# The Effects of Private Equity on the Financial Performance of Firms

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**ABSTRACT:** The research Private equity investing has risen to prominence in the modern business world. The purpose of the study is to determine whether private equity influences the financial performance of a company. This study uses a quantitative approach to attain its primary purpose. In order to determine the effect of private equity on the financial performance of a company, this study uses data from the Thomson Reuters database for the years 2012 to 2020 . There are 54 companies in the database that are supported by private equity. The study is limited since Thomson Reuters lacks financial data for the remaining companies. For the purpose of determining the effects of private equity on firm financial performance, the panel regression of the pooled OLS and random model is employed. return on investment of private equity funds as the dependent variable. The study covered independent factors such as private equity fund size, stakes, number of transactions, and capital invested. In the investment industry, these characteristics are essential for explaining private equity. According to the findings of our study, several the explanatory variables have a statistically significant impact on the firm's financial performance. This shows that the private equity fund has a positive effect on the firm's financial success, while the other independent factors have no effect on the return on private equity.

**KEYWORDS:** Private Equity;Alternative Investment;General Partners;Limited Partner;Venture Capital; financial Performance; Venture Capital;Buyout; Thomson Financial.

## 1. INTRODUCTION

In recent years, private equity has emerged as an alternative source of financing to financial markets and banks. It is defined by the establishment of a privileged and extremely powerful connection between the entrepreneur and the provider of market-collected equity capital. The development of an individual's knowledge, skills, habits, and attitudes differentiates private equity from other conventional sources of finance.

Private equity is an American phenomenon that originated in the 1980s (Lichtenberg & Siegel 1990). Private equity is based on the concept of purchasing companies with high levels of debt with the purpose of quickly selling them for a profit. In the early 1990s, private equity operators were referred to as "barbarians at the gate" to emphasize that they were still on the outside but swiftly approaching, and that upon their arrival they would raid and pillage any company they could get their hands on. On the other hand, the private equity barbarians have moved from the perimeter to the boardroom. This tendency has continued, making private equity a formidable force that rapidly and significantly reorganizes firms worldwide (Wright, Amess, Weir & Girma 2009). This is evidenced by the rise in worldwide private equity transaction volume from $29 billion in 1990 to $917 billion in 2007. (Morris 2010).

Private equity (PE) is growing as an alternative to financial markets and banks as a source of funding. It is defined by the establishment of a privileged and extremely powerful connection between the entrepreneur and the provider of market-raised equity capital. Private equity is one of these forms of funding. It bridges the gap between self-financing and traditional sources of funding. Private equity is a decades-old concept that has attracted considerable interest. According to Appelbaum and Batt (2012), private equity (PE) firms are financial intermediaries in which the general partner (the PE company) raises capital from financial institutions (limited partners), such as pension funds, mutual funds, insurance companies, sovereign wealth funds, and wealthy individuals. The objective is to construct a portfolio of assets that generate returns or to acquire a company with the idea of earning a profit on the invested funds. Typically, private equity funds are created by publishing prospectuses to potential investors, with the aim of supporting promising enterprises and making returns over time (Bolton, 2012). These funds may be obtained by debt or equity investments. The majority of direct investments made by investors and private equity firms are in privately held businesses or buyouts of publicly traded corporations. Private equity funds invest mostly in unlisted stocks and require the signing of a contractual funding agreement between the PE funds and the company or business seeking private equity financing.

In the 1980s, when a wave of aggressive, highly leveraged buyouts wiped out huge U.S. public businesses, private equity

investors rose to prominence. Since then, controversy has surrounded the effects of private equity investments. Private equity proponents say that it provides a superior form of corporate governance, whilst critics assert that it transfers value from employees to corporate raiders at the price of long-term business growth and profitability.

The research focuses on the impact of private equity on organizations' financial performance. The effect of private equity on a company's financial success is mostly determined by a number of factors revolving around the fund's investing strategy. Obtaining private equity through venture capital.

Numerous authors attempt to explicate factors such as risk-return characteristics, the economics of the private equity market, and regulatory aspects of private equity, among others. However, few authors focus on the financial performance of enterprises supported by this alternative form of funding, and they all disagree with the alternative measurement of this financing.

Over this study, we are analyzing annual data for the eight-year span from 2012 to 2020. All variable information is retrieved from the Thomson Reuters Refinitiv database. This study's data will consist of panel or longitudinal information. In this sort of data, the number of listed firms (N) are monitored throughout an 8-year period, but owing to a shortage of data, only 54 companies are selected. Six nations, nine businesses each nation, and 54 companies in total were not listed on the stock exchange. The secondary data includes private equity funds from 54 companies, but we were required to include data from six nations. Using econometric tools such as descriptive statistics, correlation matrices, pooled OLS, fixed effect and random effect models, hausseim test, and heteroscedasticity results, the researcher determined the impact of private equity funds on the firm's financial performance.

Private equity investing is like other non-traditional investments that are expected to have higher risk-adjusted returns than traditional assets. It is believed that traditional assets and private investment assets have weaker relationships. Private equity investing is still a new way to make money in most emerging markets, where most investors don't know much about it. Most investors in industrialized economies like Europe and the United States prefer private equity to help companies grow. According to Ongore and Kusa (2013), private equity funds have longer investment horizons, making them illiquid and long-term investments. In the current body of research, there are empirical studies that give an overview of private equity.

The Private equity investments have been carefully examined in the scholarly literature. Jenkins (2013), for instance, investigated the governance and structure of U.S. venture capital businesses. In addition, Gakure and Karanja (2012) conducted a study that identified the most important aspects of private capital investments. Kung'u (2013) also analyzed private equity fund investment strategies, entry channels, and performance. As a result, there is a dearth of literature concerning the effect of private equity investments on the financial performance of companies. This study will address the following question: what influence private equity investments have on the financial performance of firms.

The purpose of this study is to determine how private equity influences the financial performance of a company. It will also explore the theory of private equity and attempt to explain its various concepts, including private equity markets, private equity players, private equity investment strategies and activities, the concept of private equity funds, the structure of private equity, the growth and development of the private equity market, and the emergence of secondary markets. The purpose of the study is to gain an understanding of the technical components of private equity and to survey the literature on the topic in order to identify problems requiring significant attention. This effort will assist individuals in learning more about private equity investments and their associated challenges. It will also look at how private equity firms could grow and build the foundation for the private equity market.

