax breaks. Research shows that Malaysia had 98 venture capital businesses in 2007. After the March 2000 NASDAQ meltdown, numerous venture capital investments were written off. Many venture investors minimize their commitments by selling assets on secondary markets for a significant discount. PricewaterhouseCoopers' Money Tree Survey indicated minimal change in venture capital investments from 2003 to the second quarter of 2005. Venture capital investments favored Internet growth from 2004 to 2007.

Research shows that Malaysia has 98 venture capital businesses in 2007. Venture capital investments were written off after the March 2000 NASDAQ crash. Many venture investors minimize their commitments by selling assets on secondary markets for a significant discount. From 2003 through the second quarter of 2005, PricewaterhouseCoopers' Money Tree Survey showed venture capital investments unchanged. Internet growth from 2004 to 2007 favored venture capital investments. SunGard, the Corporation, and Metro-Goldwyn-Mayer began in 2005. 2006 saw the largest buyouts in the US, Europe, and Asia-Pacific. Private equity investors bought 654 US companies for $375 billion in 2006. After the 2007–2008 credit crisis, Citigroup and UBS AG took huge loan loss write-downs. Kohlberg Kravis Roberts and Goldman Sachs Capital Partners withdrew from the acquisition of Harman International, several private equity firms and large investment banks struggled during the credit crunch, etc. Fundraising totaled $1.4 trillion in the three years preceding 2009. In 2010, $150 billion was raised, a slight increase from 2009. The worldwide economy recovered at different speeds in 2010, according to "The European Private Equity Market Outlook," June 2010. The V-shaped comeback in developing economies and the U-shaped recovery in most developed economies show this. The IMF's 2010 Global Financial Stability Map found that investors' appetite for risk dropped as asset financial risks grew between 2009 and 2010. In an April 2011 study by EMPEA and Coller Capital, limited partners expect

private equity market allocation to rise from 13% to 18% over the following two years. 78% of emerging Asia private equity (PE) fund LPs expect net yearly returns of 16 percent or greater. more than any other investment type (Returns from Indian PE, KPMG, 2011). Private equity deals in India rank sixth, behind the US, UK, Spain, France, and China. India briefly overtook China in 2010.

Over 18,000 PE funds exist—60% more than five years ago. PE manages $4.4 trillion, $1 trillion of which is uninvested. In 2020, 4,500 private equity companies will finance 16,000 US businesses. In 2022, 13,620 US private equity, hedge fund, and investment vehicle firms will exist. It increased by 0.9% since 2021.

The Largest Private Equity Firms in The World : As of March 31, 2022, Thoma Bravo, the leading software investment business, managed about $114 billion. The company has invested over $190 billion in 380 top software and internet firms. Thoma Bravo's buy-and-build strategy and partnership-driven investment approach distinguish it. Improving innovation, operating results, and growth with portfolio company management teams Thoma Bravo promotes ecosystem collaboration and innovation.

TA Group (TA) has spearheaded global private equity expansion since 1968. The firm has raised $47.5 billion and invested in over 560 firms in its five target industries—technology, healthcare, financial services, consumer products, and business services—in North America, Europe, and Asia-Pacific. TA makes long-term investments. It helps owners and managers grow and produce value. Meritocracy, entrepreneurialism, open communication, intellectual honesty, and personal accountability help TA and its investments prosper.

TA's international team of over 110 investment experts seeks and invests in companies with strong business concepts and long-term growth potential. The firm employs its experience, global resources, and value-added skills. Strategic Resource and Capital Markets Groups assist the firm .There are offices for TA located in Boston, Menlo Park, Austin, London, Mumbai, and Hong Kong.

Bain Capital is a private investment firm that few can match. Around $160 billion is under

its management at the moment. Since it was founded in 1984, the company has been at the forefront of growth investment and was the first to popularize the "value-added" approach to investing in the financial markets. To help disruptive companies reach new heights, Bain Capital employs a tried-and-true method that is centered on teamwork. For decades, the team has invested in and built industry leaders all across the world. Since Bain Capital operates in so many different sectors and geographies, it can provide management teams with unique insights as companies expand into new consumer markets and develop worldwide. For 15 years, PG Growth has met the particular demands of early-stage firms via minority growth investments, growth buyouts, and specialty finance. Since 2007, TPG Growth has collaborated with innovative entrepreneurs, founders, and management teams. Growth equity requires conviction, adaptability, and partnership. They have the opportunity to invest early in promising ventures, particularly in sectors that are going through a period of inflection, upheaval, or significant change. A total of $13.9 billion is under TPG Growth's management. Airbnb, Beautycounter, C3, Calm, Campus Activewear, GoHealth Urgent Care, Greenhouse, Medical Solutions, MX, Nykaa, People 2.0, Pharmeasy, Spotify, Uber, and Zscaler received investment.

BXG is Blackstone's platform for growth equity investments. They have the support of the largest alternative asset manager in the world and are seasoned growth investors. Growing businesses that want to mitigate execution risks receive funding from BXG. Blackstone is the world leader in alternative asset management. The company's goal is to boost the economy and provide lasting benefits to its shareholders, clientele, and host communities. The ability to hire talented individuals and raise capital quickly allows businesses to adapt to changing circumstances. Blackstone's $941 billion in assets include private equity, real estate, public debt and equity, infrastructure, life sciences, growth equity, opportunistic non-investment grade credit, real assets, and secondary funds.

Francisco Partners (FP) is a top tech investor. It has a solid sector concentration and outstanding returns. FP's private equity and credit funds help technology companies thrive by providing flexible financing and collaboration. FP is honored to be one of the world's

largest and most active technology investment businesses. company raised $45 billion. Francisco Partners has invested in or acquired 400 technology startups over the past 20 years. HEC is a long-term, active, and successful technology investor. FP said that its $13.5 billion flagship fund, Francisco Partners VII, L.P., and its $3.3 billion Agility III fund had raised $17 billion. The company raised capital for both private equity funds from 160 institutional investors in 30 countries. Limited partners include family offices, foundations, endowments, insurance firms, sovereign wealth funds, and pension funds. European, Asian, Middle Eastern, South American, and US investors supported FP.

2. THEORICAL FRAMEWORK AND LITERATURE REVIEWS

This thesis examines how private equity affects the financial performance of companies. This section discusses the conceptual framework and literature review of the research. Appropriate hypotheses are explored in the theoretical framework. In this literature review, the findings of many researchers on private equity and firm profitability are analyzed.

2.1 Theorical Framework

In this research, it is interesting to draw on different theories to explain the research. The study is based on the agency theory and the corporate governance.

2.1.1 Agency Theory

In private equity, the term "information asymmetry" refers to the imbalance of knowledge between the investor and the entrepreneur or managers of the firm receiving the capital (2003). Private equity investors, entrepreneurs, and management often find themselves at odds with one another due, in large part, to what Kaplan and Stromberg (2004) call "the agency problem." Their results are in line with those predicted by traditional agency theories like Stiglitz's (1974) and Grossman and Hart's (1977). (1983). Experts warn that tensions can arise between an agent and a principal when both sides have incentive to update a project for different reasons. "Agency cost" refers to the expenses incurred because of agency issues (Shapiro, 2005; Jensen and Meckling, 1976). These expenses are referred to as "principal monitoring costs, agent bonding costs, and residual loss" by Jensen and Meckling (1976). In this way, private equity investors can learn about the costs required by the firm to keep ownership and management separate.

In markets or contracts, adverse selection occurs when one party lacks sufficient knowledge to determine whether the other party is good or bad (Spremann, 1990). There are two approaches to discussing this dilemma in the field of private equity investments (Raphael, 2011). In the next few paragraphs, Kaplan, Stromberg (2004) and Gompers (1996) explain this. In PE fundraising, entrepreneurs fight for equity funds by providing

optimistic estimates of strong returns and enormous growth for their organization while concealing adverse realities that would make them less attractive to funds if exposed. General partners do not complete background investigations on new recipient firms to demonstrate that they can get receivers to the capital market faster than established PE firms and strengthen their identity.

Moral hazard and holdup are the second and third types of agency, respectively. Adam Smith, a renowned economist, and philosopher originally discussed moral hazard in his book "The Wealth of Nations" (Smith & Garnier, 1838). Spreman (1990) states that this problem might develop when an agent uses hidden information or acts without the principal's knowledge to maximize his personal utility at the expense of the principal's best interests. Private equity investors cannot fully manage agents as business owners. Instead, they should focus on the company's long-term goals. (Kaplan & Stromberg, 2004; Koryak&Smolarski, 2008) Pre-contractual screening, post-contractual monitoring, and incentives solve most agency difficulties for investors.

