

THE WILD FRONTIER

NAVIGATING THE UNPREDICTABLE TERRAIN OF MACROECONOMIC UNCERTAINTIES IN THE SWEDISH PRIVATE EQUITY INDUSTRY

JOAKIM ANDERSSON

EDDIE WILLIAMSON

Master Thesis

Stockholm School of Economics

2023



The Wild Frontier: Navigating the unpredictable terrain of macroeconomic uncertainties in the Swedish Private Equity Industry

Abstract

This study examines how current market uncertainties affect Swedish Private Equity firms' investment processes. By conducting a cross-sectional study in which 12 Private Equity firms participated, this study addresses the sparingly researched topic of how uncertainty influences the Private Equity investment process, from fundraising to exit, and how Private equity firms adjust their strategies and decisions to uncertain market environments. The study finds that the dynamic relationship between uncertainty and the various stages of the investment process is highly contingent on several factors, leading to a varying degree of impact on each stage based on firm characteristics. Lastly, the study contributes to the existing literature by providing a unique context in which uncertainty is examined within the continuously growing Private Equity sector, bringing new levels of relevance to the fields of uncertainty and Private Equity.

Keywords:

Private Equity, Uncertainty, Inflation, Interest rates, Monetary policy, Fundraising, Deal sourcing, Valuation, Investment, Operational management, Exit

Authors:

Joakim Andersson (42025)

Eddie Williamson (42173)

Tutor:

Diogo Mendes, Assistant Professor, Department of Finance

Master Thesis

Master Program in Finance

Stockholm School of Economics

Joakim Andersson and Eddie Williamson, 2023

Acknowledgments

First and foremost, we would like to extend our gratitude to all interviewees for their time, cooperation, and willingness to share their industry knowledge with us. Without your invaluable input, this study would not have been possible to complete.

We would also like to thank our supervisor, Diogo Mendes, Assistant Professor at the Department of Finance, for his availability and excellent guidance throughout the entire process. We are also thankful for the guidance provided by Lukas Goretzki, Professor at the Department of Accounting, for his input and for helping us navigate the intricacies of writing a cross-department thesis.

Lastly, we would like to thank our friends and family for their ongoing support throughout our studies at the Stockholm School of Economics.

Stockholm, May 2023

Joakim Andersson

Eddie Williamson

Table of contents

1.	INTRODUCTION	1
2.	THEORETICAL DEVELOPMENT	4
2.1.	Uncertainty and its True Meaning	4
2.1.1.	Uncertainty and Behavioral Influence on Investor Decision-Making	5
2.2.	Current Macroeconomic Uncertainties and Regulatory Policy	7
2.2.1.	Inflation.....	7
2.2.2.	Interest Rates & Monetary Policy.....	8
2.3.	The Private Equity Phenomenon	9
2.4.	The Private Equity Investment Process.....	10
2.4.1.	Fundraising	11
2.4.2.	Deal Sourcing Valuation and Investments.....	12
2.4.3.	Operational Management.....	13
2.4.4.	Exit.....	15
2.5.	Theoretical Framework/Summary.....	16
3.	RESEARCH METHODOLOGY	17
3.1.	Research Design	17
3.1.1.	Qualitative Research Approach in a Cross-Sectional Study Setting	17
3.1.2.	Selection of the Empirical Setting	18
3.2	Data Collection.....	20
3.3	Data Analysis.....	21
3.4	Data Quality	22
4.	EMPIRICAL ANALYSIS.....	22
4.1.	Fundraising - in times of uncertainty.....	22
4.2.	Deal Sourcing Valuation and Investment - in times of uncertainty	27
4.3.	Operational Management - in times of uncertainty	31
4.4.	Exit - in times of uncertainty	35
4.5.	Empirical Summary	38
5.	CONCLUSION	42
5.1	General Conclusions and Contributions	42
5.2	Research Limitations.....	44
5.3	Future Research.....	45
6.	REFERENCES	46
7.	APPENDICES.....	53

7.1.	Appendix 1: Conducted Interviews.....	53
7.2.	Appendix 2: Interview Guide	54

1. Introduction

We are currently experiencing more significant uncertainty in the financial markets than we have done in a very long time, and there are simultaneously more actors in the PE market than ever before, so it is a unique situation. However, no one can predict the future, even if it rhymes with history so we need to go back and assess the situation internally, and work to build a strong and agile investment process suitable for our firm given the situation today, to give ourselves the best opportunity to succeed. (Partner, Yellow Capital)

The origins of Private Equity (PE) can be traced back to the early 20th century when the first major buy-out was conducted in a deal where J.P. Morgan acquired the Carnegie Steel Company from industrialist Andrew Carnegie in a leveraged buyout agreement (Wall Street Journal, 2012). It was not however until the 1980s that the PE industry first experienced significant expansion through surging capital commitments from Limited Partners (LPs) to General Partners (GPs) and therefore became an increasingly vital and embedded part of the global financial markets (Kaplan & Strömberg, 2009; Sensoy et al., 2014; Wright et al., 2009).

Private capital fundraising activity, in general, has grown from circa USD 805 billion in 2007, to circa USD 1,362 billion in 2019 where USD 786 billion were attributed to the PE and Venture Capital (VC) sector (Pitchbook, 2023). However, the effect of Covid-19 forced a slowdown in fundraising activity the following year (McKinsey, 2022). The slowdown led to a drop of around USD 96 billion (or a 12 percent decrease) in capital raised in 2020 for the PE and VC sector, before surging to an all-time high of USD 804 billion in 2021 (Pitchbook, 2023).

In 2022, however, the macroeconomic environment with a combination of high levels of inflation, increasing interest rates, and Russia's invasion of Ukraine has put pressure on the PE and VC markets globally, leading to falling fundraising activity, valuations, and deal activity (Preqin, 2023). These macroeconomic uncertainties caused a setback in total funds raised for the PE and VC sector in 2022 to circa USD 582 billion, representing a 29 percent drop since 2021 (Pitchbook, 2023). Notably, however, is that the total Assets Under Management (AUM) has continuously increased for the combined PE and VC sector, even throughout times of uncertainty, despite the more volatile characteristics of the fundraising market. However, in 2022 the total AUM experienced its first decrease in 15 years (Pitchbook, 2023). Even though the total AUM decreased in 2022, it still amounts to a considerable amount of circa USD 5 trillion globally, including dry powder of USD 1.25 trillion, significantly embedding the PE and VC market as key pillars for the global economy (Pitchbook, 2023). Throughout this study, we will refer to VC firms, Growth Capital firms (GC), and Buyout (BO) firms under the common term of PE, in line with the common European usage (Cuny & Talmor, 2007).