This exploratory study is intended to shed light on private equity and its many aspects. To investigate the notion, secondary sources of data were investigated, processed, and evaluated. A comprehensive literature review was undertaken to identify the difficulties and knowledge gaps in this sector. The contribution of the study to academia will be a better understanding of the effect of private equity on the financial performance of companies. It adds to our understanding of private equity investments by making suggestions for more research that are backed up by evidence.

This thesis will focus exclusively on unlisted enterprises funded by private equity investors. This analysis will only include venture capital firms and omit all other private equity kinds (buyout and others). In addition, the scope of this thesis will be confined to the analysis of companies backed by private equity investments for whom financial data is available in the Thomson Reuters Eikon and DataStream databases. Only companies who match the criteria for data availability will be included in the study's empirical analysis. The empirical analysis will span eight years (2012-2020).

This chapter looks at the thesis's setting and purpose to figure out how it works. The remainder of the research is structured as follows: Section one of the introduction relates to the definitions of all relevant terms to the thesis, and applicable theories are explored to construct the theoretical framework of the thesis. The second section then provides a complete literature review pertinent to this subject. In Chapter Three, the study's research design, empirical models, and methodology are explained, along with the sample selection and data collection process and a full description of the variables. Section three covers the descriptive statistics, pooled OLS, fixed effect and random effect models, hausseim test and heteroskedasticity results, as well as the empirical findings of the investigation. In section five, the empirical results were also examined in general terms. In the sixth section, the entire thesis is summarized with potential recommendations. At the end of the section, there is a review of the study's limitations and some advice for future researchers.

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## 2. LİTERATURE REVIEW

### 2.1 Private Equity

Depending on the characteristics of various economies, several academic studies have defined private equity in various ways. Private equity is a form of investment capital provided by institutions and high-net-worth individuals for the purpose of investing in and owning equity in enterprises. Private equity is a risky, successful, and long-term investment that provides organizations with a solid financial base and experience. Private equity is commonly referred to as patient capital since it seeks to profit from long-term capital gains rather than regular short-term reimbursements. Private equity is equity capital that is not publicly traded (Klein, Chapman, & Mondelli, 2013). Since 1960, numerous empirical and theoretical studies have been conducted on the phenomenon, both empirically and theoretically. Private equity funds therefore provide these companies with the capital they require for their creation, their investments, their development of new markets, or, in addition to pure financing, PE can also provide the capital they require to develop their businesses and to transfer them to new shareholders (the latter being the portfolio companies) (Cumming & Johan, 2007). This issue has been linked to the difference in information, the idea of pecking order, and the theory of trade-offs. This thoroughly studied phenomenon is known as "private equity. Now, we talk about information asymmetries, such as the pecking order theory and the idea of arbitrage in private equity transactions, in order to figure out what caused the problem.

### 2.2 Pecking Order Theory

Donaldson proposed this concept for the first time in 1961; Stewart, Myers, and Malouf (1980) developed it. According to the principle, organizations should employ their internal finances first because they are less expensive, followed by external sources in descending order of cost. Consequently, internal sources are depleted prior to the issuance of debt, which occurs only when internal sources have been depleted. When it is no longer prudent to continue utilizing debt, it can be utilized instead. The hypothesis begins with the premise that executives are more knowledgeable than outside investors about the company's prospects and risks. Such information influences the choice between internal and external funding and between debt and equity. Therefore, there is a hierarchy, which would be crucial for financing new or continuing initiatives. Most of the time, asymmetric information favors debt financing over equity financing, since debt financing demonstrates confidence in the profitability of a venture. In contrast, issuing shares indicates that the board of directors is pessimistic and believes the share price is excessively high. Therefore, the price of the shares could decrease if more shares are issued. Barry, Bierlen, and Sotomayor (2000) investigated the commercial applications of the partial adjustment theory and the pecking order theory. The study revealed that organizations respond to long-term financial goals for equity, debt, and leasing but that firms with greater problems with asymmetric information have a stronger pecking order for future financing needs. Typically, equity and debt are the two ways to invest in private equity. This theory is relevant to the study because companies would use it to determine whether to receive PE funding in the form of equity or debt, based on their position in the competitive landscape. The theory would also help businesses figure out the best and least expensive way to pay for a project.

### 2.3 Trade-off-Theory

According to the trade-off theory of capital structure, a corporation must assess the costs and benefits of debt and equity financing prior to deciding on their respective proportions. Kraus and Litzenberger (1973) proposed a balance between the deadweight costs of bankruptcy and the tax savings benefits of debt. The theory posits that debt financing has both a benefit and a cost, namely the tax benefits of debt and the costs of financial distress, which include both bankruptcy and non-bankruptcy costs, such as employees leaving, suppliers demanding unfavorable payment terms, bondholder/stockholder infighting, etc. (Frank and Goyal, 2007). When selecting how much debt and equity to use for financing, a firm that intends to optimize its overall value must evaluate this trade-off. According to Myers and Majluf (1984), a business utilizing the trade-off strategy establishes a target debt-to-value ratio and then works methodically to achieve it. The objective is determined by weighing debt tax exemptions and bankruptcy costs. According to the trade-off theory, the maximum amount of loans that can be used to fund microfinance varies from SME to SME based on profitability and other factors. Profitable Consequently, small and medium-sized firms (SMEs) with an abundance of physical assets that can serve as debt collateral can have a larger target debt ratio. The "pecking order" hypothesis is an alternative theory of capital structure based on the notion that managers are better informed than external investors about the future of a company. According to this theory, businesses with high and consistent earnings (termed "zero-debt firms") rarely employ debt financing (1984). According to this theory, if a company wants to fund a project with equity shares, it must do so at a price below the current market price.

This suggests that the stock is expensive and the management is inefficient. It does not know if it will be able to repay the debt if it borrows money to finance the project. This indicates that the distribution of stock is not advisable. On the other hand, the fact that the company borrowed money to pay for the project demonstrates that it is confident in its ability to repay the debt in the future. If management wishes to keep out of difficulties, they may attempt to finance initiatives with their own funds, such as retained earnings. So, when there are no more loans available, retained earnings come first, then debt, and then equity. Consequently, profitable businesses employ fewer debtors.