On the other hand, Milgrom and Roberts (1992) assert that the return on effort of completely monitored employees justifies the expense of perfect monitoring. According to Jensen and Meckling (1976), the costs of monitoring are proportional to the intensity and stringency of the monitoring. Investors strive to keep monitoring expenses as low as feasible. Consequently, there is and will never be a perfect method for businesses to maintain control (Merchant & Van der Stede, 2007). Governance measures including board composition and founder involvement can assist investors and owners collaborate and improve the private equity-backed company's performance. When the agent exploits contract flaws, the issue develops (Raphael, 2011). Due to people' tendency to take advantage and their inability to think clearly, future contracts will always be inadequate.

In their own best interests, agents divulge plans that had been kept secret and try to renegotiate as soon as the first money is spent and "sunk costs" have been paid (Spremann, 1990). According to the theory of agency, equity investors are able to and do enter into detailed contracts. However, Fama and Jensen (1983) state that the benefits of the agent's duties may be greater than the benefits of drafting and executing a thorough contract.

The agency theory supports Larcker's (1983) claim that agents respect short-term judgments and maximize firm resources in the given time. Shareholders prefer long-term earnings over short-term gains. Agency problems arise. PE fund investors give management stock options and performance rewards to address this issue. In 1987, Travlos and Waegele found that long-term pay plans improved performance. Lewellen, Loderer, and Rosenfield (1985) found that managerial stock ownership schemes yield higher returns.

Private equity firms have avoided principal-agent conflicts in various ways. Private equity firms can mitigate these a priori agency conflicts, according to Kaplan and Stromberg (2003), by utilizing specific financial contracts, making ex ante project selections, and participating in the management and monitoring of projects. Due to these regulations, PE is heavily involved in the after-the-fact administration of investment projects (Sahlman, 1990). Theoretically, private equity monitoring programs eliminate this information gap, encouraging entrepreneurs to work more and enhancing firm success (Amit et al. 1998). Sapienza et al. assert that they can contribute value to firms by, for instance, establishing close ties with managers (1996). Private equity can exert influence via collaborating with the manager and serving on the firm's board of directors, as well as by hiring managers, assisting with the formulation of strategy, and providing firms with access to their personal networks (Sapienza and Gupta, 1994). (Sapienza et al., 1996). Private equity's involvement in the management of companies following an investment should often result in improved performance. When the managers' and investors' aims are matched, and they both want to make and maintain as much money as possible, private equity investments perform best. The agency theory is applicable to this thesis since it attempts to align the interests of shareholders and managers. When private equity funds employed managers whose personal wealth is related to the worth of their company, they made superior investment judgments. Managers can be compensated depending on how well they perform their duties, and shareholders can keep a close check on them and intervene if necessary to boost investors' profits and improve the financial health of these companies. Agency theories are supported by independent variables such as invested capital (fund size, age, industry type, sector), number of transactions (holding period of the investment),

and type of investment (minority or majority) to examine information asymmetry and the different interests and motivations that may exist between the investor and the beneficial manager. Agency theories focus on aspects such as control to increase the profitability of the enterprise and organizational effectiveness.

2.1.2 Corporate Governance

Agency problems and governance are synonymous. As discussed in the preceding categories of agency theory, agency difficulties exert pressure on governance (Thomsen, 2008). Separating ownership from control, which might result in agency issues, necessitates the existence of corporate governance systems (Fama & Jensen, 1983; Thomsen, 2008). Adam Smith argued in "The Wealth of Nations" that "the directors of such firms are in charge of other people's money rather than their own, thus it is unreasonable to expect them to watch over it with the same nervous care as participants in a private co-partnership." As the employees of a wealthy man, they frequently disregard minor details since they believe it is not in their master's best interest and it is easy for them to avoid doing so. Since this is the case, "negligence and profligacy must constantly prevail, more or less, in the management of such a company's business" (Smith & Garnier, 1838, p. 311), therefore strong governance is frequently required as a remedy (Thomsen, 2008). Investors' rights are protected by law (La Porta et al., 2000). Jensen and Meckling (1976) and Hart (1995) argue that principals' and agents' interests may differ in implementing laws. Laws may not protect investors. Authorities can exploit investors. Institutional failures harm investors' investment gains, according to La Porta et al. (1998). PE investors must prepare to limit investor legal protections, which vary by country, institution, and industry (La Porta et al., 2000). Equity investors on the beneficiary firm's board could align managers' and investors' interests (Berger et al., 2009). Garca-Herrero and Santabárbara (2008) disagreed over beneficiary firm board investors.

2.2 Literature Review: Private Equity and Value Creation

The purpose of this section is to provide an overview of the relevant literature with a focus on private equity in corporate financial performance.

2.2.1 Private Equity

Profitable businesses are funded by private equity. Gompers and Lerner (2001) suggest understanding the venture capital cycle to understand private equity. Fundraising, investment, monitoring, and exit comprise this cycle. The venture capital fund is investigated, proposals are found and selected, and efforts are analyzed. During follow-up, we double-check the results. Sharing administration is beneficial. Private equity funds compensate investors through "exit mechanisms" to end the cycle. Numerous studies show that private equity and venture capital help startups succeed.

Active investors manage private equity funds to add value to a company. Private equity and venture capital funds can help companies run more efficiently by monitoring them (Barry et al., 1990). Gilligan and Wright (2010) argue that the fund's investment structure determines how private equity affects a company's financial performance. Private equity funds a company; therefore it affects its performance. Two sources of private financing are venture capital and buyouts. Venture capital is a form of private equity that is provided to companies that are just starting out and have demonstrated great potential for future growth. Venture partners are accountable for the management of venture money. Typically, they are reimbursed as a proportion of the fund's overall return, as agreed upon in writing ahead of the investment (Hisrich & Peters, 1998). According to Joachim (2010), buyouts are a form of private equity funding for established enterprises. Private equity firms do a great deal to ensure thorough pre-investment screening, and they also monitor investments throughout the holding period to ensure they are performing effectively.

Private equity funds have a variety of responsibilities within organizations. They contribute directly and indirectly to enterprises and observe their operations. In addition, these companies are frequently viewed as strategic investors, and their participation in business plans is one of the most valuable things they do (Fried et al., 1998). Kaplan and Stromberg (2003) demonstrate that when private equity investors invest in a company, they establish complex control rights and governance and control structures. According to

Hellmann and Puri (2002), private equity investments outperform traditional financial intermediaries. They can provide help and maintain order. They are related to a number of professionalization measures, such as implementing stock option plans and modifying the way human resource policies are established.

2.2.2 Financial Performance

The majority of businesses use financial performance indicators to determine how well they are doing. Taylor (2016) argues that return on assets (ROA), profits before interest and taxes (EBIT), and gross profit margin are three of the most important financial performance indicators for organizations. Future private equity investors will want to know what happened to a company's finances after it received a PE investment. According to Coleman (2007), the primary objective of every company's investment is to generate a profit. Most private equity investments are spread out over a long time so that businesses have plenty of time to pay back the money they borrowed.

2.2.3 Private Equity Investment and Firm Financial Performance

Gompers and Lerner, Ljungqvist and Richardson, Kaplan and Schoar, Moskowitz and Vissing-Jorgensen, Robinson and Sensoy, Phalippou (2013), and Harris, Jenkinson, and Kaplan have all written ground-breaking articles about the relationship between private equity and a company's financial performance.

Meles et al. (2014) examined 118 Italian private equity-funded firms. Private equity investments' type, term, investor personality, and exit strategy affect a company's performance. Private equity-backed companies outperform competitors, the poll showed. Private equity affects corporate performance. According to Salerno, private equity improves corporate performance (2019). 553 European PE-backed family-owned SMEs perform better after financing. The research did not assess PE-attracting board or strategy adjustments. Other researchers dispute that PE improves a company's finances. Gompers and Lerner (2001) found uncertainty and information inequities in the PE and VC financing of new firms. The report says PE firms and angel investors may invest in strategies, research, or activities that benefit them but not shareholders.

Wright, Gilligan, and Amess (2009) say private equity investors' buyouts and asset seizures are problematic. Private equity (PE) buyouts accelerate downsizing, according to Davis et al. (2011), resulting in substantial employment losses in PE-backed enterprises. They may also boost growth. Kaplan and Schoar (2004) claim they do not care about private equity and other fund performance. Others include hedge funds and private equity funds. Statistics show PE partnership outcomes reflect the S&P 500 Index. Private equity may not be better than other investments. The analysis shows that fund size and general partner competence boost private equity fund success.

