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Value Creation in the Private Equity Industry

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Value Creation in the Private Equity Industry

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Abstract

Private equity (PE) firms are investment firms that acquire equity shares in companies. The goal of PE firms is to exit the investment after few years with a substantial increase in value. PE firms often claim to outperform the market, i.e. to create alpha.

The overall aim of this paper is to unravel the mystery of value creation in the PE industry. First, the author presents a conceptual framework for value creation in the PE industry based on a multiple valuation model that breaks down value creation into different elements. Second, the paper evaluates whether PE firms really create value by analysing and combining results from prior empirical studies based on the conceptual framework.

The results show that existing empirical evidence is mixed but that there is indeed a tendency toward a positive evidence that PE firms create economic value in average. However, there are methodological difficulties in measuring the value creation and studies are often subject to bias. Finally, it is pointed out that the question whether PE firms really create value has to be viewed from different perspectives such as the perspective of the PE firm, the investors and the portfolio companies.

Key Words: Private Equity, Investments, Value Creation, Value Levers, Multiple Arbitrage

Introduction

Private equity (PE) firms are investment firms that acquire equity shares in companies. The often use of large debt volumes in so-called leveraged buyouts (LBO). The goal of PE firms is to exit the investment after few years with the objective of a substantial increase in value. Private equity firms often claim to outperform the market, i.e. to create “alpha”.

Hence, the overall aim of this paper is to unravel the mystery of value creation in the private equity industry. More specifically, the following objectives are formulated: First, to present a conceptual framework for value creation in the PE industry. Second, to evaluate whether PE really create value based on the conceptual framework and prior empirical results.

The paper is structure as follows: In section 2, the required background is provided by explaining the structure of PE firms as well as a general valuation model using multiples. In section 3, the conceptual framework of value creation in the PE industry is presented. In section 4, prior empirical results are examined. Finally, a conclusion is drawn is section 5.

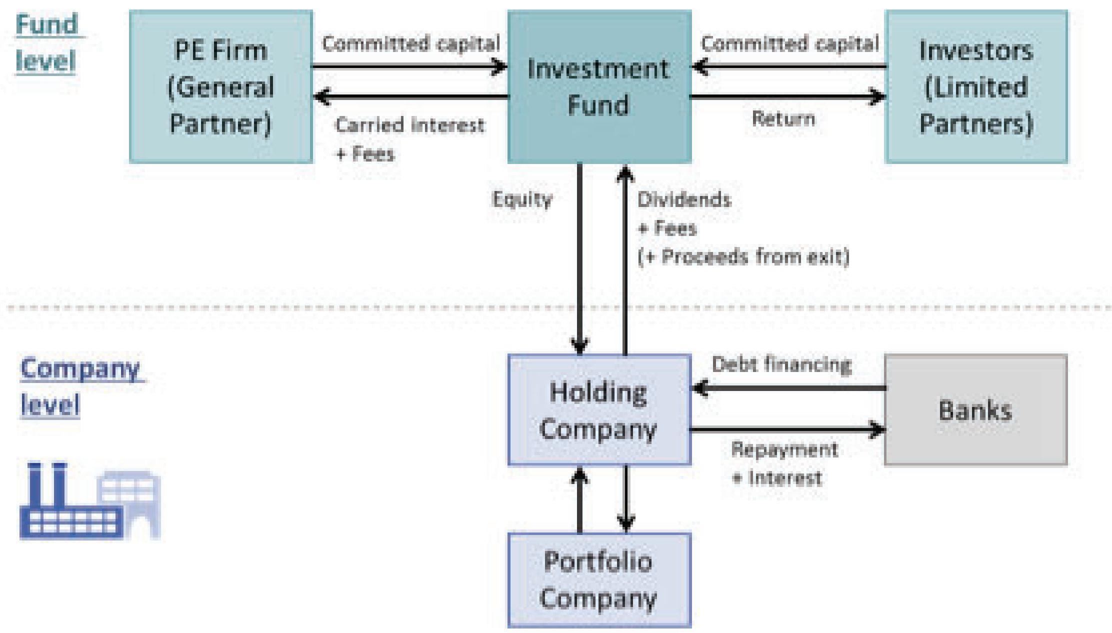
Background

Fundamentals of Private Equity Firms

In this paper, PE is defined in line with Gompers et al. (2015) as "buyout or growth equity investments in mature companies" which does not include venture capital investments.