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## 2.4 Private Equity Investment and Firm Financial Performance

Numerous studies have examined the correlation between PE and a company's performance. Meles et al. (2014) investigated 118 Italian companies supported by private equity. They found that the effect of private equity investments on how well a business did depended on the type of private equity, the length of the investment, the personality of the investor, and the exit strategy. The poll also revealed that businesses backed by private equity perform better than their competitors. This indicates that there is a correlation between private equity investments and a company's success. In the same way, Salerno (2019) says that there is a positive link between PE and how well a company does.

The study examines 553 European PE-backed SMEs and finds that family-owned PE-backed SMEs perform better than non-family-owned PE-backed SMEs following the investment. However, the study did not examine corporate governance concerns related to PE firms, such as board changes or their strategy. Still, there are studies that cast doubt on the notion that private equity has a favorable impact on the financial success of enterprises backed by private equity. For instance, Gompers and Lerner (2001) discovered that when PE/VC money is utilized to support new enterprises, uncertainty and knowledge asymmetry exist. According to the study, private equity firms and angel investors may put their money into strategies, research, or projects that give them a lot of personal benefits but don't seem likely to give shareholders much money back.

According to Ongore (2011), determining the profitability of private equity funds may be tricky. Numerous studies on the performance of private equity firms have explored firm-level performance. Gakure and Karanja (2012) looked at how private equity-funded companies did from 1987 to 2000 and found that these companies grew faster.

According to Olweny and Chiluwe (2012), measuring the profitability of private equity investments has been fraught with several challenges. First, compared to public markets, information about the private equity industry is quite scarce. Second, some private companies' financial records are all over the place and hard to understand, especially when it comes to gross and net income.

Kaplan and Scholar (2005) analyze capital inflows and persistence to determine the success of private equity funds. The analysis suggests that, on average, results estimated by the Sample 500 are not statistically different. This research also investigates industry cyclicality and concludes that industry-level fund performance is procyclical. Baker and Wruck (1989) analyzed a particular instance to determine where and how an organization enhanced its operational performance. The company's operations improved as a result of its large debt load before the acquisition, according to the findings. This aligns with Jensen's (1986) perspective on financial growth.

## 2.5 The Impact of Private Equity on Financial Performance

Domestic and international scholars have investigated the impact of private equity on business performance. The first is that private equity can help a company do better by certifying it, while the second is that it doesn't make much of a difference.

Prince Baah-Peprah and Priscilla Serwaah examined the impact of private equity on the performance of enterprises in emerging markets in 2017. (2017). Different methods were utilized to acquire primary and secondary data, and a mixed methodology was employed to analyze them. According to the research, businesses backed by private equity performed better financially than publicly traded ones. According to the study, companies having a bigger private equity stake expanded slightly faster and had a slightly higher return on equity (ROE) than those with a lower private equity stake.

Bernstein, Lerner, Srensen, and Per Stromberg (2018) analyzed the effect of private equity on the success of local businesses. They combined two datasets to estimate the impact of private equity investments on industries. One dataset analyzed private equity investments in this manner, while another analyzed the industrial activity and performance of Organization for Economic Cooperation and Development (OECD) countries. This is demonstrated by the structural analysis conducted by the OECD.

PE funds have invested in various enterprises during the previous five years, and according to the funds, these businesses have grown rapidly. In addition, they discovered that the differences between industries with high PE activity and those with low PE activity were minimal. This shows that the conclusions were influenced in part by the effect that PE-backed firms had on other firms in the industry. They didn't find any proof that businesses backed by private equity were more affected by shocks to the economy as a whole than those that weren't backed by private equity.

A study published in the American Economic Review assessed the performance of over 3,000 enterprises controlled by private equity firms and discovered an improvement in total factor productivity. The Longitudinal Business Database (LBD) of the United States Census Bureau was used to look at each business location. This is a smaller unit of observation than the business as a whole. The study showed that private equity firms prefer to sell or reorganize businesses that aren't as productive while growing businesses that are more productive.

Amess, Stiebale, and Wright conducted an analysis of the effect of private equity on a company's innovative activities (2015). This study utilized a propensity score matching technique (to produce the counterfactual) and a difference-in-differences estimator in order to evaluate the impact of leveraged buyouts on portfolio firms. Their findings demonstrate that private equity firms do not emphasize short-term cost reduction above long-term profitability but rather invest in new projects with long-term returns. The empirical literature on the effect of private equity on firm performance and the research on leveraged buyouts are interrelated (Battistin et al. 2013). The impacts of private equity (PE) investments have been widely explored since the 1980s, when highly leveraged hostile takeovers acquired control of significant public corporations in the United States. Since the 1980s, private equity

investments have grown beyond leveraged buyouts, which always require acquiring a controlling position, to encompass minority investments. Lerner et al. (2009) and Kaplan & Stromberg (2009) both say that minority investments make a big difference.

A rise in overall debt reduces return on equity and, as a result, shareholder value. This suggests that further funds should be invested rather than borrowed. Private equity capital injections will have a greater beneficial impact on performance than borrowing. Amenya (2015).

Mwirigi conducted a 2014 study on the impact of private equity on emerging markets. In his research, he examined books, articles, data, and other sources to determine what the private equity industry in Kenya does. Private equity has been a big part of how businesses in developing countries have grown, but this growth has been slowed by the lack of laws and institutions.

## 2.6 Relationship between private equity and industry performance

Numerous studies have investigated the performance of private equity businesses. The quantitative performance of these companies is intriguing for some of the reasons mentioned earlier in this literature review, including their ability to increase the value of companies they invest in prior to selling them and the broader effects of these activities on competition, innovation, and economic growth. The performance of assets is especially noteworthy since it illustrates how well they may generate income for their owners. Numerous studies have been conducted on the performance of private equity organizations.

Cochrane (2005) examines venture capital risk and return econometrically. Cochrane's selection bias analysis produces a 7% trial log return. The CAPM alpha is 45%, despite average arithmetic returns of 53%.

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Sorensen et al. (2014) compare the returns of private equity funds and firm stakeholders. By discussing portfolio selection, they suggest that private equity firms need a lot of alpha to cover shareholder costs.

Korteweg and Sorensen (2017) investigate the long-term success of private equity. Regardless matter whether net returns are consistently high or poor, they see constant performance. The predicted yearly return disparity between the highest and lowest quartiles is 7–8.