Many research have analyzed private equity firm performance. Gakure and Karanja (2012) found that private equity-backed enterprises grew faster from 1987 to 2000, however Ongore (2011) suggests that private equity funds may be hard to evaluate. Olweny and Chiluwe (2012) say private equity investments are hard to evaluate. Private equity has less information than public markets. Some private companies publish gross and net returns inconsistently and incomprehensibly.

Kaplan (1989) analyzes 76 large buyouts to assess how private equity buyouts affect operating performance and valuation. All buyouts were conducted from 1980 to 1986. These firms modify operations because those who do so are rewarded, not because management want to keep their positions or lay off workers. These operational changes increased net income, costs, and cash flow in the three years after the acquisition. Median and average market values rose 77% and 96% before and after the buyout. This thesis shows that private equity-funded companies have improved their operations and can compete with their rivals. Kaplan (1989) assessed buyout financial performance. Baker and Wruck (1989) studied one incident to determine how an organization improved operational performance. Since the company was significantly indebted before the acquisition and management held some of that debt, operations improved (in other words, professional investors were the majority shareholders). Debt covenants improved this scenario, which Kaplan's exhaustive 1989 research would not have found. This research is agreeing with Jensen (1986) that debt and reorganizing decision-making drive financial growth.

2.2.4 The Impact of Private Equity on Financial Performance

Academics worldwide have examined how private equity affects a company's bottom line. In 2017, Baah-Peprah and Priscilla Serwaah examined how private equity affects emerging economy company performance. (2017). Various approaches collected and analyzed primary and secondary data. Privately held companies outperformed publicly traded ones, the poll found. According to research (ROE), private equity boosted growth and ROI.

In 2018, Bernstein, Lerner, Srensen, and Stromberg explored how private equity affects local business performance. They examined sector impacts of private equity investments using two data sets. Private equity investments and OECD industrial performance were evaluated in two datasets. The OECD's structural evaluation confirms this. Bernstein, Lerner, Srensen, and Stromberg examined local company performance and private equity in 2018. Two data sets examined the impacts of the private equity sector. Thus, one dataset assessed private equity investments, while another analyzed their effects on OECD industrial production and performance.

PE firms have invested in many fast-growing companies over the past five years. There was little difference between the high-PE and low-PE industries. PE-backed companies' influences on other industry firms influenced the conclusions. Private equity-backed enterprises were not more susceptible to economic shocks. The American Economic Review reports greater total factor productivity. 3,000 private equity-owned enterprises were examined. Each business was found using the US Census Bureau's LBD. Business matters. Private equity firms sell or reorganize less productive enterprises and expand more profitable ones.

Amess, Stiebale, and Wright (2015) examined how private equity affects innovation. Leveraged buyouts' effects on portfolio firms were examined using a difference-in-differences estimator and propensity score matching to produce the counterfactual. Private equity investments and OECD industrial performance were evaluated in two datasets. They are back profitable startups. Leveraged buyout and private equity performance

studies are related (Battistin et al. 2013). Since the 1980s, when large U.S. public corporations were bought via hostile takeovers using a lot of debt, private equity (PE) investments have been studied.

Minority investments, which do not involve a takeover like in a leveraged buyout, have grown in popularity since the 1980s. Minority investments are crucial, say Kaplan and Stromberg (2009) and Lerner et al. (2009). Shareholder value declines as total debt rises because a higher debt load results in a lower return on equity. This suggests that, rather than taking out a loan to cover your financial needs, you should look into investing the money. Amenya's success is more likely to be boosted by private investor funding than by borrowing money (2015). In 2014, Mwirigi authored a paper about how private equity affects developing nations. He researched the Kenyan private equity market using books, journals, data, and other sources. Private equity has helped emerging economies grow. Studies that compare companies that use private equity investment funds to those that do not use this type of funding have found a positive correlation between using private equity and higher rates of growth and efficiency. The rates of revenue growth and employment growth for businesses that receive venture capital funding are significantly higher than those for businesses that do not receive such funding, Engel, and Keilbach (2002) and Davila et al (2003).

Due to selection at follow-up, Private equity-funded firms are more productive, according to Chemmanur et al. (2011). These experts say that firms backed by private equity have a higher total factor productivity (TFP) before they get venture financing. Moreover, TFP growth after receiving venture capital is greater for PE-funded enterprises than for non-PE-funded firms. According to Puri and Zarutskie (2012), firms that are supported by private equity do better than those that are not. According to Paglia et al. (2014), private equity investment increases sales and employment for three years.

2.2.5 The Relationship Between PE Investment and Return of Recipient Companies

Studying private equity profitability, the quantitative performance of these firms is

intriguing for the reasons indicated before in this literature review, such as their ability to raise the value of companies they invest in before reselling them and their influence on competition, innovation, and economic growth. It shows the company's profitability. Cochrane (2005) provides a thorough econometric evaluation of the potential reward and loss associated with venture financing. Examining how to gauge the profitability and returns of private equity using statistical approaches without being affected by selection bias is the study's primary topic. The return on an initial public offering (IPO) involves focusing on "only the winners," which, according to Cochrane, will lead to more skewed returns for future investors. As a result, analyses that fail to control for bias tend to yield too optimistic results. This experiment had a mean log return of 7% and an intercept of 2% after accounting for Cochrane's selection bias. While the CAPM alpha is just 45%, the average returns based on the numbers are closer to 53%.

Kaplan and Scholar (2005) analyze the success of private equity firms by tracking investor contributions and redemptions. The data illustrates that the S&P 500's average return is consistent over time and across asset classes. There is a high degree of consistency in the outcomes, as well. Fund performance is found to be procyclical at the industry level, with the research also noting that mutual funds and private equity funds experience and react to cycles differently. Despite its merits, this report demonstrates the pressing need for further research into the profitability and vulnerability of private equity. Nielsen (2007) investigates the relationship between private investors and institutions. This research contributes to our understanding of entrepreneurship and finance by demonstrating that institutional investors are a primary source of funding for private equity firms.

It has been argued by Moskowitz and Vissing-Jorgensen that professional investors with diversified portfolios, such as pension funds, receive a meager return from investing directly in private enterprises once return is adjusted for risk (2002). Professional investors with diversified portfolios, such as pension funds, do not fare well when investing directly in private enterprises. Compared to public equity investments, direct investments in private enterprises by pension funds performed worse on average by 393 basis points per year, as shown in this study . People were either too sure of themselves, priced the market

too high, or did not understand the risks well enough, which all led to the poor performance.

Sorensen et al. (2014) compare private equity fund returns to private equity company returns to determine stakeholder returns. The company does this to determine if the incentive and management costs, as well as the lack of liquidity over the long term, are justified by the returns. Considering the issue of the owner's portfolio allocation, they discover that private equity companies need to generate sizable alpha to justify the fees they charge investors. Based on their findings, Sorensen et al. (2014) argue that conventional methods of evaluating a private equity fund's performance are overly optimistic, and that investors may be lucky to break even at best.

Harris et al. (2014b) like to think that Korteweg and Sorensen (2017) will eventually look into how well private equity works. Using a new way to break persistence into its three parts, they were able to show that it has strong long-term persistence. They find that private equity does the same thing whether returns after fees are consistently high or low. The best private equity firms earn 8–10% more than the worst. They also say that performance is not always the same, which makes it hard for investors to know if private equity funds are dependable and give good returns. This article is called "Skill and Luck in Private Equity Success," and it talks about why and how some private equity companies are successful while others are not. Kaplan and Schoar (2005) examine how much money enters and stays in private equity funds to assess performance. The 500 samples show that the returns are similar. Furthermore, the results are consistent.

2.2.6 Private Equity, Corporate Governance and Performance

Investment returns are strongly influenced by corporate governance standards, and the size of the board is a major factor in this. The larger the board, the more committees it has, the more independent directors it has, and so on. The close quarters that are common in the private equity business mean that the relationship between board size as a part of board structure and the success of investee firms needs to be looked into more.

Many studies have studied how corporate governance procedures, governance

characteristics, and board structure and effectiveness affect PE firm success. Yermack (1996) notes that empirical research on board structure often ignores the impact of board size on performance, focusing instead on outside directors, stock ownership, and CEO influence. In a study of 452 large U.S. public corporations, Yermack discovered that having a larger board of directors reduced company value. His findings on board size constraints (1993) support those of Lipton and Lorsch (1992) and Jensen (1992). Communication and coordination issues lead to better decisions in smaller groups. Eisenberg et al. (1996) found that board size negatively affects performance in 900 small Finnish enterprises. Because different factors can affect board size and structure in both types of organizations, experts recommended this study.

Cumming et al. (2008) found that cross-country legality influences venture capital governance. (Kaplan & Strömberg, 2003). Legally advantageous nations earn more (La Porta et al., 1998; Cumming and Walz, 2004). The legal environment affects external corporate governance (Cumming et al. 2008). Cumming et al. (2006) found that PE businesses are more likely to IPO in nations with better business environments.