Correspondingly to the growing significance of PE in the global economy, there has also been a commensurate increase in the body of academic research dedicated to the nature and effects of the PE investment class (Gompers et al., 2016; Wood & Wright, 2009). One of the most fortified areas and findings with regards to PE research is the area of understanding PE as an organizational function, its ultimate structure, and goals (see e.g., Kaplan & Schoar, 2005; Kaplan & Strömberg 2009; Metrick & Yasuda, 2011). Furthermore, extensive research focus has been directed toward the effects that PE firms tend to have on the operating performance of their portfolio companies (PCs) after entry, which has been studied by scholars such as Jensen (1989) and Guo et al., (2011). There is also an increasing focus on PE and PC relationships from a management control point of view in which the processes of monitoring, measuring, and managing operations are being studied (see e.g., Acharya et al., 2009; Jones, 1992). Notably, however, is that previous studies on PE to a large extent have neglected the effects uncertainty may impose on the areas studied. For example, previous research conducted

on management controls in a PE and PC relationship has been studied from a point of view in which the external environment is considered stable (see e.g., Barber, 2008; Bedford & Ditillo, 2022), whereby factors of uncertainty as an influencing factor on PE markets and the importance of managing these uncertainties have been sparingly investigated. Furthermore, Guo et al. (2011), who studied PE ownership impact on returns, explained that despite the evidently positive returns PE creates by improving operating performance in PCs, there is limited research challenging these findings under less favorable market conditions, which is why it warrants further investigation.

Scholars have effectively analyzed and synthesized previous literature on PE ownership effects on PCs with historical outcomes involving vital and distinctive stages of the PE investment process such as fundraising, investments and transactions, operational performance, and exits (Kaplan & Strömberg, 2009). However, despite the significance financial market uncertainties may play on these four vital stages of the PE investment process, limited academic emphasis has been directed to understanding their holistic influence on these critical stages. Even though there are a few studies in which uncertainty and its effects on PE are taken into consideration, it has commonly been covered as a part of another broader topic (see e.g., Acharya et al., 2013; Kut et al., 2007). With uncertainty in financial markets being a constantly present factor, one could argue, however, that there is limited coverage of the topic of uncertainty and its holistic effects on the different stages of the PE investment process, especially with a focus on the Swedish PE market. Thus, there is arguably a gap to bridge in the existing literature.

The Swedish macroeconomic environment today, with high rates of inflation and increasing interest rates, is not unprecedented. What is unprecedented, however, is the fundamental importance of PE and its size in the financial markets today in combination with the current macroeconomic circumstances of high inflation and increasing interest rates fueling uncertainty in the different stages of the PE investment process. We will refer to these phenomena as macroeconomic- or market uncertainties interchangeably throughout this study. Considering these circumstances, this study aims to describe, analyze, and synthesize the understanding of uncertainty related to current macroeconomic challenges in Sweden and its effects on the PE investment process and hence aims to answer the posed research question:

How are current market uncertainties affecting the investment process for Swedish Private Equity firms?

In order to effectively investigate the posed research question, this study will apply a PE investment process framework derived from the general categorizations of Kaplan & Strömberg (2009), and Gilligan & Wright (2020). In doing so, this study will adhere to four stages that will set the boundaries for focus: (1) Fundraising, (2) Deal Sourcing Valuation and Investment, (3) Operational Management, and (4) Exit. The PE investment process will continuously be analyzed through the theoretical lens of uncertainty as described by Galbraith (1974) and Knight (1921), and its effect on investor decision-making processes (see e.g., De Long et al., 1990; Ricciardi & Simon, 2000; Rigotti & Shannon, 2005). Therefore, by employing the boundaries and focus of this theoretical framework, this study will be able to effectively assess the posed research question of how macroeconomic uncertainties influence the different stages of the PE investment process of Swedish PE firms and allow the audience of this study to gain valuable insights into the state of the current Swedish PE market. Note, however, that uncertainty and its impact on the PE investment process and its different stages can be a multifaceted and complex phenomenon. The focus of this study will therefore be on using the PE investment process framework to derive the influences that current market uncertainties yield on the PE investment process from individual perceptions of PE firm representatives in order to try and holistically answer the research question.

This study employs a cross-sectional research design and utilizes a sample of 12 PE firms primarily focused on investments in the Swedish market. Data was collected through 12 separate interviews conducted with the participating firms. In general, PE firms direct great emphasis on the importance of understanding the current market environment and taking into consideration its potential effects throughout the entire PE investment process. However, PE firms tend to develop different strategies and processes for controlling the outcome of such uncertainties, most of which are contingent on PE firm characteristics. Hence, PE firms tend to implement different activities in order to allow continuously high value creation throughout the PE investment process. By drawing upon the theoretical framework set forward by previous literature, this study, therefore, aims to investigate the impact of current market uncertainties on the PE investment process in Sweden and explores how PE firms may differ in their approaches to coping with these uncertainties. To gain a comprehensive understanding of this multifaceted and complex topic, a qualitative cross-sectional study was deemed appropriate. Such a research methodology approach allows the authors to examine multiple perspectives and thus obtain holistic insights over the diverse empirical settings (Eisenhardt, 1989; Lillis & Mundy, 2005).

Drawing on said rigorous methodological approach and relevant prior literature, this study yields valuable and holistic findings of how PE firms strategically cope with current market uncertainties. In particular, this study illuminates a relationship between PE firms' risk appetite and their investment process, as well as how certain firm characteristics may influence their position on the risk appetite continuum.

Specifically, this study yields important insights for PE firms seeking to navigate the challenges of fundraising in uncertain markets with increasing risk aversion among LPs. Being able to demonstrate a good fund track record is the key remedy for successful fundraising in times of uncertainty, however, brand recognition, partner experience, and high-quality communication skills further enable the potential for a successful fundraising process. Moreover, the study reveals that current market uncertainties have led to a decline in investment transaction rates, however, effects on PE valuations have been limited. It has also triggered a growing emphasis on high-quality investments where profitability is now the guiding factor for a viable investment, increasing the competition for financially stable PCs. Thus, valuable insights into the PE firms' way of responding to uncertainty in the investment landscape are provided. Furthermore, this study sheds light on the importance of adaptive management control strategies in navigating operational strategies in uncertain market conditions. It finds that interactive controls were commonly implemented in PCs during the COVID-19 crisis to provide temporary and agile strategic guidance. Those controls have now consolidated into a long-term strategic focus, thus becoming more diagnostic in nature. This suggests that organizations have naturally become more agile and better at navigating uncertainty through their management control systems. Finally, this study reveals that there is a shift in focus within PE exit markets in times of uncertainty, as PE firms tend to adopt longer holding periods to concentrate on operational improvements and await better market conditions, rather than realizing quick returns. This drives attention away from internal rate of return (IRR) as the primary measure of PE fund performance.