## 3. DATA AND METHODOLOGY

In this section, we describe the sample selection procedure and research technique employed in the development of this thesis. We employed a quantitative technique known as panel data, which is a statistical study. Panel data analysis offers a comparatively greater level of statistical validity and helps eliminate omitted variable bias.

## 3.1 Hypothesis Definition

This empirical study tests four ideas about how private equity affects the financial success of a company.

H1: Private equity fund size has no effect on firms' financial performance.

H2: Private equity stakes have no effect on firm's financial performance.

H3: The number of deals has a positive effect on firm's financial performance.

H4: The amount of capital invested has an impact on firm's financial performance.

## 3.2 Research Model

We utilized the random-effects model since certain conditions were met. The random-effects model is used to evaluate the effects of specific individual traits that are not inherently observable. In panel data investigations, individual-specific effects are frequently observed. We employ the approach of Prince Baah-Pepsteinbacher, Serwaah, and Karanja (2017), who employed the variables private equity stake and private equity fund, which is also the independent variable in my study. I added the number of transactions and the amount of capital spent to the analysis as two more variables. The process of data analysis begins with descriptive statistics to introduce us to the data set. In our investigation, the panel regression model was utilized. In the last part of our research, we use heteroscedastic regression and autocorrelation to test how well the model works.

## 3.3 Data Sources

Using data from Thomson Reuters Eikons, this study analyzed the influence of private equity on the financial performance of companies. Thompson Reuters has the most used private equity funds for research in both academia and business. The Refinitiv Private Equity Data Screen provides access to a company supported by private equity through its public data. In the private equity process, the industry in which the company works and the country in which it is headquartered are two crucial considerations. The Thompson Reuters Company Currently, private equity investments are being collected and reviewed in order to quantify and rank the private equity of companies. Nearly 70% of the global investment market is covered by the Thompson Reuters Private Equity Investment Scream database, one of the major private equity investment databases. The database contains scores for 187 unlisted global market enterprises. In addition, Thompson Reuters private equity investment providers have created private equity scores based on several business sectors and industries, encompassing enterprises from nearly every country on earth. In addition, the sample observations are organized as a balanced set of panel data so that the effect of private equity on the financial performance

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of companies over time may be adequately evaluated, despite the fact that panel data is more fair and acceptable.

### 3.4 Data Description

For this study, we examined data for each year from 2012 to 2020. The Thomson Reuters Refinitiv database is used to obtain information on all variables. The data for this study is based on a panel design, which is also called longitudinal data. This type of data allows us to observe the number of unlisted companies (N) over an 8-year period. The private equity-backed market consists of 181 unlisted companies. Due to a lack of financial information, only 54 of these companies were selected. Thomson Reuters and company websites are used to obtain secondary data. Private equity funds of 54 companies were included in the data. In the table "APPENDIX", you can find more information about the sample data set.

**DATA AND VARİABLES DEFİNİTİON**

| Variable | Description | Types of Variables | Expected Relationship |
|---|---|---|---|
| R | Return | Dependent | - |
| PEF | Private Equity Fund | Independent | Positive |
| PES | Private Equity Stakes | Independent | Positive |
| NO of Deal | Numbers of Deal | Independent | Positive |
| IC | Invested Capital | Independent | Positive |

### 3.5 Descriptive Statistics

The descriptive panel data for this study consists of private equity data from a total of 54 unique firms from 6 countries for 8 years (from 2012 to 2020).

### 3.6 Testing Correlation

The correlation matrix explores the direct relationship between variables, which also show the multi-linearity problem. The correlation matrix is based on the correlation coefficient; if the two variables are exactly positive, the correlations will be1.0. When the two variables have a negative linear association, the zero coefficient of correlation implies that there is no linear relationship between the variables.

### 3.7 Normality Test

Consistency is a property of the point estimator that falls around a sample as the size of the sample becomes big, it tells us nothing about the sample size distribution, and it's needed away of estimating and developing this hypothesis for the study estimators.
H1: Data is not normally distributed
H2: Data is normally distributed

### 3.8 Method of Estimation

In our analysis of the panel data, we will focus on the estimation method of which we will present the pooled regression, the fixed effect model, and the random effect model.

#### 3.8.1 Panel Regression Test

This study's estimating method begins with a description of panel data procedures. The research investigates the returns on private capital utilizing the "pooled OLS, fixed effects, and random effects" technique. According to Baltagi (2005), panel data analysis generates a considerably higher level of statistical validity and also reduces omitted variable bias. By reducing time-invariant unobserved mistakes, this produces a more reliable outcome. In addition, panel data accounts for individual heterogeneity. The panel provides more information and greater efficiency than time series. It accounts for correlation and examines more intricate behavioral models (Gujarati, 2003). Thus, the generic model is stated.

$$y_{it} = \beta_0 + \beta_1 x_{1it} + \beta_2 x_{2it} + \ldots\ldots + \beta_k x_{kit} + u_{it} \text{ ------- 1}$$

Where I denotes the unit of observation, "t" the time period, "k" the kth explanatory variable, "0" the intercept, "k" the coefficient of each explanatory variable, and "uit" the composite error term. The term error is made up of two parts: an unobserved individual effect and an idiosyncratic error. This is written as $u_{it} = \alpha_i + u_{it}$ ——— 2

The unobserved individual effect is time invariant, whereas the idiosyncratic error varies over cross-sectional units (Baltagi, 2005). The error estimation method results in three types of panel data classifications: pooled OLS, fixed effect, and random effect models.

#### 3.8.2 Pooled Regression

First, cluster regression is investigated. It has constant ordinate and slope coefficients. All of this model's data can be pooled and regressed using ordinary least-squares. We performed the regression model using 54 observations, omitting cross-sectional and temporal data. It's intuitive to use a comparable estimator when extending a cross-sectional analysis to panel data. POLS corresponds to OLS on data pooled over time (t) and cross section (Wooldridge, 2010). Yit = xit + uit = POLS estimator
1. If E[X0 I(Yi Xi)] = 0, the error term has a zero-conditional mean.

2.K-dimensional nonsingular matrix A E (X0 iXi).

### 3.8.3 Fixed Effect Model

The Fixed-effects estimator is another unobserved model. In this approach, E (ci | xi) can be any function of x. The model is better than random effects analysis (Wooldridge, 2008). (2010) "fixed effect" means that although the intercept varies between firms, it is constant over time. The fixed-effects model, or LSDV, lets each company have its own intercept value. If the unobserved impact is linked to explanatory variables, apply the fixed effects estimator. Yit=xit+uit=xit+I+vit I=1, 2,... t=1, 2,..