The typical structure of a PE firm is outlined in Figure 1. On fund level, there is one or more investment fund that is set up by the so-called General Partner, i.e. the PE firm in the narrower sense. The General Partner is compensated for managing the fund by receiving so-called carried interest and a certain fee. The General Partner in most cases also invests in the fund. However, the largest part of the fund volume is raised from the limited partners (Kaplan and Strömberg, 2009). In Europe, the capital of buyout funds is especially raised from pension funds that represented more of 40% of fundraising in 2016 (Invest Europe, 2017).

Figure 1: Structure of PE firms



Source: own illustration based on Kaplan and Strömberg (2009) and Jensen (1989)

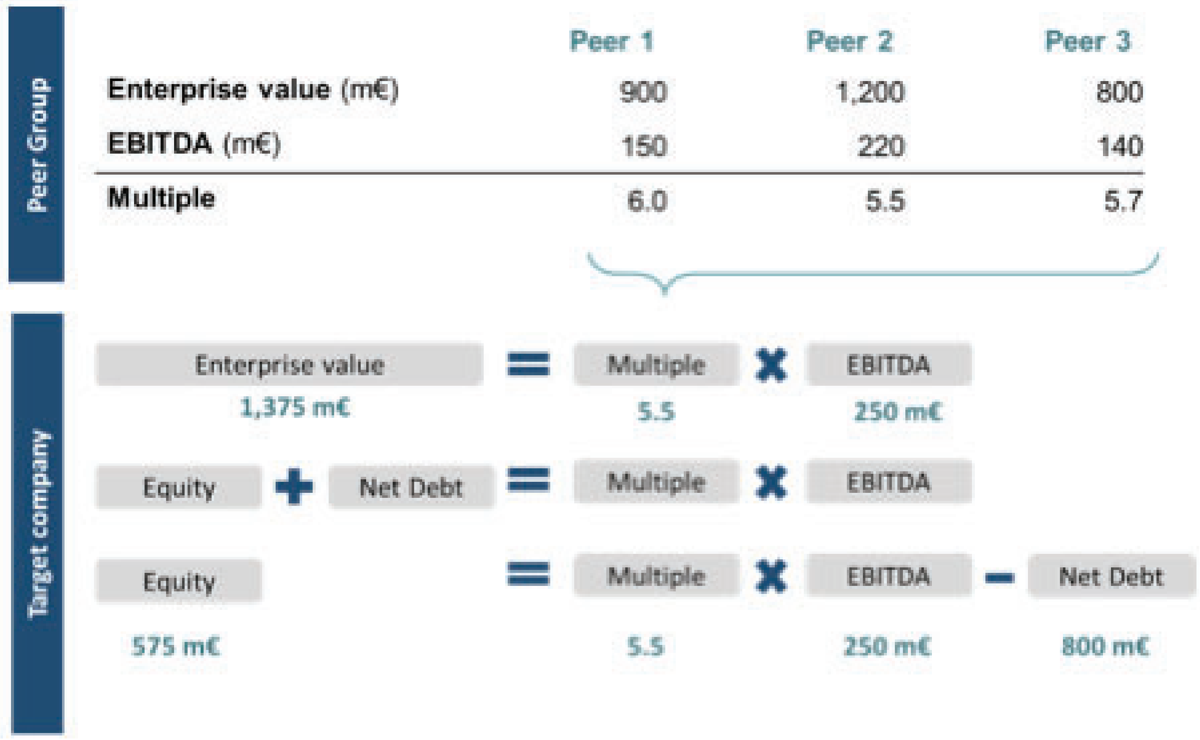
On company level, the different portfolio companies that have been acquired are located. Before an acquisition, usually a new holding company is created and funded with equity from the fund as well as outside debt from banks or debt funds. The holding company subsequently acquires and holds the portfolio company.

Valuation Model

In this paper, value creation is defined as increasing the financial value of the firm. To determine the value of a company, there are different valuation methods. The most relevant ones in theory and practices are the Discounted Cash Flow (DCF) approach and the Multiples Approach. In this paper, the author uses a multiple-based valuation model as a basis for the conceptual framework because it is more suitable for distinguishing the different value creation effects (see section 3.1).