These findings provide practical contributions for PE practitioners, serving both as a tool for self-reflection and providing insights into the broader impact of uncertainty on peers. It also conveys valuable information for LPs and investors seeking a deeper understanding of how PE firms navigate uncertain markets and make investment decisions. Overall, these practical contributions can assist various stakeholders in making well-informed decisions amid market uncertainty within the PE market. Moreover, this study further makes some important

contributions to the existing literature by offering fresh perspectives on Galbraith's (1974) and Knight's (1921) conceptual understanding of uncertainty, contextualized within the relatively novel yet crucial component of the world economy, the PE market. Moreover, the study employs the concept of uncertainty to provide additional theoretical dimensions to the PE investment process and its distinct four stages, drawing from the comprehensive work of Kaplan & Strömberg (2009) and Gilligan & Wright (2020). By integrating the academic disciplines of finance and accounting, this research synthesizes the existing literature to provide valuable academic insights into the PE market in times of uncertainty.

The rest of this study is outlined accordingly: Chapter 2 provides a comprehensive overview of the theoretical background by reviewing previous literature, discussing uncertainty and its effect on individual decision-making, and current market uncertainties such as inflation, interest rates and related monetary policies, and their influence over the PE investment process. It also introduces identified research gaps and the theoretical framework used for effectively analyzing the posed research question. Chapter 3 outlines the methodology and research design. Chapter 4 describes, analyzes, and synthesizes the empirical findings with some contrasting of previous literature. Finally, chapter 5 summarizes the study with main conclusions and contributions, research limitations, and suggestions for future research.

2. Theoretical Development

The following chapter will outline the theoretical development which lays the foundation for the study. Section 2.1 aims to provide a theoretical overview of the true meaning of uncertainty, including the theory behind uncertainty's influence on individual behavior and decision-making (2.1.1). Section 2.2 briefly describes the regulatory dynamics of the economy and introduces the current market uncertainty of inflation (2.2.1) as well as the importance of interest rates and monetary policies (2.2.2) to combat such phenomena. Section 2.3 provides an overview of PE as an investment asset class. Section 2.4 describes the PE investment process divided into four segments: Fundraising (2.4.1), Deal Sourcing Valuation and Investments (2.4.2), Operational Management (2.4.3), and Exit (2.4.4). Section 2.5 provides a summary of the theoretical development and provides a theoretical framework.

2.1. Uncertainty and its True Meaning

Both the terms risk and uncertainty are broadly applied in lemans language. However, these are not to be confused with each other and need to be distinguished in order to efficiently understand uncertainty and its underlying significance to the economic system (Knight, 1921). Knight (1921) studied the correlation between risk, uncertainty, and profit, and defines risk as a scenario in which all potential outcomes and probabilities are fully understood and comprehensible. From a decision-maker's point of view, this implies that the risk element of any decision can be thoroughly contemplated, as the decision-maker is aware of the potential negative outcomes of any given decision. Knight (1921) further imposed the idea of risk being equal to measurable uncertainty, as it is commonly interpreted in methods used by investors, such as financial projections, due diligence, and research, which allow investors to reasonably measure potential outcomes and probabilities. Contrastively, uncertainty refers to risks that to a high degree are unique and cannot be effectively reduced in any way to a quantitatively defined probability (Knight, 1921). Ellsberg (1961) provided a direct and pedagogical explanation where uncertainty refers to any event in which the probability of occurrence is unknown. In essence, Knight (1921) explains that the primary distinguishing factor that

separates the risk and uncertainty phenomena are the limitations in knowledge of the decision-maker and/or their inability to accurately predict future outcomes and probabilities.

Scholars have since built on Knight's (1921) definitions by synchronizing the terms of risk and uncertainty into organizational contexts. Galbraith (1974) studied information utilization within organizations during times of uncertainty related to market conditions and found that as the uncertainty related to a specific task increases, more processing of information needs to take place amongst the decision-makers during the implementation of that task. Furthermore, Galbraith (1974) explained that tasks need to be well-defined and understood to allow decision-makers to utilize their knowledge and experience to prepare essential resources and strategies before the execution of the task. If that cannot be obtained, more ad-hoc adjustments, such as reallocations of established resources, schedules, and priorities, will be needed during the actual execution of the task. Consequently, Galbraith (1974) concluded that uncertainty is the difference between the amount of information required to perform a given task, and the amount of information already possessed by the organization. By synthesizing the two definitions of uncertainty presented by Galbraith (1974) and Knight (1921), one can describe uncertainty as risks where outcomes and probabilities cannot be quantified, and where sufficient information to execute the given task does not exist.

Knight (1921) further explained that the distinguishing difference between risk and uncertainty is important for financial markets and argue that if risks were the only relevant aspect of randomness, knowledgeable financial institutions could effectively reduce the risk of their investments to zero through diversification and risk management techniques. However, uncertainty provides market agitation that such institutions are unable to predict. Additionally, Ellsberg (1961) argued that risk and uncertainty are not only considered two different aspects of unpredictable events, but they also have distinct influence on individuals' behavior, which conflicts with the expected utility model. Hence, uncertainty as distinguished from risk, can inflict significant influences on individuals' rationales and their behavior which may lead to non-maximizing decisions for utility and eventually influence financial market activities (Ellsberg, 1961; Rigotti & Shannon, 2005).

2.1.1. Uncertainty and Behavioral Influence on Investor Decision-Making

Building on Galbraith's (1974) and Knight's (1921) explanations of uncertainty, Rigotti & Shannon (2005) argue that assuming the absence of uncertainty and known probabilities of risky events would allow financial market participants to make fully rational decisions and efficiently price instruments. This argument aligns with standard finance literature, which argues that investors typically make rational decisions based on their preferences, following the rational choice theory that excludes alternative actions that are not purely rational and calculative (Barberis & Thaler, 2003; Scott, 2000).

However, in the presence of continuous uncertainty, where probabilities of risky events are unknown, market participants develop diverging beliefs regarding the probabilities of future uncertain events, suggesting that market participants adjust their behavior to changing circumstances (Rigotti & Shannon, 2005). Consequently, it becomes evident that people do not always act rationally (Barberis & Thaler, 2003), as psychological factors may influence their decisions, especially when faced with uncertain conditions (Ricciardi & Simon, 2000). These uncertain conditions may exert significant influence on investors, potentially causing decisions to deviate from their intended objectives and even lead to irrational investments that can distort asset prices and challenge the efficient market hypothesis (Barberis & Thaler, 2003). Hence,

investors actively engaged in investments and financial markets are susceptible to various psychological factors transcending beyond that of uncertainty alone. Such psychological factors, including framing and endowment effects, overconfidence, risk aversion, and herding behavior, play significant roles in shaping how investors perceive events, especially during times of uncertainty (Hirshleifer, 2015; Ricciardi & Simon, 2000).

As described by Kahneman & Tversky (1981), framing effects address how information presented to an investor may influence their decision-making process as different ways of framing a given issue or event may psychologically influence the subjective perception of the issue, potentially impairing the decision-quality of investors. Moreover, Thaler (1980) explained the endowment effect as a significant psychological factor with the potential of impairing investors' decision quality. He observed that individuals tend to attach greater value to assets that are currently in their possession, leading to a subjective overvaluation of these assets and a greater perception of loss when losing them, compared to the perceived gain of equivalent assets.