### 3.8.4 Random Effect Model

One of the unobserved effects models is the random effects estimator, which has the following general form:

Yit = xitβ + ci + uit, t = 1, 2. . .

This estimator assumes stick exogeneity and orthogonality between ci and xit (Wooldridge, 2010). Unobserved effects are random if they are uncorrelated with explanatory variables. The model is:

yt = β0 + xit1β1 + xit2β2 + · · · + xitkβk + uit

= β0 + xit1β1 + xit2β2 + · · · + xitkβk + ai + vit

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

In the presence of an unobserved effect, POLS can still be used to create unbiased and consistent estimates, but the random effects estimator is more efficient. The random-effects regression model is used to assess the impact of non-quantifiable individual characteristics such as bravery or comprehension. In panel data analysis, individual-specific effects are frequently detected. In a panel data set, the random-effects model is often used with the fixed-effects regression model to look at how different individual traits affect the response variable.

### 3.8.5 Hausman Test

The Hausman test determines "fixed vs. random effects." The Hausman test's null hypothesis is that random effects are favoured over fixed effects. Hausman tests if "unique mistakes are associated with regressors." The Hausman test assesses whether fixed or random effects estimators are better for panel data. Hausman assumes (0, COV x I). If covariance is met, fixed effects and random effects estimators will be consistent. The random effects model is more efficient than the fixed effects model since its standard error is lower. Only the fixed effects model makes sense if the covariance assumption is breached (Wooldridge 2009: 493).

### 3.9 Heteroscedasticity

Additionally, the research examines whether the desired assumption of homoscedasticity holds true. The presence of heteroscedasticity is a major concern for regression analysis applications. Heteroscedasticity occurs when the favorable standard deviations are not constant and tracked over a fixed period of time. The null hypothesis is therefore rejected. The conclusion would then be that the models have an issue with heteroscedasticity.

### 3.10 Autocorrelation

Autocorrelation describes the interaction between past and future beliefs in a series of events. Autocorrelation is frequently referred to as "lagged correlation or serial correlation," referring to the association of a set number of members over a period of time.

## 4. RESULTS OF THE STUDY

This section evaluates the study's hypothesis in light of the empirical results and explores their theoretical context. The study used econometric tools such as descriptive statistics, correlation matrix, normality test, pooled OLS, fixed effect and random effect model, Hausman test, heteroskedasticity and autocorrelation results.

### 4.1 Descriptive Statistics

This study's descriptive panel data consists of private equity information from a total of 54 unique firms from six nations (the United States, France, Germany, the United Kingdom, Canada, and Mexico) during a period of eight years (from 2012 to 2020). The following table provides descriptive statistics for the dependent and independent variables of the study:

**Table 1. Summary Statistics**

| Variable | N | Mean | Std.Dev. | Min | Max |
|---|---|---|---|---|---|
| Return | 54 | 27.5 | 15.732 | 1 | 54 |
| Numbers of Deals | 54 | 3.074 | 2.4251 | 1 | 9 |
| PE Funds | 54 | 6.407 | 6.792 | 1 | 33 |
| PE Stake | 54 | 5.240 | 4.485 | 1 | 19 |
| Invested Capital | 54 | 21.556 | 11.005 | 1 | 40 |

Our table panel has 53 observations from 6 countries over 8 years (2012–2020). The highest return in the sample is 54 and the lowest

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is 1. Our sample has a mean return of $27.5 and a standard deviation of $15,732.

## 4.2 Correlation Matrix

The Pearson correlation matrix of the variable in our panel data is as presented in the table 2.

**Table 2. Pearson Correlation Matrix**

|  | Return | No of Deal | Invested Capital | PE Fund | PE Stake |
|---|---|---|---|---|---|
| Return | 1 |  |  |  |  |
| Numbers of deal | -0.1637 | 1 |  |  |  |
| Invest Capital | 0.1494 | 0.0308 | 1 |  |  |
| PE Fund | 0.0868 | 0.3314 | -0.083 | 1 |  |
| PE stake | -0.309 | 0.5594 | 0.1486 | 0.3195 | 1 |

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

The correlation matrix shows that return is strongly connected with private equity funds and capital invested, which is not surprising. As the private equity fund grows, so does corporate performance. private equity funds is a statistically significant predictor of private equity performance (0.0868). Mwirigi (2005) discovered the same thing when he studied private equity in emerging markets. Private equity helped emerging market companies grow. Similar results were found in 2007 by Baah-Peprah and Serwaah. They studied how private equity influences emerging-market companies. Private equity-funded businesses have a higher return on equity (ROE) and grow faster, and the amount of capital invested correlates positively with the return on private equity (0.14).

The private equity fund and invested capital are considerably more important to the overall return than the number of transactions and private equity stake. There's no correlation between transactions or private equity stakes and return. There's a strong association between acquisitions, capital spent, private equity fund size, and stakes. The private equity stake correlates positively with total invested capital, but the private equity fund has no significant association with it (-0.083), showing that invested capital has no effect on the market private equity fund. Private equity stakes and funds are linked. A matrix correlation study shows a positive relationship between private equity fund size and performance. Investing and performance are modestly correlated. A second regression of PE fund performance on ownership shows that PE fund ownership affects firm performance. The results support Meles et al. (2014) and Jain and Kini (1995), who found that PE-funded firms perform better. According to Kim and Cho (2009), Ueda (2004), Kaplan and Stromberg (2009), Boucley et al. (2011), and Chunj (2011), private equity makes a major difference in how well and efficiently organizations run.

## 4.3 Normality Test

The goal of this study was to see if the data was regularly distributed. The Shapiro-Wilk Test was used to determine whether the dependent variable was normal. The following hypothesis was investigated further

Ho: The dependent variable is not distributed regularly.

H1: The dependent variable is distributed regularly.

The results of the tests are listed in the table 3 below.

**Table 3. Normality Test**

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

Based on the preceding findings, the Shapiro-Wilk test yielded a p-value of 0.59543, which is greater than 0.005. So, the null hypothesis was not true, and a normal distribution was found for the dependent variable.