Small businesses may not have the agency problem, which influences board size and structure. However, board size has been shown to negatively affect small-business success in other studies. They employ Eisenberg et al. (1996)'s study in the PE sector, assuming recipient firms are small. Despite smaller organizations' less-separated ownership and control, the authors believe board size can negatively affect performance.

Public companies separate risk-bearing and governance. Private equity firms integrate corporate risk-bearing and governance duties through concentrated share ownership and effective board supervision. "Remarkable outcomes" (Wruck, 2008, p 12). For long-term success, private equity firms maintain corporate governance. PE can help supported firms by lowering agency costs (Jensen 1986, 1989). Jayhun (2016) says PE connects managers' incentives with executives' goals, boosting company operating performance. General partners save money by attending board meetings and monitoring their investments (Kaplan & Stömberg, 2003).

2.2.7 Summary of Related Literature Reviews

An empirical study is presented in Table 1 which shows us the result of these old studies.

Table 1: Summary Reviews

Authors / Study	Period	Sample Observed	PE Performance	Financial Performance Measure	Finding Relationship
Ludovic Phalippou and Maurizio Zollo/ What Drives Private Equity Fund Performance?	1980 to 2003	700 Private Equity Funds	Two datasets maintained by Thomson Venture Economics. Data base	CAPM-beta	Positive
By Alexander Popov and Peter Roosen boom ‘’On the Real Effects of Private Equity Investment”	1998-1999 And 2006-2007	17 groups of industries	EVCA yearbooks. The firm-level Amadeus database,	Average entry rates	The research shows that private equity investment makes it more likely for new companies to join industries with the most competition.
Vu To Huy “Organizational and strategic factors in the performance of French venture capital funds”	1997-2004,	163 French funds	The company Thomson Finance has, the Venture Expert database	Multilevel method Internal Internal Rate of Return (IRR)	Positive
Augustin CAPRASSE & Laurent CLERBOIS the “impact of private equity on the performance of portfolio companies”	2017-2018	12 Belgian PE professionals.	Interviews	IRR	Private Equity has a positive impact on the companies in which it invests
Fan Xin, Wu Xinmin “The impact of private equity on corporate performance: empirical”	2014 to 2018	1702 funds	China's private equity industry	Csmar Roe, Roa	Positive

Florencio Lopez-de-Silanes and Ludovic Phalippou. "Private Equity Investments of Scale"	1973 to 2002	151 Private Equity (PE)	Thomson Venture Economics (TVE).	The average IRR	We find that performance is negatively related to both the number of parallel projects
Joakim Andersson Fredrik "Private equity owned companies' performance in Sweden after the financial crisis.	2007--2008	136 compagnies	Bloomberg and data Stream.	ROA ROE	Positive significant impact on profitability for private equity owned companies.
Prince Baah-Peprah and Priscilla Serwaah "The impact of private equity on firms in emerging markets:"	2015		Venture Capital Trust Fund)	ROE	PE investors has a positive significant impact on financial
Peter Mwangi Karanja "The effect of private equity investments on financial performance of firms in Kenya"	2005 to 2017	25 firms		Correlation analysis, and regression analysis	This thesis established that investment in private equity had statistically significant effect on the financial performance of the firms.

Source: (Author's Own).

3. DATA AND METHODOLOGY

This thesis section outlines the preliminary testing, data, and analysis used to study private equity's impact on unlisted enterprises' financial performance. The thesis discusses the sample, data, and sources. The regression model describes the dependent and independent variables, assumptions, regression equations, and model assumptions.

3.1 Data Specification and Collection

The data collected on private equity is unstable and some important data may be missing. This study analyse private equity with the available data.

3.1.1 Data Collection

Thomson Reuters Eikon has been used to get the data for this thesis. In addition, the study is confirmed 54 unlisted companies, including 9 French, 9 Canadian, 9 American, 9 Mexican, 9 London, and 9 German companies that received private equity support between 2012 and 2020 on Thompson Reuters .This includes the date of issuance, the amount invested, the years of activity, the number of funds, the number of investors, the offering price, the closing price on the day of issue, the industry sector, the date the firm is created, the principal underwriter, and whether venture capital was involved. Research is conducted on Thompson Reuters' private equity funds by a variety of organizations, including companies and educational establishments. The Refinitiv Private Equity Data Screen shows public information on private equity-backed companies. Industry and country are important in private equity. The Company of Thompson and Reuters at the moment, data on private equity investments is being gathered and examined so that the private equity of companies can be measured and ranked. Thompson Reuters Scream Private Equity Investment Scream is a major private equity investment database. It accounts for 70% of global investment.

3.1.2 Study Sample Description

Secondary data from 2012 to 2020 are analyzed in this thesis. Research for this thesis relied on panel model data, commonly known as longitudinal data. Using this information,

they can study the growth of unlisted enterprises (N) over the last eight years. Private equity funds non-public companies. They are not able to select every company because we did not have the necessary data. On the other hand, this thesis considers 54 companies that are not listed on the stock exchange. After all of the information has been gathered, it is validated to ensure that it is accurate and then arranged in chronological order .

3.1.3 Explanatory Variables and Hypothesis Development

In order to examine the impact of private equity on the financial performance of firms, a panel regression model is used. The amount of capital invested, number of deals, and board size of director are all independent variables that can affect financial performance. They learned how private equity funds affect a firm's performance by examining the relationship between these variables.

Table 2: Variables Definition

Variables	Description	Types of Variables	Expected Relationship
Private Equity Return		Dependent	-
BDS	Board of director size	Independent	Negative
ACI	Amount of capital invested	Independent	Negative
ND	Numbers of Deals	Independent	Positive

3.1.4 Hypothesis Development

It has been stated that private equity has become the driving force behind the expansion of small and medium-sized businesses, particularly when it comes to the development of unlisted companies of any size. Companies that have received private equity capital have been shown to see considerable improvements in their financial performance. Companies backed by private equity (PE) investors are more successful than those that are not (Kaplan and Scholar, 2005). The performance benefits from private equity capital injections will outweigh the costs of borrowing from Amenya (2015). Research examines, with the use of concepts from agency theory and corporate governance, the following hypotheses concerning the ways in which private equity can influence the financial success of a

company:

H1: There is no correlation between the amount of capital invested and the financial performance of companies.

H2: Private equity has no impact on the corporate governance.

H3: The number of deals has a beneficial impact on the financial performance of the company.

3.2 Methodology: Model Used in The Study

This thesis uses an econometric model to analyze the results of private equity financing on firm profits. This thesis uses the random effect model to examine the private equity and its correlation with the financial performance of small and medium-sized enterprises (SMEs) that received private equity financing. Prince Baah-Peprah and Priscilla Serwaah (2017) and Peter Mwangi Karanja (2017) used board size of director and amount of capital invested as independent factors .The number of deals is then included as an additional variable in this studies. Starting with descriptive statistics and ending with a correlation matrix and normality test for the variables, this analysis uses the panel regression model provided. The process of estimating the model is discussed in the next section. The fixed effect, random effect, and panel regression models are available. Testing based on the Hausman method chooses the most effective analytical model. In the final section, model diagnostics are demonstrated through the use of heteroskedastic regression and autocorrelation.

3.2.1 Descriptive Statistics

This research uses descriptive panel data from a total of 54 unlisted companies and covers the years 2012 through 2020.

3.2.2 Testing Correlation

The correlation matrix illustrates multi-linearity through analyzing variable relationships. The correlation coefficient serves as the basis for the correlation matrix. A 1.0 correlation exists when both variables are positive. Zero correlation coefficients show no linear link between variables. when the variables have a linear connection that is in the negative.

3.2.3 Normality Test

Point estimator consistency changes with sample size. It does not reveal anything to us about the manner in which the sample sizes are distributed; rather, the estimators of this study require it in order to estimate and develop this hypothesis.

3.2.4 Method of Estimation

Panel data studies have focused on the estimate technique, pooled regression, fixed effect model, and random effect model.

3.2.4.1 Panel Regression Test

This thesis estimation approach uses panel data. Private capital returns are studied using "Pooled OLS, fixed effects, and random effects". According to Baltagi (2005), panel data analysis enhances statistical validity and reduces omitted variable bias. Reliability can be improved by reducing time-invariant and unobserved difficulties. Panel data considers individual heterogeneity. Panels rule time. It considers correlation and complex behavioral models (Gujarati, 2003).

$$yit = \beta 0 + \beta 1x1it + \beta 2x2it + \ldots\ldots + \beta kxkit + uit \quad 1$$

"t" represents the time period, "k" the kth explanatory variable, "0" the intercept, "k" the coefficient of each variable, and "uit" the integrated error term. Errors have inconsistent results.