Moreover, De Long et al. (1990) support the arguments previously put forth by Rigotti & Shannon (2005) and Barberis & Thaler (2003), adding that subjective beliefs heavily influenced by optimistic or pessimistic market sentiments regarding future uncertain events can cause market inefficiencies by irrationally mispricing assets from their fundamental values. Such tendencies, when extrapolated onto the financial market population and observed for a long period of time, are commonly referred to as herding behavior, which plays a vital role in driving market volatility and potential market bubbles and crashes (Nofsinger & Sias, 1999).

Furthermore, psychologically influencing factors may arise as an effect of protracted bull markets with long investor success, as they may lead investors to develop overoptimistic beliefs in their ability to create value (Gervais & Odean, 2001), and such overconfidence tends to be even stronger in times of high market uncertainty (Hirshleifer, 2015). Additionally, prolonged periods of market optimism can lead investors, who have not recently experienced significant market uncertainties or economic setbacks, to become less risk-averse than they rationally should be. As a result, and in combination with over-confidence, they may downplay the potential losses associated with low-probability, but high-magnitude risks (Kahneman & Tversky, 1974).

With more experience, however, investors tend to develop better tools for self-assessment and thereby become better at recognizing psychological influences and biases to avoid common behavioral pitfalls of investing (Gervais & Odean, 2001). For example, Brozynski et al. (2006) explained that herding behavior and subjective influence by changes in financial market sentiments tend to decrease with experience. Moreover, experienced fund managers that have experienced a bubble with a subsequent market crash before, tend to be less susceptible to buying assets at inflated prices during optimistic periods due to a generally lower risk-willing profile (Greenwood & Nagel, 2009).

Thus, uncertainty and numerous psychological factors may yield multiple effects on investor behavior and on the events in the market in which they operate. While these examples provide only a glimpse into the multitude of behavioral influences and psychological complexity, they are crucial for achieving a comprehensive understanding of the broader context of this study. Moreover, the financial markets are of course very complex, and multiple other factors such as

e.g., fiscal policy, international trade, geopolitical tensions, and monetary policy may also yield significant effects on financial markets and macroeconomic stability.

2.2. Current Macroeconomic Uncertainties and Regulatory Policy

2.2.1. Inflation

One of the most prominent concerns on the broader economy and financial markets relates to the threat of high inflation and the uncertainty that comes with it. With low inflation, however, there is generally also low uncertainty stemming from a broad consensus that monetary policy will focus on keeping inflation low (Ball, 1990). However, as an economy experiences unexpected increases in inflation, there is a subsequent growing public uncertainty toward future monetary policy and, consequently, towards future inflation in the sense that policymakers must balance the fine line between disinflation and a recession (Ball, 1990). As the general policymakers' subjective risk profiles and intended course of actions for reaching targeted inflation rates cannot with certainty be foreseen by the general public, they leave a cloud of perceived uncertainty for market participators (Ball, 1990).

While increasing inflation can raise financial market uncertainty, there is a broader conceptual and complex factor to inflation as it affects the general economy as a whole. Multiple prominent scholars such as Fischer (1993) and Bruno & Easterly (1998), have proved evidence of the unfavorable effects high inflation has on the growth of general economies, but that the relationship is non-linear. Sarel (1996) corroborates this negative viewpoint and explains that when inflation is low, there is no significant negative effect on economic growth, but when the annual average rate of inflation exceeds 8 percent, there is a structural break with powerful and significant negative long-term effects on economic growth. Hence, there seems to be a consensus amongst economic scholars that high levels of inflation will lead to unfavorable economic growth development (Barro, 1995; Sarel, 1996).

Even though Sweden, as of the end of December 2022, is arguably not a worst-case inflation scenario, the Swedish economy is currently experiencing its highest rate of inflation since the early 1990s (SCB, 2023a), measuring at 12.3 percent (SCB, 2023b). Barro (1995) puts this inflation rate level in contrast by proving that a 10 percentage point increase in the average annual inflation rate would yield the equivalent of a GDP per capita reduction of 0.2 – 0.3 percentage points per year. Barro (1995) further emphasized that even if the negative effect that this level of inflation has on economic prosperity seems to be rather insignificant, the long-term effects on the economy are substantial, as a long-term inflation rate of 10 percent would lower the real GDP levels with circa 4 – 7 percentage points after three decades. Therefore, the effects of high inflation may not be immediately apparent, but are nonetheless significant in the long-term (Barro, 1995). With Sweden's GDP corresponding to circa SEK 604 billion at year-end 2022 (IMF, 2023), a long-term inflation rate of 10 percentage points would equal a GDP decline of SEK 24 – 42 billion.

The general long-term economic development, combined with the uncertainty effect of inflationary environments, will affect market participators, including private market investors such as PE firms, and their investment processes and decisions in numerous ways. It may affect the potential of raising capital (Boyd et al., 1996), expectations of future investment returns (Fama & Schwert, 1977), risk management strategies (Kut et al., 2007), exit possibilities (Acharya & Pedersen, 2005), and more.

Inflation, as a phenomenon, generally affects a magnitude of factors in the macroeconomic environment. However, one of the most prominent factors affected by inflation is interest rates

(Chen et al., 1986). When there is a consensus of expectations of increasing inflation, there is a corresponding influential effect on the expectations of future nominal cash flows as well as changes in nominal interest rates (Chen et al., 1986). Moreover, avoiding high inflation is one of the most important factors for future economic growth (Sarel, 1996), whereby monetary policymakers need to take corrective action.

2.2.2. Interest Rates & Monetary Policy

Central banks (CBs) constitute a vital role in the global economy and serve as key pieces for financial regulation, with their focus on maintaining market stability by applying monetary policy (Cecchetti, 2009; Blinder et al., 2008). By utilizing monetary policy, CBs influence the availability of funds in the financial systems through manipulation of their balance sheet, which consequently affects the prices of those funds, namely the interest rates (Cecchetti, 2009). CBs can manipulate their balance sheets primarily by adjusting their size, meaning that the expansion or contraction of balance sheet reserves may influence risk-free interest rates (Cecchetti, 2009). Alternatively, CBs can change their balance sheet asset composition to influence relative prices (Cecchetti, 2009). In the last decades, monetary policy has been increasingly focused on achieving price stability by maintaining low and stable inflation rates, either by CBs adjusting their balance sheet for suitable changes in interest rates, or by CBs increasing money supplies (Barro, 1995; Mankiw & Reis, 2003).