## 4.4 Model Selection Tests

For panel data regression analysis, there are three primary model types. The most popular models are Pooled OLS, Random Effects Model, and Fixed OLS. The pooled OLS model contains time-series and cross-sectional observations of dependent variables that do not exploit panel data set characteristics. The Random Effects Model accounts for the effects of each individual by using a single intercept for each individual. In the random effect model, it is assumed that individuals are selected at random and that their effects are not constant but unpredictable (Hill et al. 2018). In the fixed effect model, on the other hand, it is assumed that the missing variables in the panel data vary across individuals but not over time. The fixed effect model permits the modification of unobserved characteristics of an object that do not vary over time and are related to the reported independent variables. Since we have panel data to test our hypothesis, we must select the most appropriate panel data regression model for our research. We utilized the F test

and the Breusch-Pagan LM test to determine which regression model was superior. The F test is used to determine whether the pooled OLS model or the fixed effect model should be utilized in the regression analysis. According to the null hypothesis of the F test, the pooled OLS model is superior for regression analysis. In contrast, the alternative hypothesis asserts that the fixed effect model is superior. If the p-value of the F test is less than the significance level of 5%, we reject the null hypothesis and accept the alternative hypothesis, which states that the Fixed Effect Model is superior to our regression model, and vice versa. The results of the F test indicate that none of our models support the null hypothesis of the F test. This indicates that the pooled OLS approach does not match our regression models well. We shouldn't use the pooled OLS method for our panel data. Instead, we should use the fixed effect model.

### 4.4.1    Pooled Regression Model

We have 54 observations and run the regression model disregarding the data's cross-sectional and temporal characteristics. Examining the cluster regression model is the initial step. For this model, all data may be combined, and an ordinary least-squares regression model can be conducted.

**Table 4.** Pooled Regression Model

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

| Variable | Coefficient | Std.err. | T | P>|t| | [95% conf intervalle | |
|---|---|---|---|---|---|---|
| Numbers of Deal | -.1536021 | 1.029399 | -0.15 | 0.882 | -2.222256 | 1.915052 |
| PE Fund | -.9445813 | .3717002 | -2.54 | 0.014 | -1.691541 | .1976219 |
| PE Stake | .8569765 | .4907876 | 1.75 | 0.087 | -.1292981 | 1.843251 |
| Invested Capital | .330523 6 | .1883605 | 1.75 | 0.086 | -0.48001 | .7090482 |
| CONS | 22.40869 | 5.480873 | 4.09 | 0.000 | 11.39446 | 33.42292 |

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

The analysis showed up with an F-value of 2.79, which was significant because the p-value was less than 0.05 (p value = 0.03640.05). There were 54 observations, and the R-square of this pooled regression table is 0.1855%, while the Adj R-square is 0.1190%. This means that, at a 95% level of significance, the overall pooled regression model was significant. From the p-values of the explanatory variables, we can see that only the private equity fund variable is significant, since P = 0.0014 is less than 5%. The study's results are the same as those of Bernstein, Lerner, Srensen, and Per Stromberg (2018), who looked at how private equity affects the performance of an industry and found that companies that invested in private equity funds grew much faster than those that didn't. At the 5% level, the private equity stake, number of deals, and capital invested don't mean much, but they do at the 8.7%, 8.6%, 88, and 6% levels. The return is the dependent variable, and the number of deals, the fund's private capital, how much of the private capital is used, and the amount of capital invested are the independent variables. This result shows that the number of deals, private equity stake, and invested capital all have a negative relationship with the return of private equity, while the private equity fund has a positive relationship with the return of private equity. In some ways, these results support H3, H1, and H4. Now, we don't accept the result of the pooled regression model because we think that the codes of the six companies are not the same. We use the fixed effect model and assume that the intercepts of the six companies are different.

### 4.4.2    Fixed Effect Model or LSDV Model
### Table 5. Fixed Effect Model

| Variable | Coefficient | Std.err. | T | P>|t| | | [95%   conf. Intervalle] |
|---|---|---|---|---|---|
| Numbers of Deal | -.3700976 | 1.072634 | -0.35 | 0.732 | -2.531849  1.791654 |
| PE Fund | -.8479552 | .5158557 | -1.64 | 0.107 | -1.887594  .1916836 |
| PE Stake | .9311377 | .689396 | 1.35 | 0.184 | -4582488    2.320524 |
| Invested Capital | .3207864 | .1944385 | 1.65 | 0.106 | -.0710786   .7126514 |
| 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) =1.28        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

   This table contains 54 observations and 6 businesses. The F statistic is 1.28 and the P statistic is 0.29, both of which are greater than 0.05, indicating that none of these coefficients or P values of 0 are statistically significant. In our research, the return serves as the dependent variable, while the number of transactions, the private equity stake, the private equity funds, and the amount of capital invested serve as independent factors. Since the P value is greater than 5% (P = 0.732, P = 0.106), the number of deals and amount of money invested are irrelevant. This indicates that the number of transactions and quantity of capital spent have no bearing on the return on private equity investments. The number of transactions has a negative correlation coefficient with private equity returns (-.3700976). In contrast, the return on private equity has a positive capital invested coefficient of 0.3207864. The private equity share and private equity fund are also unimportant, as the probabilities P (0,107) and P (0,184) for PE stake and PE fund are greater than 5% and do not explain the return. The standard deviation of this variable, the number of transactions, is 1.072634, while the standard deviations of the PE fund and PE stake are 0.5158557 and 0.689396, respectively, and the standard deviation of the amount of capital invested is 0.1944385.

### 4.4.3    Random Effect
This table in our analysis contains the random effect model, so we will analyze our level variable.