Figure 2 shows an illustrative example of a multiple valuation. To determine the enterprise value of the target company, a peer group of comparable companies is identified in a first step. In a second step, a performance indicator is retrieved for these companies – most often the Earnings Before Interest and Tax (EBITDA). Next, a so-called multiple is calculated as a proportion between the enterprise value and the performance indicator. The multiple is a standardized measure that can be used to compare the enterprise values. Finally, the multiple can be applied to the target company to derive the enterprise value. In order to calculate the equity value, the net debt has to be subtracted as the total enterprise value consists of equity and debt.

Figure 2: Example of multiple valuation



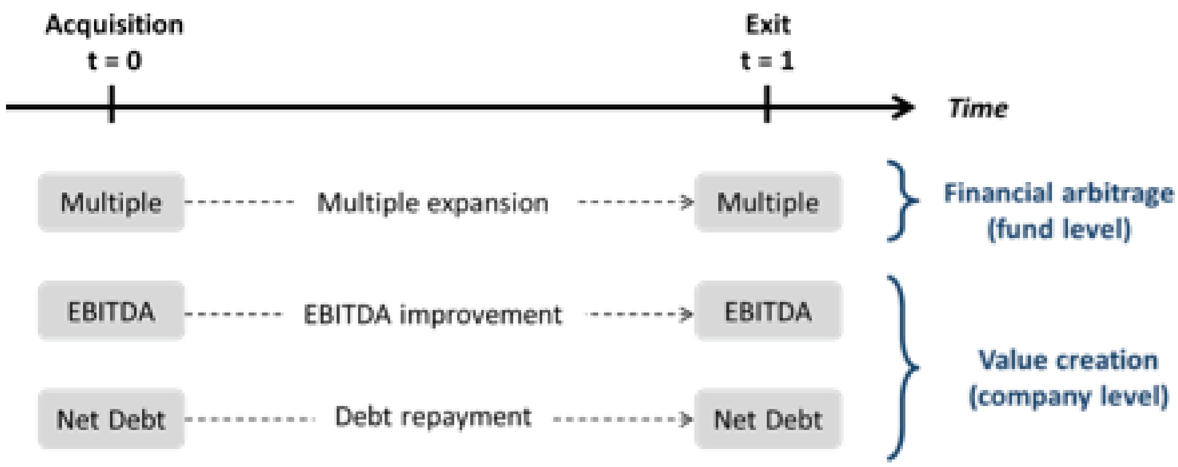
Source: own illustration

Conceptual Framework

Framework of Value Creation

Referring to the valuation model using multiples, a change of the company value can be achieved by a change in one of the three input factors. Depending on the input factor, there are different effects that lead to an increase in value between the point in time of the acquisition and the exit as illustrated in Figure 3.

Figure 3: Framework of value creation



Source: own illustration

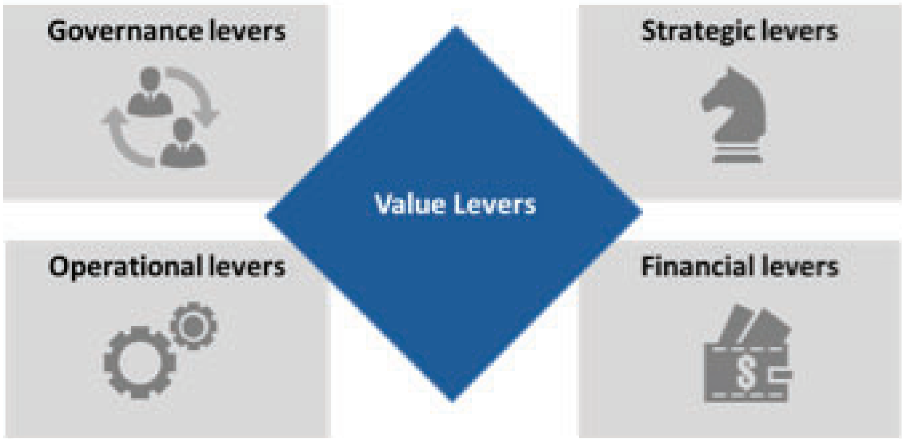
An increase in the multiple is also referred to as a so-called multiple expansion. A multiple expansion can occur for example due to positive market timing or negotiation skills of the PE professionals. Economically, it means that the PE fund has achieved a higher sales price per unit of profit for the company than the original purchase price. Thus, value is created on fund level, i.e. for the investors and the PE firm, but not on company level. This type of value creation can also be classified as financial arbitrage.