During the early 1990s, the economy experienced a significant downturn due to high budget deficits and high interest rates, forcing the economy into a recession which led CBs to apply an expansionary monetary policy in the following years (Kraay & Ventura, 2005; Taylor, 1999). As a consequence, CBs around the world made aggressive efforts with the objective of re-fueling economic growth by lowering interest rates and increasing the money supply to parry the effects of the recession (Taylor, 1999). These measures were successful in spurring economic prosperity and had some spillover effects on the overall economy; one of them being the availability of capital within the broader investment industry (Taylor, 1999). Kraay & Ventura (2005) explained that these expansionary monetary policies led to a following period of low interest rates and continuously increasing budget deficits. The trend of decreasing interest rates and growing budget deficits continued in the late 1990s, laying the foundation for what came to fuel the dot-com bubble, and the eventual crash in early 2000 (Kraay & Ventura, 2005).

Looking into the present-day environment, the European Central Bank (ECB) has spent over €3.4 trillion on asset purchases in various quantitative easing programs over the last ten years (ECB, 2023a). Since the end of 2022, these programs have been halted and replaced by increasing interest rates, having reached 3 percent as of February 2023 (ECB, 2023b). In a Swedish context, the Swedish Central Bank also increased its interest rate to 3 percent in February 2023 (Riksbank, 2023). Looking back into the recent past, the Swedish interest rate remained below 1 percent for almost a decade between 2010 and 2020 and even turned negative between 2015 and 2020 (Riksbank, 2023), implying a long period of monetary expansion.

Numerous academic studies have long examined the impact of monetary policy on the financial markets. For instance, Bernanke & Blinder (1992) found that raising interest rates contributed to the recession in the early-1990s, while lowering interest rates contributed to its recovery. Building on these observational inputs, the authors contrasted the effect that potential changes in interest rates have on a variety of economic factors and found a negative correlation between the interest rate and its impact on industrial output, real GDP, real individual consumption, and unemployment. Moreover, macroeconomic theory suggests an inverse relationship between interest rates and aggregate demand, with higher rates hampering both borrowing and spending

(Krugman & Wells, 2015). Contrastively, lower interest rates stimulate demand and fuel economic activity (Krugman & Wells, 2015). Furthermore, numerous scholars have argued that monetary policy heavily influences the overall sentiment and activity on the stock market, with smaller, non-dividend-paying companies being the most vulnerable to monetary tightening measures with smaller effects on larger and more established firms (see e.g., Cloyne et al., 2023; Fernández-Amador et al., 2013).

Changes in interest rates also have a significant effect on the expected returns in financial markets, as concluded by Campbell & Viceira (2005), who confirmed a negative correlation between interest rates and expected returns in financial markets. Hence, the findings of Campbell & Viceira (2005) support the framework presented by Krugman & Wells (2015), where decreasing aggregate demand leads to a decreased willingness to invest capital, and consequently lower market returns. Therefore, interest rates play a critical role in shaping the returns of financial assets, and it is essential for investors to understand these dynamics in order to make informed investment decisions (Krugman & Wells, 2015).

2.3. The Private Equity Phenomenon

PE is an alternative form of investment in asset classes that are not publicly traded. Typically, the term PE is applied to numerous investment categories such as VC, GC, and BO, which refer to different investment stages and sizes of investments (SVCA, 2023). VC firms normally conduct early, minor-stake investments with active ownership clauses in pre-seed or seed funding rounds for newly started companies (SVCA, 2023). GC firms focus on minority or majority investments in growth companies that are in a more mature stage and out of scope for VC firms, while BO firms typically make majority investments in mature companies in need of funding or active ownership (SVCA, 2023). While PE (including GC and BO) and VC are commonly referred to as two distinct areas in American usage, this study will apply the European usage of the term PE, where VC is commonly included (Cuny & Talmor, 2007).

Investing in PE is typically carried out through what is called a limited partnership structure, where the PE firm, through fundraising activities, attracts equity capital to a newly established fund and actively invests the capital in private companies, called portfolio companies (PCs). Capital raised for the fund is provided by LPs, usually consisting of institutions such as pension funds, endowments and insurance companies, or sometimes high-net-worth individuals. Once the LPs have committed capital, they possess limited influence over the GP and its investment plan, which includes making capital calls and deploying capital in investments (Kaplan & Schoar, 2005; Kaplan & Strömberg, 2009; Metrick & Yasuda, 2011).

The PE fund structure commonly has a finite lifetime of up to ten years but may be extended for two to three more years in the case of LP approval (Kaplan & Strömberg, 2009; Metrick & Yasuda, 2010). However, successful investments are usually overturned and realized before the fund's lifetime comes to an end (Strömberg, 2008). During the fixed lifetime of the fund, the capital raised from LPs is to be deployed into private companies, which commonly occurs during the first half of the fund's lifetime (Kaplan & Strömberg, 2009). Thereafter, and for the rest of the fund's lifetime, operational strategic activities are implemented to increase the value of the PC. This is followed by a divestment of the PC, which is where GPs return initial investment plus excessive returns to their LPs (Gillian & Wright, 2020; Kaplan & Schoar, 2005; Kaplan & Strömberg, 2009).

After deployed investment, the holding period begins in which the PE firm will put extensive focus on improving the PC's operational efficiency through active ownership (Metrick &

Yasuda, 2011). Throughout the duration of the holding period, various governance and management control mechanisms are implemented to facilitate rigorous oversight of critical strategic priorities, such as e.g., profitability, growth, and efficient continuous operations. These actions are intended to enhance the long-term financial performance of the PC and create optimal conditions for maximizing its return on investment by exit (Gompers et al., 2016; Guo et al., 2011; Jensen 1989). Although some scholars argue that PE firms are efficient in creating excess value and returns for their investors (see e.g., Ljungqvist & Richardson, 2003), there are conflicting findings stating that PE firms, at best, generate average returns in line with the S&P 500 (see e.g., Kaplan & Schoar, 2005; Phalippou & Gottschalg, 2009).

2.4. The Private Equity Investment Process

Kaplan & Strömberg (2009), put the fundamental mechanisms of PE structures into perspective by providing historical evidence on vital parts of the PE investment process such as fundraising commitments, transactions, and timing of exits and how these have changed over time. Additionally, the authors contextualize the effects of PE ownership in terms of operational management after the initial investment. By setting these vital parts into perspective with Gilligan & Wright's (2020) explanation of the PE process, it is evident that PE firms and their fund managers have four clear stages to adhere to in the PE investment process. First, raising capital through fundraising activities. Second, source investment opportunities and make investments. Third, actively manage operations in the investments. Lastly, realizing returns via exits.

The fundraising process refers to the process in which GPs raise capital from LPs, either with or without help from external parties, such as gatekeepers or placement agents. Raised funds are then allocated by the GP to investments in accordance with the contractual partnership agreement and its covenants (Cendrowski, 2012; Gilligan & Wright, 2020; Kaplan & Strömberg, 2009).

The Deal Sourcing Valuation and Investment process describes the systematic approach in which a PE firm identifies an investment opportunity, conducts precautionary due diligence and valuation, and agrees to purchase a company and add it to its portfolio. The typical deployment timeframe averages around five years (Gilligan & Wright, 2020; Gompers et al., 2016; Kaplan & Strömberg, 2009).