**Table 6. Random Effect Model**

| Variable | Coefficient | Std.err. | Z | P>|Z| | [95%   conf. Intervalle] | |
|---|---|---|---|---|---|---|
| Numbers of Deal | -.177187 | 1.026864 | -0.17 | 0.863 | -2.189804 | 1.83543 |
| PE Fund | -.9358835 | 3781822 | -2.47 | 0.013 | -1.677107 | -.1946601 |
| PE Stake | .8641161 | .5007351 | 1.73 | 0.084 | -.1173066 | 1.845539 |
| Invested Capital | .3297904 | .1878231 | 1.76 | 0.079 | -.0383361 | .6979169 |
| 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=0.0318Corr (u_i, x) =0

   In this table, there are 54 observations and 6 companies that make up the regression effect model. The Waldchie 2(4) value is 10.57, and the P value is 0.0318. This means that P is less than 5%, the model is significant, and the coefficients are not zero. The return is the dependent variable. The private equity fund size is important to explain the return because the probability of this variable happening is less than 5% in the random effect model table (0,013). This shows that the size of a private equity fund is a statistically significant predictor of its return. The result was the same as what Kaplan and Scholar found in 2005. They found that the PE firm's fund performance has a positive and large effect on fund raising. Kaiser and Westarp (2010) cite these results. So, only the most successful private equity companies can get money early in the life of a fund. This is because the best private equity firms have a lot of experience and a high level of skill, which gives them a lasting competitive advantage. Investors can also spot PE businesses with a lasting competitive advantage. Because the P value is higher than 5%, the number of deals, capital invested, and private equity stake are not important. P = 0.863, P = 0.079, P = 0.084, which means that the number of transactions and the amount of capital invested, PE stake don't have a positive correlation with the return of private equity. This means that they are not significant and don't explain the return. The correlation coefficient of the number of deals (-.177187) has a negative coefficient on private equity returns. On the other hand, the coefficient of the PE fund, PE stake, and amount of capital invested have a positive coefficient on the return on private equity. Private equity stake and invested capital are also not significant because the Probability of PE stake and PE fund is the more than 5% P (0,084) and P (0,079) to not explain the return of private equity.

### 4.4.4    Hausman Test
 Since the F test and the Breusch-Pagan LM test indicated that pooled OLS is not optimal for our regression models and our panel data contains both mixed effects and random effects, we ran the Hausman test, which determines whether the fixed effect or random effect model is optimal for our regression models. The Hausman test lets us pick between the fixed and random effect models for our panel data investigation. The Hausman test's null hypothesis is that the random effect model is better for regression analysis.

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The alternative hypothesis is that the fixed effect model for regression is more accurate. The null hypothesis is accepted if the Hausman test's P value is over 5%. If P5%, the alternative hypothesis is adopted. tabulated Hausman test findings.

**Table 7. Hausman Test**

H1: Null Hypothesis; Random effect model is appropriate
H2: Alternative Hypothesis; 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 Fund | -.8479552 | -.9358835 | .0879282 | .3508352 |
| PE stake | .9311377 | .8641161 | .0670216 | .4738474 |
| Invested Capital | 3207864 | .329790 | -.009004 | .0502872 |

b=Consistent under H0 and H1; obtained from xtreg B=Inconsistent under H1, efficient under H0; obtained from xtreg Test of H0: Difference in coefficients not systematic Chi2 (4) = (b-B)'(V_b-V_B) ^ (-1)) (b-B) =0.73 Prob>chi2=0.9470

As shown in the table, we must accept the null hypothesis and run the random effect model regression for both models with the dependent variable. To explain the null hypothesis, the P-value is more than 5% because the P-value = (0.9470). It seems like the random effect model works better. Based on how the above tests turned out, we chose the right models for the study's regression analysis. According to the Hausman test, this model is correct because the probability is significant, and the PE fund has a probability of less than 5%. This means that this independent variable has a positive effect on performance, but the other independent variables have no effect and are not important in explaining the return of private equity on the firms.

**4.5 Model Diagnostic Tests**

Following the selection of suitable models for our panel, diagnostic tests were performed on the models. A Breusch-Pagan heteroskedasticity test was used to test for heterocedasticity in the models. The null hypothesis of the Breusch-Pagan heteroscedasticity test is that residuals are homoscedastic. Heteroscedastic behavior is the alternate hypothesis for residuals. The Breusch-Pagan heteroskedasticity test reveals that the probability values for each model are below 5%. This means we did not reject the null hypothesis that residuals are homoscedastic and instead accepted the hypothesis that residuals in our model are heteroscedastic. We ended our examination of panel data by examining series and autocorrelation. The Durbin-Watson and Breusch-Godfrey LM tests with the null hypothesis of no serial correlation in the residuals (autocorrelation) The null hypothesis of the Durbin-Watson autocorrelation test is that there is no first-order autocorrelation. This test's alternative hypothesis is that there is first-order autocorrelation. The test findings demonstrate that the null hypothesis cannot be rejected for any of the presented models. So, there is no problem with serial correlation, and the functional form test shows that the model is correct.

**4.5.1 Heteroscedasticity**

Heteroscedasticity arises when the variance or spread of errors in a linear model are not identical. This, if not rectified, can result in erroneous estimations (Gujarat, 2003). We utilize the Breusch-Pagan test in Stata with the null hypothesis that variance is constant to examine whether this is true. Table 11 displays the results, where the bold p-value shows the presence of heteroscedasticity. Therefore, the null hypothesis cannot be rejected and must be accepted. This is because the likelihood of a value is 0.7439, which indicates the mean is greater than 0.05.

**Table 8. 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

**4.5.2 Test for Autocorrelation**

The interdependence of mistakes in a linear regression model is referred to as autocorrelation. Thus, the errors for any two observations are often related (Sarstedt & Mooi, 2014). This issue also makes precise estimations difficult. We test this hypothesis using the Durbin-Watson test and the Breusch-Godfrey LM test with the null hypothesis "residual is not serially correlated" (autocorrelated). The results are shown in Tables 12 and 13. Again, bolded p-values imply autocorrelation.

**Table 9. Durbin's Alternative Test for Autocorrelation**

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Null hypothesis: Residual are not serially correlation (autocorrelated)
ALT hypothesis: Residual are serially correlated or autocorrelated

| Laps | Chi2 | Df | P |
|------|------|------|------|
| 1 | 144.545 | 1 | 0.5542 |

H0:no serial correlation

**Table 10. Breush-Godgrey LM Test for Autocorrelation**

| Lags (p) | Chi2 | Df | P |
|------|------|------|------|
| 1 | 40.538 | 1 | 0.4224 |

H0:no serial correlation

The results indicate that it is not possible to reject the null hypothesis for any of the models offered in each test. So, there is no problem with the serial correlation, and the model can be described well based on what the functional form test shows. We cannot reject the null hypothesis since the probability value of Durbin's alternative test for autocorrelation is more than 5%, or 0.5542. However, the null hypothesis will be accepted because the residual is not serially correlated (autocorrelated). In the Breusch-Godfrey LM test for autocorrelation, we also accept the null hypothesis, as the P value of 0.4224 suggests that the residual is not serially correlated (autocorrelated) (autocorrelated). Similarly, the errors have a normal.