This is written as $u_{it} = \alpha_i + u_{it}$ 2

The idiosyncratic error fluctuates between cross-sectional units; however, the unobserved individual influence does not change over time (Baltagi, 2005). The pooled OLS, fixed effect, and random effect panel data may all be classified using error estimates.

3.2.4.1 Pooled Regression

The method under investigation is called cluster regression. It has ordinate and slope coefficients that are always the same. Ordinary least squares can combine and regress this model's data. There are 54 observations included in the regression model, however there are no cross-sectional or temporal data. When expanding a cross-sectional analysis to panel data, it is common sense to apply a similar estimator as part of the process. Pols is equivalent to OLS when applied to data that has been pooled over time (t) and cross section in the same way that OLS does (Wooldridge, 2010).

$$Y_{it} = x_{it} + u_{it} = POLS$$

Based on the following:

1. $E\ [X^{0\,i}\,(Y_i - Xi_\beta)] = 0$, Therefore, the error term contains a mean with no condition connected to it.

2. $A \equiv E\ (X_{0\,i}X_i)$, The matrix A has a rank of K and is non-singular.

3.2.4.2 Fixed Effect Model

Unobserved fixed-effects estimators This method allows any x-function E (ci, xi). The model is robust (Wooldridge, 2008). (2010). The intercept is constant even when firms differ substantially. For six-country variances, LSDV gives each nation its own intercept value. The fixed effects estimator functions most accurately when the unobserved effect is connected to the variables that it is estimating.

This can be written as the model:

$$Y_{it} = X_{it+}\ U_{it} = X_{it\beta+}\alpha_{i+}\ V_{it}$$

With i=1,2.....N, t=1,2.....T.

3.2.4.3 Random Effect Model

One of the models that account for unobserved effects is named the random effects estimator, and its general form is as follows:

$$Yit=x_i t_\beta+ci+u_{it}=1,2\ldots\ldots T$$

This estimate requires ci-xit orthogonality and stronger stick exogeneity assumptions (Wooldridge, 2010).The unobserved effect is random since it is unrelated to the variables that explain the phenomena.

In this case, the

model could be stated as follows:

$$yt= \beta_0+x_{it}1\beta1+_{xit}2\beta2+\ldots..+_{xit}\,k\beta k+u_{it}$$

$$= \beta0+_{xit}1\ \beta1+_{xit}2\ \beta2+\ldots\ldots+_{xit}k\ \beta k+ai+v_{it}$$

With i=1,2….N, t=1,2……T. and k=1,2…..K.

The random effects regression approach investigates intangible characteristics such as bravery and comprehension in participants. Panel data shows individual effects. The random-effects model examines how attributes affect the response variable in panel data sets. Another strategy that is frequently used is known as the "fixed-effects regression model."

3.2.4.4 Hausman Test

Hausman tests distinguish "fixed" and "random" effects. "The preferred model is random effect, while the alternative hypothesis is fixed effect," is the Hausman null hypothesis. “For the purpose of determining whether or not a model is statistically significant, the Hausman test examines "the unique errors' connection with the regressors." Hausman tests examine whether fixed effects or random effects estimators yield more accurate panel data

results. Hausman tests usually assume the coefficient is 0. Under covariance, fixed-effect and random-effect models generate comparable estimates. The reduced standard error of the random effects model outperforms the fixed effects model. Data that violates the covariance assumption will only fit the fixed effects model (Wooldridge 2009: 493).

3.2.4.5 Heteroscedasticity

Homoscedasticity is also examined. Heteroscedasticity complicates regression. Positive standard deviations fluctuate heteroscedasticity. Suppose they reject the null hypothesis? Heteroscedastic models.

3.2.4.6 Autocorrelation

Autocorrelation describes a time series' past and future expectations."Autocorrelation"—the relationship between a set of members over time—is commonly used interchangeably with "lagged correlation" or "serial correlation."

4. RESULTS AND DISCUSSIONS

The study's results are briefly discussed here. The analysis begins with a description of this study samples, followed by the correlation matrix, normality evaluate the findings of a Hausman test table comparing the pooled OLS, fixed model, and random effect model, and the heteroskedasticity and autocorrelation results.

4.1 Descriptive Statistics

The descriptive information of the dependent and independent variables of this study can be found in Table 3.

Table 3:Summary Statistics(US Dollar)

Variable	N	Mean	Std.Dev.	Min	Max
Private Equity Return	54	303.61	1145.839	-94.85000	5569.837
Numbers of Deals	54	2.537037	2.470299	1	12.00000
Amount of Capital Invested	54	6.407407	6.792111	1	33.00000
Board of Director Size	54	5.240741	4.484502	1	19.00000

Source : (Own Calculations)

The table shows that there are 54 observations in the balanced panel for the years 2012–2020, with a maximum yield of 5569.837 and a minimum yield of -94.85. The average yield in the sample was 303.61 and the Std was 1146 per unit of output. When compared to the mean yield, the standard deviation of the yield is small, ensuring the accuracy of the yield estimate. The observation includes 1–12 deals, averaging 2.537037. The private equity fund's standard deviation is 2.470299, with a mean of 6.407407 and a range of 1 to 33 transactions and a maximum of 12. The mean of the board's size is $5,240, the std dev is $4,485, the min is 1 and the max is 19.

4.2 Correlation Matrix

The pearson correlation matrix of the panel data is presented in this table 4:

Table 4:Correlation Matrix

Variables	Return	No of Deals	PE Funds	Board of Director Size
Private Equity Return	1			
Numbers of deal	-0.1637	1		
Amount of Capital Invested	0.0868	0.3314	1	
Board of Director Size	-0.309	0.5594	0.3195	1

$p<0.01$,$p<0.05$, $p<0.1$

Source: (Own Calculations)

Private equity return is closely correlated with amount of capital invested, as expected. The amount of capital invested improve company performance. The amount of capital invested predict private equity performance statistically (0.0868). Mwirigi (2005) found the same in emerging market private equity. Baah-Peprah and Serwaah observed in 2007 that private equity grew emerging market enterprises. They examined how private equity affects emerging markets. Private equity-funded companies grow quicker and have a higher ROE. The amount of capital invested determines private equity returns more than number of deals and board size. Number of deals and board size are unrelated. The amount of capital invested are closely correlated with board size. Board size and the amount of capital invested are positively correlated (0.3195). A matrix correlation study reveals that the amount of capital invested increase returns. Performance is moderately connected with investing. PE fund ownership affects business performance in a second way. According to several researchers are all assert that , private equity (PE) backed firms perform better, as asserted by Kim and Cho (2009), Ueda (2004), Kaplan and Stromberg (2009), Boucley et al. (2011) and Chunj (2011), Meles et al. (2014) and Jain and Kini (1995).

4.3 Normality Test

This thesis examines data distribution regularity. The Shapiro-Wilk Test determines dependent variable normalcy. Investigating the following hypotheses. Table 5 shows test results.

Table 5**:**Normality Test

Ho: Dependent variable distribution is irregular.

H1: Dependent variable is distributed consistently.

Variable	Obs	W	V	Z	Prob>Chi2
PE Return	54	0.98212	0.893	-0.242	0.59543

Source : (Own Calculations)

The Shapiro-Wilk test had a p-value of 0.59543, which contradicted the prior tests. The dependent variable had a normal distribution, disproving the null hypothesis.

4.4 Model Selection Tests

Most panel data models are the pooled ordinary least squares model, random effects model, and fixed effects model: Pooled OLS regression models use cross-sectional and time series dependent variables. Without panel data set benefits (Hill et al. 2018). Regression models with the Random Effects Model utilize one intercept per participant. The random effect model implies random selection and effects (Hill et al. 2018). Panel data with omitted features vary across individuals but not over time in fixed effect models. Effect models change unobserved entity attributes related to reported independent variables. The research hypothesis is evaluated using panel data and a suitable data regression model. F- and Breusch-Pagan LM-tests selected a regression model for this study. The F test determines which regression model to use pooled OLS or fixed effect. The F test's alternative hypothesis suggests fixed effect regression analysis. The F test null hypothesis suggests regression analysis is better with the pooled OLS model. This study

reject the null hypothesis and accept the alternative hypothesis if the F test p-value is less than 5%. The F-test fails the null hypothesis for all models, showing that the regression model will use a fixed-effects model for panel data and that the pooled OLS technique is unsuitable. because all models reject the F-test null. The Breusch-Pagan LM test then examined the models for random effects.