Operational management denotes the procedural steps in which PE firms and fund managers utilize their experience to apply financial, governance, and operational engineering to their portfolio companies to efficiently improve operations and sequentially create economic value (Cuny & Talmor, 2007; Gilligan & Wright, 2020; Gompers et al., 2016; Jensen, 1989; Kaplan & Strömberg, 2009).

Exits are a vital part of the entire process and are an inevitable event due to funds having a set contractual lifetime and timeframe for returning the capital to LPs. Exit sales are most commonly done to strategic buyers, followed by divestments to other PE firms, and lastly through Initial Public Offerings (IPOs) (Gilligan & Wright, 2020; Gompers et al., 2016; Kaplan & Strömberg, 2009). There is, however, a notable divergence in the exit strategy distribution between larger and smaller PE firms and the size of the PC being exited (Strömberg, 2008).

For the context of this study, a PE investment process framework containing these four stages derived from Kaplan & Strömberg (2009) and Gilligan & Wright (2020) will be considered in the following order: (1) Fundraising, (2) Deal Sourcing Valuation and Investment, (3) Operational Management, and (4) Exit, and will be referred to as the PE investment process

from here on and throughout the rest of this study. The PE investment process will be studied more in-depth in its relation to current market uncertainties in the following sections.

2.4.1. Fundraising

Fundraising is a fundamental activity in the PE investment process (Gejadze et al., 2017). GPs must make sure their investment objectives are clearly defined and communicated for their fundraising to appeal to LPs (Gejadze et al., 2017). However, raising capital for a fund is not easy, especially given the popularity of well-established PE actors with mega follow-on funds that are crowding out smaller new funds' market presence (Cendrowski, 2012). This is a consequence of LP's general preferences, as experienced GPs with proven track records of top-quartile returns are heavily favored, as opposed to less experienced GPs without a proven track record of returns (Cendrowski, 2012). These findings align with Pitchbook (2023) data showing that 87 percent of funds raised in 2022 were committed to experienced fund managers, compared to a 78 percent pre-COVID-19 allocation. This is further corroborated by Brown et al. (2019), who found that certain low-performing PE firms are incentivized to boost their NAV during their fundraising process to attract LPs for capital to follow-on funds. However, some additional factors that may help new GPs that are raising their first fund to meet their targeted fundraising cap is having previously worked for a name-brand firm or establishing a specific area of specialization for their fund (Cendrowski, 2012; Gejadze et al., 2017).

Hence, LPs generally build their perception of a new fund's performance expectations based on the success of the GP's previous funds (Berk & Green, 2004; Chung et al., 2012). This implies that good performance leads to an increased demand for stakes in the follow-on fund (Sensoy et al., 2014). However, given the scarcity of time to allocate to portfolio companies and the screening of new investments, GPs typically cap their fund at a certain capital requirement, which breeds LP competition to participate in the highly demanded funds (Sensoy et al., 2014). This limited access can allow popular GPs to alter their fund structure agreements to spur competition among the LPs (Sensoy et al., 2014).

Looking at the current macroeconomic uncertainties, scholars have identified three main aspects that could harm fundraising during times of uncertainty; cyclicity in capital calls, increased interest rates as an effect of high levels of inflation, and the denominator effect (Boyd et al., 1996; Metrick & Yasuda, 2011; Robinson & Sensoy, 2016). Robinson & Sensoy (2016) discussed liquidity shocks stemming from cyclical capital calls as one of the prime factors differentiating PE from public equity investments. The authors argued that the long period during which capital is locked-up to a PE fund can result in sudden liquidity shocks when the capital calls are realized for an investment to be made (Robinson & Sensoy, 2016).

Furthermore, it is commonly understood among scholars that high rates of inflation yield a negative impact on the economy, since high inflation rates hampers the provision of capital, thus interfering with both fundraising and allocation of funds, which is detrimental for the long-term capital formation and real activity (Boyd et al., 1996). Increases in the steady state rates of inflation may therefore decrease an economy's steady state capital stock, meaning a potential decrease in economic development (Schreft & Smith, 1997), further negatively influencing the capital availability for PE fundraising.

Lastly, the denominator effect has a major impact on fundraising activity in times of market uncertainty, as explained by Metrick & Yasuda (2011). The authors describe the denominator effect as the consequence of LPs maintaining identical allocation levels amongst various asset classes while public markets are in decline (Hege & Nuti, 2011; Metrick & Yasuda, 2011). One of the main remedies to this, the authors argue, is for GPs to develop strong relationships with

their LPs to maintain their trust during periods of market uncertainty and enhance their chances of receiving LP investments in upcoming funds (Metrick & Yasuda, 2011).

To conclude, we hypothesize that the fundraising market is constrained, and that total capital raised in PE funds will decline in the short-term, affecting most actors within the broader PE industry. The reason for this is threefold: cyclicity in capital calls, rising interest rates, and the denominator effect. Furthermore, we expect to derive a few main remedies for combating the negative effects of market uncertainty on the fundraising market: Strong fund track record, recognizable brand name, experience of GP leadership, and building long-term LP relationships.

2.4.2. Deal Sourcing Valuation and Investments

According to Kaplan & Strömberg (2009), fundraising- and transaction volumes are heavily correlated in terms of their cyclicity, where they tend to rise during boom-market periods and decline during bust periods. The authors argue that this cyclicity is heavily influenced by macroeconomic conditions. Using debt as an example, Kaplan & Strömberg (2009) found that the amount of leverage used in PE decreases as interest rates rise. This, in turn, leads to lower valuations in the private market and a slower rate of transactions. The historical relationship between operating earnings yield in PE investments and interest rates on high-yield bonds further explains this situation, as a premium for the former is a necessary condition for a PE boom to occur with rising valuations (Kaplan & Strömberg, 2009).

Adding to this sentiment, Ljungqvist et al. (2020) found that PE firms tend to accelerate their transaction pace during periods of low interest rates. The historical success of PE firms can therefore be partly explained by the relatively favorable credit conditions that have presented incentives for fund managers to speed up investments (Ljungqvist et al., 2020). This finding supports the aforementioned cyclicity argument, which explains that the availability of debt financing affects booms and busts in the market for PE. In other words, there is a higher transaction rate and more leverage in transactions during low interest rate periods, and vice versa (Kaplan & Strömberg, 2009; Ljungqvist et al., 2020).