In this paper, value creation in the narrower sense is defined as creating value on company level by improving the operating performance (EBITDA) or paying off debt from the acquisition. This type of value creation can be realized with the help of different levers that are explained in the subsequent section.

Framework of Value Levers

Private equity firms use different levers to create value on company level. In the literature, it is often distinguished between three categories of levers (Kaplan and Strömberg, 2009). The author of this paper proposes a framework of four categories that captures the tools that are available in practice more completely (see Figure 4). The detailed measures for the levers have been compiled from different literature sources and complemented with the own practical experiences of the author.

Figure 4: Value levers



Source: own illustration

Governance levers aim at solving the principal agent problem, i.e. controlling the managers of the portfolio company in order to ensure that they serve the best interest of the shareholders. This leads to a more effective and efficient management that is supposed to finally result in an increase in value. PE firms enhance the governance using different levers. First, PE funds usually acquire majority shares, i.e. there is a situation of concentrated ownership t ensures effective decision-making as opposed to public companies with a high free float of their shares. Second, the representatives of the private equity firms are often very active as supervisory board members and also intervene in the management of the company informally. Third, the management of PE portfolio companies is often asked to invest in the company themselves so that there is a personal interest in increasing the value of the company.

There are also different strategic levers. PE firms might for example divest business lines that are considered less important or value creating. A different strategy is to combine different portfolio companies to one more powerful organization in a so-called buy and build strategy.

Among the operational levers, different different growth and efficiency measures can be found. These might be marketing or sales oriented measures, production or logistics oriented measures or as well general cost cutting programmes.

Finally, there are different financial levers. First, taxation can be optimized by the increased leverage. Moreover, capital expenditures might be reorganized to only make really value-adding investments. Furthermore, one of the most common measures of PE firms is to optimize net working capital (NWC).

Empirical Results on Value Creation

Overview of Previous Studies and Their Methods

Previous studies have conducted research on the question of value creation in the PE industry using both qualitative and quantitative methodologies.

Qualitative studies provide an in-depth view on one single company of few companies by applying different methods such as interviews or data analysis. Table 1 gives an overview of examples of previous qualitative studies.

Table 1: Overview of qualitative studies

Author	Year	Title
Lahmann et al.	2017	Value creation in SME private equity buy-outs
Achleitner et al.	2014	Value creation drivers in a secondary buy-out

Source: own illustration

Qualitative studies are especially useful to understand how PE firms create value whereas quantitative studies help answering the question whether or not they do. In line with the formulated objectives of this paper, the focus of the following discussion is on the quantitative measurement of value creation.

Quantitative studies attempt to measure the value creation with a larger data set consisting of many companies. Table 2 gives an overview of examples of previous quantitative studies.

In the quantitative studies, there are different approaches of measuring value creation on fund and company level.

a. Comparison of fund performance with a benchmark. The studies from the U.S. use especially the S&P 500 index as a performance benchmark (Harris et al., 2014; Higson and Stucke, 2012; Phalippou and Gottschalg, 2009).

b. Analysis of enterprise values on company level (Guo et al., 2011; Levis, 2011; Meles, 2011)

c. Comparison of operating performance (e.g. sales, EBITDA) on company level – either with non PE-backed peers (Guo et al., 2011) or pre- and post-buyout (Cohn et al., 2014)

Table 2: Overview of quantitative studies

Author	Year	Title	Measurement method
Cohn et al.	2014	The evolution of capital structure and operating performance after leveraged buyouts: Evidence from U.S. corporate tax returns	Company level operating performance
Harris et al.	2014	Private Equity Performance: What Do We Know?	Fund performance
Phalippou	2014	Performance of Buyout Funds Revisited?	Fund performance
Higson, Stucke	2012	The Performance of Private Equity	Fund performance
Guo et al.	2011	Do buyouts (still) create value?	Company level valuation and operating performance
Levis	2011	The Performance of Private Equity-Backed IPOs	Company level valuation
Meles	2011	Do Private Equity Investors Create Value for Italian Initial Public Offerings?	Company level valuation
Phalippou, Gottschalg	2009	The performance of PE funds	Fund performance
Bergström et al.	2007	The Operating Impact of Buyouts in Sweden	Compay level operating performance

Source: own illustration

The variety of approaches to value creation already shows that the question whether or not PE creates value cannot be answered easily. Additionally, the measurement of fund performance can be viewed from different perspectives. On the one hand, it can be seen gross-of-fees, i.e. from the perspective of the funds. On the other hand, from the investor perspective of the limited partners, the return has be to measured net-of-fees, i.e. less the remuneration of the PE firm. Phalippou and Gottschalg

(2009) additionally point out that published fund performance is sometimes biased by inflated accounting valuation of ongoing investments.