## 5.  DİSCUSSİON CONSLUSİON AND RECOMMANDATİON

### 5.1 Discussion

In the past decade, the majority of emerging markets have been associated with fresh investment opportunities and some growth potential, attracting private equity (henceforth PE) investors. An extensive study on the relationship between private equity and corporate financial performance has demonstrated that PE plays a key role in firm success. Prior to the present, research on these firm performance consequences was limited.

In our study, the private equity fund has a favorable effect on the financial performance of the private equity-backed company, demonstrating that financial performance has an effect on the private equity fund. Funded businesses can be more profitable. In addition, an increase in the number of funds invested can boost the firm's success. Based on the information we have, the private equity fund makes money, but the average return is less than 5%.

Numerous studies have been conducted to investigate the private equity fund component. Bernstein, Lerner, Srensen, and Per Stromberg (2018) studied the impact of private equity on industry performance and concluded that firms that invested in private equity funds expanded considerably faster than those that did not. Kaiser & Westarp quote the findings of Kaplan and Scholar (2005), who found that fund-raising is favorably and significantly influenced by a private equity firm's fund performance (2010). The result is consistent with the findings of Meles et al. (2014) and Jain and Kini (1995), that PE-funded firms perform better than non-PE-funded firms, as well as the findings of other researchers (Kim and Cho 2009, Ueda 2004, and Kaplan and Stromberg 2009, Boucley et al. 2011, and Chunj 2011), who discovered that PE significantly improves the performance and efficiency of recipient firms. McKinsey (2016) says that there is a positive relationship between the performance of private equity funds and economies of scale, lessons learned from previous funds, reputation, and access to transactions. The research of Higson and Stucke (2012) takes a more balanced view of this relationship. They find that the positive relationship is statistically insignificant, except for funds whose investments have never been in a recession, in which case it is very significant.

This success is due to the investment of private equity capital, which made it possible for us to come up with new ideas. The dynamic experience, networks, knowledge, and other abilities of the fund management all contribute to the performance of investee companies, helping the monetization of entrepreneurial ideas and the expansion of financially challenged organizations. Private equity investment supports the commercialization of entrepreneurial ideas and the growth of financially challenged businesses. The Private Equity Council (2015) cites the "4 Cs" (capabilities, clarity, culture, and capital) as an illustration of private equity's capacity to enhance business operations. This is only one example of the real-world applications of private equity. Previous research, such as that conducted by Kaplan and Schoar (2005), Hoskisson et al. (2013), and Klonowski (2011), has suggested that the performance of a private equity fund is correlated with the fund's level of expertise and knowledge, which enables investee firms to achieve superior performance. The point stated by these scholars is verified as a result of our findings, which also reveal that private equity investors and fund managers who have developed specialized sector experience and abilities frequently provide competent and complete counsel to recipient firms. This not only adds value, but it also helps the recipient businesses make more money.

We examined whether the quantity of transactions had a favorable effect on the success of private equity-backed companies. The data reveals that there is no correlation between the number of transactions and the performance of PE-backed companies. As explained in Chapter 4, the pooled regression and random effect models are frequently used econometric measurements of the efficiency of a company's performance. Although the data show that there is no positive correlation between the number of

transactions of firms in our sample and private equity profitability, this relationship is not statistically significant. In our analysis, the p-value for the number of transactions is 0.863% more than 5%, and the relationship between the number of transactions and the profitability of private equity is significantly negative. This means that the financial performance of an investment has no effect on the number of transactions. The findings of Prince Baah-Peprah and Priscilla Serwaah (2007) indicate that the ownership stake possessed by the PE stake has a considerable favorable impact on the financial performance of recipient enterprises. When founders are involved in management, it has a big and positive effect on how well organizations do financially. However, according to our data, private equity stakes have no meaningful impact on the financial success of companies. The p value is 0.084, which is more than 0.05. Lastly, our results indicate that the amount of money spent does not have a substantial effect on the return and does not explain the effect on financial performance.

## 5.2 CONCLUSİON

The purpose of this study was to determine the effect that private equity has on the financial performance of a company. Our organization conducted a literature assessment on the impact of private equity and its relationship to financial success. We obtained secondary source data from a Thompson Reuters publication and conducted an econometric analysis that included a model test using Stata software and the random-effect model approach. All of this was conducted in order to prove our theory.

Numerous studies have found the positive effects of private equity on the financial success of businesses. Numerous studies have found a link between the factors and private equity. The findings found that private equity investment was included in the empirical literature as an alternate source of funding. Using the random effect model for panel data, the study investigated the impact of private equity on the financial performance of companies. This was done by taking into account other factors, like the number of transactions and the amount of capital involved.

The major purpose was to evaluate if these independent variables affect the financial performance of the organization. For the years 2012 to 2020, the random effect model was used to meet our study's objectives. The following conclusions are drawn from the economic analysis and research findings: According to the results of our study, several of the explanatory variables have a statistically significant impact on the company's financial success. This suggests that the private equity fund positively affects the firm's financial performance, but the other independent variables have no effect on private equity performance. The correlations for the variables' number of deals and equity ownership on private equity performance are negative and negligible. Both the factors for the size of the private equity fund and the amount of capital invested are positive and highly significant. This shows that a larger fund size is linked to better financial success.

## 5.3 RECOMMANDATİON

This study's findings contribute to future research. A longitudinal study could be done to determine the long-term effects of PE financing on participants. This may be useful given that financial performance fluctuates over time. Variables such as the stakes of private equity investors, the size of private equity funds, the number of transactions, and the amount of cash spent may alter over time. In order to detect the effects of PE over time, longitudinal data is advised for future research. Using non-recipient companies as a matched sample will serve as the foundation for a new line of inquiry. By comparing these two firms, we may establish the amount to which PE adds value to its recipient firms. Similar research on this topic could investigate further explanatory elements. additional facets of corporate governance and executive compensation. When assessing overall performance, the explanatory variable edge size may also be useful. This is significant since private equity financing is supported by both financial and human resources. A comparable study might be conducted using data from one or more additional websites in order to confirm the reliability and validity of this study's findings.

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