Research conducted by Kaplan & Stein (1993) found that there was a significant BO boom during the 1980s, which was followed by a subsequent bust in the early 1990s, mostly attributable to a change in interest rate policy, as described in section 2.2.2. The authors also concluded that 22 out of the 83 transactions conducted between 1985 and 1989 eventually defaulted on their debt, after having taken on a significant amount of leverage during the favorably low interest rate period of the mid-to-late 1980s (Kaplan & Stein, 1993). Kaplan & Strömberg (2009) also argue that the cyclicity in PE could lead to mispricing in transactions, i.e., when investors take advantage of mispricing in the debt- and equity markets. This implies that more transactions occur when debt markets are favorable for investors (Kaplan & Strömberg, 2009). As an example, they suggest that the low costs of debt leading up to the financial crisis led to the BO boom that preceded the crisis (Kaplan & Strömberg, 2009). This example, combined with the previous finding from Kaplan & Stein (1993) about the BO boom in the 1980s, points towards a trend where intense BO booms are typically followed by subsequent bust periods (Kaplan & Stein, 1993; Kaplan & Strömberg, 2009).

Various academic research papers have investigated how companies perform during times of macroeconomic uncertainties. One study, conducted by Perez-Quiros & Timmermann (2001), focused on the correlation between company size and company performance during market uncertainties. The authors reached the conclusion that smaller and less mature companies are generally more cyclical in nature, and also most strongly affected by recessionary periods

(Perez-Quiros & Timmermann, 2001). Their research is complemented by Marsh & Pfleiderer's (2013) study on asset allocations during the financial crisis period between 2007 and 2009. Through their study, they were able to conclude that most investors tend to flee to quality during times of significant market uncertainties (Marsh & Pfleiderer, 2013). However, considering that every asset sale needs a buyer to complete the transaction, there is always a counterpart that is willing to offload their quality asset in return for a riskier asset, for each transaction to go through. This implies a counterpart willing to take on a certain amount of risk is necessary for a risk-averse investor to pursue their quality asset, thereby separating the risk-averse and the risk-willing parties on the financial markets (Marsh & Pfleiderer, 2013).

Based on previous research within the field, it is strongly indicated that the PE industry will experience a short-term decline in both transaction volume and valuations as an effect of current market uncertainties. This trend is expected to have a more significant impact on smaller, early-stage PE firms. Given the overall caution on the market, we also expect to see a flight-to-quality among PE firms, with most actors prioritizing the selection of high-quality PCs that offer stable returns.

2.4.3. Operational Management

After the PE firm has gained control over a PC following an investment, the PE firm becomes actively involved in monitoring and managing a long-term illiquid asset for which economic value enhancements will be largely attributed to improving operations (Cuny & Talmor, 2007). To achieve improved operational performance in new PCs, PE firms have historically been effective in implementing suitable financial and governing control initiatives (Jensen, 1989; Kaplan & Strömberg, 2009). In recent years, however, these control initiatives have become commonplace whereby PE firms today increasingly focus on utilizing the firm's experience and industry expertise to also create competitive advantage through operational engineering initiatives (Kaplan & Strömberg, 2009). Such initiatives include the development and efficient implementation of value-creating strategies such as cost-structure optimizations, productivity and margin enhancements, strategic pivots, and inorganic expansion through acquisitions (Acharya et al., 2013; Kaplan & Strömberg, 2009).

Furthermore, PE firms will play an active role in the implementation of continuous monitoring strategies and strategic plans aligned with organizational objectives throughout the holding period, and the active role has become increasingly important as competition for transactions has increased in recent times (Gilligan & Wright, 2020; Guo et al., 2011). In times of increased market uncertainty, however, closer monitoring and hands-on involvement in PC operations become even more important for PE firms, although the level of active involvement tends to differ across firms (Harrigan et al., 2009; Kut et al., 2007).

In order to achieve operational efficiency and efficient management of resources, many scholars have argued for the importance of implementing suitable management controls, a field in which Otley (1999) has been prominent. Otley (1999) explains that the main idea of management control is to generate important information through, amongst other things, performance measurement metrics from which managers can make sense of key operational information to make well-grounded decisions and maximize organizational performance in line with strategic objectives. Management controls are commonly deduced into formal and informal controls (Langfield-Smith, 1997). While informal controls are based on the intangible rules and structures that are unintentionally constructed from the organizational culture, formal controls include visible and objective components including set rules, budgeting systems, and organizational targets such as KPIs that are tangible and easy to measure (Langfield-Smith, 1997). Bedford & Ditillo (2022) argue that these informal and formal controls are necessary

for PE firms in an organizational context, as they together create a foundation for governance used to efficiently manage PCs. For the context and objectives of this study, however, we will focus on formal controls and levers related to those.

While performance measures can serve multiple purposes, merely measuring through formal controls and receiving information typically yield limited organizational contribution. Any management involved in implementing key measures aimed to improve the organization requires more than knowing what to measure to reach organizational objectives, it is equally important to know how to deploy these measures and interpret the results (Behn, 2003; Jones, 1992). Even though there seem to be inconsistencies across PE firms in their monitoring practices, they have in general proven to be efficient in identifying key levers and suitable management control systems facilitating improved operational performance for value creation (Acharya et al., 2009; Barber, 2008; Bloom et al., 2015).

As a foundation for identifying important levers of control, Simons (1995) constructed a four key levers of control framework that can be used as an efficient tool for controlling business strategies and managing tensions arising from external forces. The four levers introduced include belief systems, boundary systems, diagnostic control systems, and interactive control systems (Simons, 1995). This study will, however, only focus on and contextualize findings surrounding diagnostic control systems and interactive control systems, which are used to control critical performance variables for operations and to manage strategic uncertainties (Simons, 1995). During times of uncertainty, it is vital for managers to find a balance where the interactive controls complement the diagnostic controls efficiently in order to make well-grounded strategic decisions (Goretzki & Krauss, 2020).

Diagnostic control systems represent formal information systems derived from organizational strategies to ensure that the strategy will effectively lead toward organizational objectives (Simons, 1995). These controls allow managers to monitor and actively evaluate financial and non-financial metrics to take potentially suitable actions to adjust operational directions and reduce influences of uncertainty on the organization (Simons, 1995). The interactive control systems instead focus on organizational uncertainties that may jeopardize current strategies and thus serve as an enabling instrument for strategic pivots. As strategic uncertainties are not inherently constant and therefore are implicitly difficult to monitor consistently, interactive control systems allow organizations to apply an agile focus of attention for information gathering from outside the normal routine channels (Simons, 1995).

While imposed management controls for measurements and strategic initiatives are a vital tool for addressing and parrying potential threats that uncertainty may cause to organizations (Courtney et al., 1997), one needs to be careful when implementing such measurements as disruptive organizational changes may create resistance for change among employees (Oreg, 2006). Furthermore, macroeconomic disturbances may spur uncertainty about future events and outcomes within an organization, potentially leading to a perceived lack of control among employees as they may struggle to understand the consequences that certain changes may have on their job status or reporting structures, potentially increasing employee turnover (Bordia et al., 2004). Additionally, Bordia et al. (2004) further argue that the quality of organizational communication generally reduces during times of uncertainty, highlighting the increasingly important role of clear communication to reduce individually perceived uncertainty related to change, and its potentially harmful consequences.