Besides the different measurement approaches, there are serious sources of bias in the studies. First, there is a general bias in every performance benchmarking depending on the selection of the benchmark (e.g. stock market index or peer group) as well as the time period selected for the benchmarking. Phalippou (2014) additionally points out a systematic bias in prior U.S. studies that usually use the S&P 500 index as a benchmark. The problem is that buyout funds mainly invest in small companies that have a superior average performance than the S&P 500 companies. Comparing the buyout fund returns to small-cap indices shows an underperformance of buyout funds according to Phalippou (2014). Second, there is a general sampling bias due to data availability restrictions. Furthermore, the author of this paper is convinced that there is a selection bias in studies that are based on a sample of portfolio companies that have undergone a successful exit (e.g. Levis, 2011; Meles, 2011), i.e. a successful sale of the portfolio company by the PE fund. Typically, exited companies are more successful than the portfolio companies for which no buyer could be found.

Analysis of Prior Quantitative Results

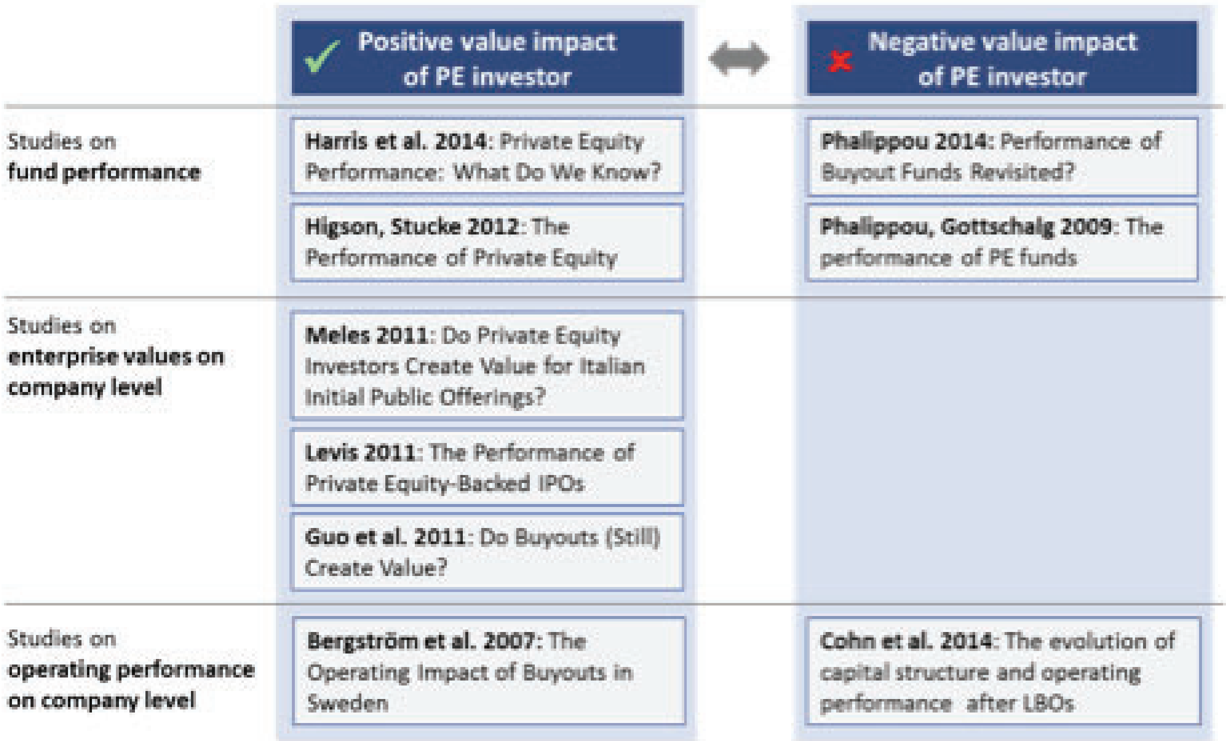
The matrix of prior results in Figure 5 gives a rough overview of the previous studies. They are clustered into two columns: The ones that implicate a positive value impact and the ones that show a negative or no value-impact of PE firms. Overall, the results are mixed with a positive tendency.