The Breusch-Pagan LM test's null hypothesis implies zero error variance for each entity or time period, confirming the pooled OLS method. The alternative hypothesis asserts that models have random effects, making the random effect model better. The null hypothesis states that any entity or time period has zero error variance.

The thesis rejects the null hypothesis and supports the alternative if the Breusch-Pagan LM test p-value is less than 5%. Null hypothesis: variables are unrelated. The model has significant random effects because all Breusch-Pagan LM test p-values are below 5%. Random effects also matter. Even though this thesis rejects the null hypothesis and advises utilizing the random effects model instead of pooled OLS analysis for panel data analysis, the pooled regression model is computed first.

4.1 Pooled Regression Model

The regression model uses 54 observations without cross-sectional or temporal data. Analyze the clustered regression model. This model can use clustering and OLS. Table 6 shows the dependent variable clustered regression model.

Table 6:Pooled Regression Model

Source	SS	Df	MS
Model	2433.2071	4	608.3018
Residual	10684.30	49	218.047

Return	Coefficient	Std.err.	T	P>|t|	[95% conf Intervalle
Numbers of Deal	-.1536021	1.029399	-0.15	0.882	-2.222256 1.915052

Amount of capital invested	-.9445813	.3717002	2.54	0.014	-1.691541	.1976219
The Size of Board Director	.8569765	.4907876	1.75	0.087	-.1292981	1.843251
CONS	22.40869	5.480873	4.09	0.000	11.394462	33.4229

Adj R-squared=0.1190 Root MSE=14.766 Number of obs=54 F (4, 49) =2.79
Prob>F=0.0364 R-Squared=0.1855

There has been statistical significance in the results of the analysis, with an F-value of 2.79 (p = 0.03640.05). This pooled regression table has an R-square of 0.1855% based on 54 observation and an adjusted R-square of 0.1190%.The pooled regression model was significant at 95%.The p-value for the amount of capital invested variable is only 0.0014 (less than 5% significance). The amount of capital invested investors had greater returns than those who did not, as reported by Bernstein, Lerner, Srensen, and Per Stromberg (2018). At the 5% threshold, the number of deals and the size of the board of directors are not particularly essential, but at the 8.7%, 88.5%, and 6% levels, they become of much greater importance. Performance is affected by the number of transactions, the amount of capital invested, and board composition. This result indicates that the amount of capital invested has a positive relationship with private equity performance, but the number of transactions and board size have a negative relationship with private equity performance. The result of the pooled regression model is now rejected by the thesis because we believe that the codes of the 54 firms in the six countries are not identical. In the analysis, the fixed effect model is used with the assumption that each of the 54 firms has a unique intercept.

4.5 Fixed Effect Model or LSDV Model

Table 7:Fixed Effect Model

Private Equity Return	Coefficient	Std.err.	T	P>|t|	| [95% conf. Intervalle]
Numbers of Deal	-.3700976	1.072634	- 0.35	0.732	-2.531849 1.791654
Amount of Capital Invested	.8479552	.5158557	1.64	0.107	-1.887594 .1916836
Size of the Board Director	.9311377	.689396	1.35	0.184	-4582488 2.320524
CONS	22.27632	5.660857	3.94	0 .000	-10.86761 33.68503

Sigma_u	4.5347426				
Sigma_e	14.911134				
Rho	.08465788				

F test that all u_i=0; **F (4, 44) =1.2 Prob>F=0.29** R-Squared: within=0.1042 between=0.580 overall=0.1838 Corr (u_i, Xb) =0.0429 Obs per group: min =9; avg=9.0; max=9

Source: (Own Calculations)

This table includes a total of 54 observations that are obtained from six different nations. It is clear from examination of both the F statistic, which has a value of 1.28, and the P statistic, which has a value of 0.29, that neither of the coefficients nor the P values satisfy the threshold for statistical significance, which is set at 0.05. The rate of return is the dependent variable in this study, and the explanatory variables are the number of deals, the size of the boards of directors, and the amount of capital invested. This indicates that the outcomes of private equity are unrelated to the number of transactions that take place. The number of deals that are completed has a substantial bearing on the returns that are generated by private equity (-.3700976). Board director and the amount of capital invested are determined to be unimportant due to the fact that their respective probabilities, P (0,107) and P (0,184), are more than 5% and do not explain the return. This variable has a standard deviation of 1.072634, which is much higher than the standard deviation of the amount of capital invested (0.5158557) and the standard deviation of the board of directors

(0.689396).

4.6 Random Effect Model

Table 8: Random Effect Model

Private Equity Return	Coefficient	Std.err.	Z	P>|Z|	[95% conf. Intervalle]
Numbers of Deal	-.177187	1.026864	-0.17	0.863	-2.189804 1.83543
Amount of Capital Invested	.9358835	3781822	2.47	0.013	-1.677107 -.1946601
Size of the Board Director	.8641161	.5007351	1.73	0.084	-.1173066 1.845539
CONS	22.40385	5.514213	4.06	0.000	11.59619 33.21151
Sigma_u	1.7870061				
Sigma_e	14.911134				
Rho	.01415916				

R-squared: within=0.1029 between=0.5977 overall=0, 1855 **Wald chi2 (4) =10, 57**
Prob>chi2=0.03 Corr (u_i, x) =0 (assumed)
Source: (Own Calculations)

The regression effect model is contained in this table, which contains 54 observations. Waldchie 2(4) is 10.57 with a P-value of 0.0318. The model is significant, the coefficients are non-zero, and P is less than 5%. In the random effect model table, this variable has a probability of less than 5%, making the amount of capital invested a key element in explaining the return (0,013). Here, the amount of capital invested predicts its PE return scientifically. It matched Kaplan and Scholar's 2005 study. They found that fund performance greatly impacted a private equity firm's capital raising. Kaiser and Westarp (2010) cite these findings. Because of this, throughout the beginning phases of a fund's existence, funding is only available to the most promising private equity firms. This is because the most successful private equity firms have a long-term competitive advantage because they know a lot and have a lot of experience. Private equity firms that have a sustainable competitive advantage are also easy to identify for investors. Deal volume and board size are largely irrelevant when the P value is greater than 5%. The quantity of transactions does not positively correlate with the return of private equity (P = 0.863 and

P = 0.084). Consequently, it is insignificant and does not account for the profit. There is a negative relationship between the number of deals and private equity returns (the coefficient is -.177877), which shows that as the number of deals increases, more attention is directed to other deals, which results in a lower return on investment. Private equity returns are positively correlated with the amount of capital invested and board director size. Because the probability of the size of the board director and PE funds being greater than 5% (P = 0,084 and 0,079) does not account for the return of private equity, the size of the board director is likewise not significant.

4.7 Hausman Test

Given that the F test and the Breusch-Pagan LM test showed that pooled OLS is not the best choice for our regression models and that our panel data contains both fixed and random effects, we used the Hausman test to determine which of our models—the one with fixed effects or the one with random effects is superior. We found that the model with fixed effects is superior to the model with random effects.. With the use of the Hausman test, we are able to select the appropriate panel data analysis model from among fixed and random effect models. The assumption that using the random effect model is superior to using regression analysis is Hausman's null hypothesis. It is possible that the fixed-effect regression model provides more accurate results. The null hypothesis is accepted when the P value from the Hausman test is greater than 5%. Alternate Hypothesis in the Event That P5% of the Accumulated Hausman Results.

Table 9: Hausman Test

H1: The null hypothesis; the Random Effect model is an Appropriate.
H2: Alternate hypothesis number ; The Fixed Effect Model is Appropriate

-Coefficients-				
	(b) Fixed	(B) Random	(b-B) Difference	Sqrt(diag(v_b-v_B)) Std.err
Numbers of deal	-.3700976	-.177187	.1929106	.3099897
PE Funds	-.8479552	.9358835	.0879282	.3508352

The Size of the Board Director	.9311377	.8641161	.0670216	.4738474

Chi2 (4) = (b-B)'(V_b-V_B) ^ (-1)) (b-B) =**0.73** Prob>chi2=**0.94**

Source: (Author's Own Calculations)

In considering the data shown in the table, the researcher is required to conclude that the alternative hypothesis cannot be correct and must instead use the random effect model of regression for both models, including the one that contains the dependent variable. Due to the fact that the P-value for the regression model with the dependent variable is greater than 5%, the P-value for rejecting the null hypothesis is also greater than 5%. This is because the P-value for the regression model with the dependent variable is 0.9470. It is larger than 5% since the P-value for the explanation of the null hypothesis is 0.9470, which indicates that it is statistically significant. It seems that the random effect model provides the most accurate results. Because of the outcomes of these analyses, we are confident in our choice to apply the proper models to the regression analysis that was conducted for this thesis. The Hausman test leads to the conclusion that this model is accurate because the probability has been shown to have statistical significance and the amount of capital invested has a probability that is lower than 5%. To put it another way, the amount of capital invested have a positive effect on performance, whereas the other independent elements do not have an effect and are not necessary for understanding the return of private equity to firms.