On fund level, some of the analysed studies (Harrison et al., 2014; Higson and Stucke, 2012) show that PE funds in average have consistently exceeded returns of the public markets. However, as Higson and Stucke (2012) find out, the variation between the different funds is considerable and excess returns are driven by the top performing funds. Also Phalippou (2014) confirms the outperformance against the S&P 500 with a different data set, but also shows a clear underperformance using a small-cap index as a benchmark.

Levis (2011) compares the aftermarket performance of PE-backed initial public offerings (IPOs) in the U.K. in the three years following the IPO and concludes that both the market performance and the operating performance exceeds other IPOs and the market as a whole. Also Meles (2011) obtains similar results in Italy which he explains with the relationship of PE investors with the key IPO market players.

With regard to the operating performance, Bergström et al. (2007) conclude that buyouts have a significant positive impact on the companies' operating performance. On the other hand, Cohn et al. (2014) state that they were able to find operating improvements in companies that have public financial statements. However, using corporate tax return data in a larger data set, the authors found little evidence of operating improvements.

Figure 5: Matrix of prior results



Source: own illustration

The objective of this paper is not only to evaluate the overall ability of value creation, but also to break down the value creation into the different elements according to the framework of value creation: multiple expansion, EBITDA improvement and net debt reduction. The studies that merely compare returns on fund level or total enterprise values on company level are not suitable for this objective. However, some studies provide more detail and also the studies on operating performance on company level are useful to answer the question. According to a number of studies, multiple expansion plays an important role in creating alpha in primary buyouts (Acharya et al. 2013, Guo et al. 2011) while opportunities for multiple expansion are limited in secondary buyouts (Achleitner et al. 2014). EBITDA improvements are also found to be relevant in numerous studies (Acharya et al. 2013, Guo et al. 2011, Achleitner et al. 2014) although Cohn et al. (2014) find contrary evidence. Their results are also negative in terms of debt repayment as they find that firms do not reduce leverage after buyouts. They suggest that the higher leverage is a conscious part of the LBO structure.

Conclusion

Summary

The paper has shown based on the conceptual framework that value creation can be broken down into different effects. Besides multiple arbitrage, the PE industry uses a set of governance, strategic, operational and financial levers to create value on company level.

Evaluating empirical evidence on value creation it can be concluded that the results are mixed with a positive tendency that PE investments create economic value in average. It has also been shown that due to methodological difficulties, the question whether and how PE creates value cannot be easily answered. Moreover, it was shown that value creation has to be viewed from different stakeholder perspectives (limited partners, general partners, and portfolio company). Depending on the point of view, the value that is created differs due to the different participation of the stakeholders in the value creation.

In terms of the different elements of value creation from the framework, all of the elements combined – multiple expansion, EBITDA improvement and net debt reduction – seem to be relevant. However, also for this question the results are mixed.

Limitations and propositions for further research

The conclusions of this paper are based on prior studies. Consequently, the limitations of those studies – as discussed in this paper – are also relevant for this study.

Moreover, also the methodology of this paper is subject to limitations. First, not all available prior studies on the topic might have been included. Second, the studies could be compared on a more detailed level analysing the individual datasets and parameters used for the different models. Furthermore, based on the secondary data, an evaluation of the effects from the framework of value creation was only partially possible.

Finally, the interpretation of the results should be done carefully. Above all, the quantitative evidence of outperformance does not necessarily imply causation. If PE firms are able to create alpha, it could be caused either by active value creation or by a good selection of the investments that would have outperformed also without the investor.

Due to bias in the studies and a limited scope, further research has to be conducted before we can definitely unravel the mystery of value creation. For example, more detailed studies could be conducted that break down total returns into different effects.

Moreover, beyond the scope of this paper, there are research gaps that offer potential for interesting future studies. For example, research on individual value levers might offer interesting potential. For this type of research questions, both quantitative and qualitative studies might be interesting.

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