4.8 Model Diagnostic Tests

After selecting models for the panel, they performed diagnostic tests. Breusch-Pagan heteroskedasticity tests examined the models. Breusch-heteroscedasticity Pagan's test presupposes homoscedastic residuals. Residuals may be heteroscedastic. The Breusch-Pagan heteroskedasticity test shows all models have probabilities below 5%. Our model's residuals are homoscedastic because they found no evidence to support the alternative hypothesis that they are heteroscedastic. Series and autocorrelation completed our panel data analysis. Durbin-Watson and Breusch-Godfrey LM tests assume no serial correlation in residuals (autocorrelation). The Durbin-Watson autocorrelation test assumes no first-

order autocorrelation. Null hypothesis: first-order autocorrelation: none of the models evaluated can reject the null hypothesis. Thus, serial correlation does not exist, and the functional form test validates the model.

4.9 Heteroscedasticity

Heteroscedasticity is present in a linear model whenever there is a disparity in the variance or spread of the errors. If this is not corrected, it could lead to erroneous calculations (Gujarat, 2003). (Gujarat, 2003). The Breusch-Pagan test in Stata is utilized in order to ascertain whether or not the assumption of constant variance is valid. The findings are presented in Table 10, where the p-value in bold signifies the presence of heteroscedasticity when compared to the other values. Therefore, we are forced to acknowledge the validity of the null hypothesis, as it cannot be refuted. This is because the mean is bigger than 0.05, and the likelihood of there being a value is 0.7439. This leads to the conclusion that there is value.

Table 10: The Breush-Pagan Heteroscedasticity Test

- Null Hypothesis: Residual are Homoscedasticity

-Alternative Hypothesis: Residual are Heteroskedasticity

Source	Chi2	Df	P
Heteroscedasticity	0.11	1	0.7439

Chi2 (14) =0.11 Prob>|chi2) **=0.7439**

Source: (Author's Own Calculations)

4.10 Test For Autocorrelation

A Linear regression errors are autocorrelated. Thus, two observations' errors usually correlate (Sarstedt & Mooi, 2014). This precludes proper estimations. The thesis evaluates the "residual is not serially correlated" null hypothesis using the Durbin-Watson and Breusch-Godfrey LM tests (autocorrelated). Tables 11 and 12 show results. Autocorrelation requires underlined p-values.

Table 11:Durbin's Alternative Test for Autocorrelation

-Null hypothesis: Residual are not serially correlation

-Alt hypothesis: Residual are serially correlated

Laps	Chi2	Df	P
1	144.545	1	0.5542

H0:no serial correlation

Source : (Own Calculations)

Table 12:Breush-Godgrey LM Test for Autocorrelation

Lags (p)	Chi2	Df	P
1	40.538	1	0.4224

H0:no serial correlation

Source : (Own Calculations)

Based on what was found, it is not possible to say that the null hypothesis should be rejected for any of the models that were evaluated. Based on the results of the functional form test, there is no problem with the serial correlation, and these results can be used to describe the model correctly. Since the probability value of Durbin's alternative test for autocorrelation is more than 5%, or 0.5542, the research cannot say for sure that the null hypothesis is wrong. The null hypothesis will be allowed to stand, though, because the residual does not show any correlation with itself over a number of steps. They also accept the null hypothesis in the Breusch-Godfrey LM test for autocorrelation since the P value of 0.4224 shows that the residual is not serially correlated (autocorrelated). This means that the null hypothesis is probably true (autocorrelated). In a similar way, the mistakes are thought to be typical.

4.11 Discussion

In the thesis part, the results of the hypothesis and the theoretical analysis related to the hypothesis are discussed. This thesis used secondary data to evaluate the hypothesis. This thesis employed a regression effect model to determine how private equity investment affected the performance of the companies that received funding. According to the results, private equity investments improve the bottom line for the companies that receive them, and more investments mean more money for growth. The findings suggest that the amount of capital invested do impact business outcomes. Since the chance of this variable occurring is less than 5% in the random effect model table, the response from the regression effect model indicates that the amount of capital invested is important in explaining performance (0.013). There is a significant positive relationship between the amount of capital invested performance and financial performance, according to a matrix correlation analysis (0.0868).

the amount of capital invested research is extensive. Bernstein, Lerner, Srensen, and Stromberg (2018) found that companies that invested in private equity funds grew far faster than those that did not. Kaiser and Westarp found that the amount of capital invested performance boosts fundraising. (2010). Other investigations (Kim and Cho 2009; Ueda 2004; Kaplan and Stromberg 2009; Boucley et al. 2011; and Chunj 2011) found that PE significantly improved investee firms' performance and efficiency. A successful private equity fund has economies of scale, information from earlier funds, a solid reputation, and lucrative projects, according to McKinsey (2016). Higson and Stucke explain this connection in greater depth (2012). The favorable association is not statistically significant for funds that have never experienced a recession. Hoskisson et al. (2013) and Klonowski (2011) theorized that the amount of capital invested success is linked to its knowledge and expertise, which helps its investees perform better. The research also found that private equity investors and fund managers with sector expertise often provide competent and thorough advice to recipient firms, confirming these researchers' claim. This increases transaction value and profits for the receiving firms. In this regression table, board size has no significant effect on performance since P equals P (0.084), which is larger than 5%.

The size of the board and the financial performance of businesses showed no relationship (-0.309). Prince Baah-Peprah and Priscilla Serwaah (2007) found that board size improves recipient firms' financial performance. However, Yermack (1996) discovered a negative association between board size and company value using a panel data set of 452 big US public corporations. His results support those of Lipton and Lorsch (1992) and Jensen (1993), who recommend restricting board size. This misunderstanding is frequently attributed to the difficulty of reaching consensus in large groups. The results are as shown. The findings, however, suggest that the number of directors serving on a company's board has little to no bearing on the company's bottom line. This study analyzed whether private equity-backed businesses benefited from an increase in the frequency of transactions. The success of companies supported by private equity was not impacted by the frequency with which they went through transactions. There is a positive correlation between transaction and PE profitability among the firms in our sample, but the relationship is not statistically significant. Private equity profitability is negatively correlated with the number of deals, and the P-value for this relationship is 8.63 percent higher than five percent. Deal activity is thus unaffected by the success or failure of investments.

4.12.1 Comparision of the Results of this Study and Other Studies of Earlier Research

Hypothesis	Result of this Study	Other Research Result
H1: Private equity fund has no effect on firms' financial performance	According to the results, PE fund has an effect on financial performance by the response in Table 6 of the regression effect model, PE fund is significant in explaining the performance because the probability of the occurrence of this variable is less than 5% in the random effect model table (0.013). A matrix correlation of this study showed that there is a strong positive correlation between PE fund and financial performance (0.0868).	Bernstein, Lerner, Srensen, and Per Stromberg (2018), Kaiser & Westarp cite the results of Kaplan and Scholar (2005), Meles et al. (2014) and Jain and Kini (1995), Kim and Cho (2009), Ueda (2004),and Kaplan and Stromberg (2009), Boucley et al. (2011), and Chunj 2(011) all these research studied the impact of private equity on industry performance and concluded that firms that invested in private equity funds grew significantly faster than those that did not invest. They found that private equity has a significant positive impact on the performance of investee companies.
H2: The size of the board director has no effect on firm's financial performance.	The size of the board director has not significantly impacted on corporate financial success. The correlation between investment funds and company financial performance was -0.309, so in the regression model, the investment funds are not significant with performance since the P-value is equivalent to P (0.084), which is more than 5%.	The research conducted by Prince Baah-Peprah and Priscilla Serwaah (2007) reveals that private equity ownership has a substantial favorable effect on the financial performance of investee enterprises.
H3: The number of deals has a positive effect on firm's financial performance.	This hypothesis shows that transaction volume does not affect recipient firm performance. Not statistically significant. since the P-value for transactions is 0.863% bigger than 5%.	Private equity investment negatively correlated with firm success in another research that examined transaction numbers.

CONCLUSION

The study sought to examine the relationship between private equity and the financial performance of firms. The study sought to provide an answer to the question of how private equity affects the financial performance of firms. The study contributed to the literature on the impact of private equity on the performance of unlisted companies, several authors cited in the literature asserted a positive answer to the research question such as Gompers and Lerner; Ljungqvist and Richardson; Kaplan and Schoar; Moskowitz; Vissing-Jorgensen; Phalippou; Harris; Jenkinson and others found that private equity improved the performance and financial success of companies and plays a role in indirectly supporting and monitoring companies.

To highlight the explanatory power of agency theory and corporate governance, the study evaluated three independent variables on the performance of the firm, namely the amount of capital invested, number of deals and the size of board director, the study uses the random effects model to achieve the research objective.

The following conclusions are drawn from the research findings: the amount of capital invested variable contributes positively correlated on the firm's financial performance on the contrary the number of transactions and board size are negatively correlated with PE performance, but the effect is small. Since the amount of capital invested variable is less than 5% in the random effect model, PE fund and financial performance have a significant positive relationship. Previous researchers have found a positive correlation (Kim and Cho 2009; Ueda 2004; Kaplan and Stromberg 2009; Boucley et al. 2011; and Chunj 2011; Hoskisson et al. 2013 and Klonowski (2011)) confirming that PE significantly improves the performance and efficiency of investee firms perform better. The number of transactions and board size do not appear to be sensitive to financial performance. The corresponding hypotheses are therefore rejected. Based on these results, we conclude that the explanatory variables number of transactions and board size are negatively correlated with performance, but the effect is small and previous researchers have found a negative correlation between these factors.

The study is also an academic study, and it is conducted under extremely tight time constraints. The scope of the study is limited to secondary data obtained from the Thompson Reuters database and published financial statements of the private equity-backed firms are not allowed. An important limitation that should not be overlooked is the small number of investee firms used as a sample for the study. Given the lack of a database for the private equity industry, the sample used may not be a perfect representation of private equity beneficiaries. This may affect the generalizability of our results to other markets. Data for the study period was also difficult to obtain because some financial data are not available and had to be calculated, which took a long time.

This thesis informs future research. Longitudinal studies would be able to detect PE effects over a period of time hence such studies are encouraged for future studies. Similar research could examine more explanatory factors, such as the age of the firm and executive compensation,the size of the firm may also help in assessing performance. Again, using non-recipient firms of PE as a matched sample will set the pace for a new direction of analysis. By comparing these two distinct firms, it will help ascertain the extent to which PE adds value to their recipient firms.and finally, similar study could be conducted with data from different country or countries to help test the reliability and validity of the findings of this study.

REFERRENCE

Achaachi, L. (2022). Entry of Investment Fund in the Capital of companies in Marocco, What effect on their performance? International Journal of Accounting, Finance, Auditing, Management and Economies, P15.

Alexander Ljungqvist, Mtthew Richardson (2003). The cash flow, return and risk characteristics of Private Equity. National bureau of economique research 1050 Massachusetts Avenue Cambridge,MA 02138,47.

Antonio Meles, Stefano Monferrà & Vincenzo Verdoliva (2014). Do the effects of private equity investments on firm performance persist over time? Applied Financial Economics.

Augustin Caprasse & Laurent Clerbois (2017-2018). The impact of private equity on the performance of portfolio companies. Louvain School of Management (LSM),P7.

Achleitner, A. K., Schraml, S., & Tappeiner, F. (2008). Private equity minority investments in large family firms: what influences the attitude of family firm owners?

Axelson, U., Strömberg, P., &Weisbach, M. (n.d.). Why are buyouts levered? The financial structure of private equity funds.Finance ,1582.

Battistin, E., Bortoluzzi, P., Buttignon, F., & Vedovato, M. . (2016). Minority and majority private equity investments: firm performance and governance. Journal of Management&Governance,P 1-26.

Battistin, E., Bortoluzzi, P., Buttignon, F., Serafini, M., & Vedovato, M. (2013). The effects of private equity on targets : Majority versus Minority Investments. Dipartimento di Scienze Economiche “Marco Fanno”.

Berger, A. N., & Udell, G. F. . (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. Journal of banking &finance.

Bloom, N., Sadun, R., & Van Reenen, J. (2015). Do private equity owned firms have better management practices? American Economic Review,P442-446.

Chouzo, M . V. (2019). L'influence du capital-investissement sur l'influence du pilotage des PME. Programme Grand Ecole,P12-16.

De Lima Ribeiro,L.,&Geladsonde Caravahalo,A. (2008). Private equity and venture capital in an emerging economy: evidence from Brazil. Venture Capital,. 111-126.

Demaria, C. (2013). Introduction to private equity: venture, growth, lbo and turn-around capital.

Erich Battistin, F. B. (2016). Minority and majority private equity investments: firm perfomance and governance. Science+Business Media New York,P6.

Erick Fogelstion, Jonaton Gustafsson. (2020). GB Stakes in Private Equity:An Empirical Analysis of Minority Stakes in Private Equity Firms . *Stockholn School of Economis*.

Fan Xin & Xiumin. (2019). The Impact of Private Equity on corporate perfomance: An Empirical Reasearch of the listed companies on GEM.School of Business,Sichuan Agricultural University,Chengddu,Scihuan,China ,P82-83

Fenn, G. W., Liang, N., & Prowse, S. (1997). The private equity market: An overview. Financial Markets, Institutions &Instruments,6(4),P1-106.

Georage W. Fenn, Nellie Liang, Stephen Prowse.(n.d.). The private Equality market; An Overveiw. P1-8.

Gompers, Paul, ALan. (1993). The theory, structure ,and perfomance of venture capital. Harvad University,P1-11.

Jeroen Verbouw &Miguel Meuleman . (2020). The Real Effects Of private Equity buyouts : A meta- analysis. 4.

Kaplan, S. N. (2009). Leveraged buyouts and private equity. Journal of Economic Perspectives,P46-121.

Kaplan, S. and Schoar, A. (2005). Private Equity Performance: Returns, Persistence, and Capital Flows, Journal of Finance 60, P1791-1823.

Kaplan, S. and Strömberg, P. (2008). Leveraged Buyouts and Private Equity, working paper.

Kaiser, K., & Westarp, C. (2010). Value creation in the private equity and venture capital industry. Fontainebleau, France.

Jérôme Glachant, J.-H. L. (2008). Private Equity et capitlisme francais. P21, P22,P23.

Lauzon, N. (2013). The performance of venture capital funds analyzes ,The impact of venture capital investment on portfolio performance. Graduate School of Business, P8-18.Leslie A.(n.d.).

LESLIE A. & Jeng A. (n.d.). The determinants of venture capital funding: evidence across countaries. Boston University Schoolof management Boston, MA, USA, Bain Capital, P243-248.

Mathew P.Clark& Kamilla H.Risanger. (2019). Factor effects on private Equity Activity. Master thesis, Advanced Economics and Finance and Copenhagen Business School, P 15, P 26.

Metrick, A. and A. Yasuda. (2007). Economics of Private Equity Funds, Working Paper, Wharton Business School.

Machete, M. (2019). Private Equity:What Happens Next? *International MSc in Management at ESCP Paris*, P23.

Ongore, V. O. (2011). The relationship between ownership structure and firm performance. An impirical analaysis of listed companies in Kenya. African Journal of Business Management,, P2120-2128.

Prince Baah-Peprah&Priscilla Serwaah. (2017). The impact of private equity on firms in engeneering markets: evidence from Ghana. Univertiy of Agder,school of Business &Law , P 24, P 25.

Puccioni, A. (2021).The impact of Private Equity Operation on the Performance of Target Companies , An Empirical analysis of Italian SME's. *Department of Business and Managment*, P10-13.

Raviraj Karmvir Gohil and Vijay Vyas. (2016). Private Equity Performance :A Literature Review. *Jounal of Private Equity ,Vol19,No 3 Euromoney Institistional investor of PE*, 7.

Samila, S. &. (2011). Venture capital, entrepreneurship, and economic growth. The Review of Economics and Statistics,P 338-349.

SF, S. M. (2012). Venture capital (VC): Its impact on growth of small and medium enterprises in Kenya. International Journal of Business and Social Science.

Strömberg, P. (2008). The new demography of private equity. The global impact of private equity report.

Viral V. Acharya, Oliver Gottschalg, Moritz Hahn and Conor Kehoe.(2011). Corporate Governance and Value Creation: Evidence from Private Equity1. P6-7.

Vu., T. H. (2010). Organizational and stratigic factors in the perfomance of french venture capital funds. Management and management university of Nancy2., P 22, P 38.

Wei, S. G. (2008). Deteminants analysis of growth rate in private equity market . Business Adminstratation Finacial Risk Managment program, P1-5.

Wieland, M. F. (2009). The role of human capital in private equity firms' investment strategies. Erasmus University Rotterdam, ESE, P7, P13.

Wright Robbie, M. K. (1998). Venture capital and private equity: A review and synthesis. Journal of Business Finance & Accounting, , P521-57.