Organizations tend to respond differently to uncertain environments, and in line with contingency theory, the appropriate way of adapting and organizationally managing uncertain environments and instability depends on the underlying circumstances at hand (Tosi & Slocum,

1984). Thus, it is evident that GPs will implement different ways of measuring operations to be able to control and evaluate performance in line with the organization's goals and objectives during times of uncertainty.

Considering the insights gained from previous research, we anticipate that PE firms will intensify their hands-on involvement in strategic decision-making in their PCs and direct more attention towards operational improvement initiatives. As a result of the current market uncertainties, we also expect to see a new blend of measurement controls used in PC operations. More specifically, we expect an increased utilization of interactive controls used to effectively navigate operations through current market uncertainties.

2.4.4. Exit

As PE funds have a finite lifetime, exiting PCs is an inevitable stage in the PE investment process in order to provide returns to the LPs. Although exit strategies usually hinge on the size of the PE firm and ultimately the size and maturities of its PCs, it has been historically proven that circa 50 percent of the exit transactions conducted by PE firms involved a strategic buyer, circa 30 percent involved another financial buyer such as another PE firm, and 20 percent of the exits were conducted through IPOs (Gompers et al., 2016; Strömberg, 2008).

However, multiple factors might influence PE firms' exit strategies, including the timing of exits, as well as to whom an exit is deemed the most viable. In the process of planning for an exit, the two most important factors that PE firms consider are the implementation of the strategic operational plan for the PC and capital market conditions, both of which Gompers et al. (2016) argue are more important than reaching a set return target for the PC at the time of exit. More specifically, exit possibilities depend heavily on the conditions of the buyers' market, and buy-side actors may therefore be influenced by numerous cyclical factors. Boyd et al. (2001) argued that inflation is one such critical factor, and that increases in inflation will lead to significantly decreasing liquidity in the financial markets. Hence, buy-side actors that are highly sensitive to inflation naturally become less active during inflationary periods. Furthermore, as previously explained in section 2.4.2, but that is equally important for the context of this section, Kaplan & Strömberg's (2009) examination of the cyclicity of PE transactions observed patterns in which the state of credit market conditions may influence PE transaction activities. The authors explained that when interest rates are low and debt market conditions are unusually favorable, more deals are typically finalized, while higher interest rates yield a less favorable transaction market in terms of volume (Kaplan & Strömberg, 2009).

It is common for certain strategic and financial buyers to finance their acquisitions through a mix of equity and debt financing (Kaplan & Strömberg, 2009). However, increasing interest rates put pressure on debt financing as they increase the cost of debt, implicitly making large debt-financed investments more expensive (Van Binsbergen et al., 2010). Consequently, increasing interest rates may put pressure on any capital structure of the acquisition deal, as increasing interest rates yield larger debt values. This causes a larger share of the potential synergy gains to be attributed to the debtholders, thereby lowering the profits for the acquirer, and eventually imposing a value-decreasing effect for equity holders (Israel, 1991). As a consequence of increased interest rates, acquirers may therefore seek to adjust the capital structure of their transactions by increasing their portion of equity financing. However, this may risk reducing potential returns on investments since increases in the equity of the debt-to-equity ratio capital structure will lead to a higher cost of capital, as the cost of equity exceeds the cost of debt (Miller & Modigliani, 1958). Furthermore, interest rates and company future cash-flows are inversely related such that increases in the interest rates will yield negative

effects on the valuation of a company (Christie, 1982). Such effects may consequently affect the attractiveness of any potential buy for an acquirer, and potential sell for the holder.

Circling back to the inflation and liquidity relationship findings of Boyd et al. (2001), Acharya & Pedersen (2005) explain that the risk of liquidity associated with selling assets ('liquidity risk') stems from the perceived uncertainty and transaction costs faced when selling them. Contrasting public vs. private markets, public companies tend to offer significantly higher liquidity than privately held companies do (Acharya et al., 2009). Holding all else equal, the liquidity risk in privately held companies is larger mainly due to PE investors often selling large shares of, or entire corporations. Hence, PE investors are usually exposed to larger uncertainties regarding transaction costs compared to similar size investments in public markets, and PE firms are therefore experiencing a higher liquidity risk than public market investors. Consequently, high rates of inflation implicitly lead to increased liquidity risk for LPs and their portfolios as well (Sorensen et al., 2014).

Together, macroeconomic factors such as inflation and increasing interest rates create an uncertain environment for PE firms since the increasing liquidity risk, as a result of increasing inflation, and strained debt financing conditions may create a strategic conundrum on the transactions market. This becomes a dilemma for PE firms both in the sense of either selling or holding onto PCs throughout times of uncertainty while considering the finite fund lifetime, and for potential acquirers regarding capital structure arrangements.

Based on our analysis of previous literature, we hypothesize that the majority of PE firms will retain their PC holdings and wait for more favorable market conditions for exits. Considering the available exit options, the short-term outlook suggests a cold IPO market and that strategic buyers will likely remain the most predominant sell-side participant in times of uncertainty.

2.5. Theoretical Framework/Summary

The theoretical development in the previous sections discusses the four separate, yet interrelated stages that will be applied throughout this study to effectively investigate and analyze the posed research question. Thus, this study adheres to a theoretical framework derived from the categorizations of the PE investment process by Kaplan & Strömberg (2009), and Gilligan & Wright (2020). This means that this study frames its focus onto the PE investment process stages including (1) Fundraising, (2) Deal Sourcing Valuation and Investment (3) Operational Management, and (4) Exit. Each of these four defined stages will be integrally assessed and analyzed while incorporating critical insights and understandings of uncertainty (see e.g., Galbraith, 1974; Knight, 1921) and its effect on investor decision-making processes (see e.g., De Long et al., 1990; Ricciardi & Simon, 2000; Rigotti & Shannon, 2005). These four stages, and their foundation in the relevant theoretical literature, will then continuously be contrasted and analyzed through the interviewees' perceptions of how current macroeconomic uncertainties in Sweden, such as high levels of inflation and increasing interest rates, affect the PE investment process. This approach will enable added dimensional perspectives throughout the analysis of the empirical data.

While PE has emerged as an increasingly vital component of the thriving global economy in recent decades, we are now experiencing a current macroeconomic environment where high inflation rates, increasing interest rates, and ongoing geopolitical tensions are putting pressure on financial markets. Therefore, it is arguably imperative for PE firms to make sense of the given environment and adapt their investment process accordingly to the new circumstances. Within the scope of this study, an integrated view of current macroeconomic uncertainties and

their relationship with the PE investment process will provide new insights into how Swedish PE firms adapt their processes to the current environment.

As this study aims to explain the effects of uncertainty on the different stages of the PE investment process, a visualization of the theoretical lens is presented in Figure 1, which incorporates the defined PE investments process framework derived from Kaplan & Strömberg (2009) and Gilligan & Wright (2020), as well as the underlying presence of current macroeconomic uncertainties in Sweden and how individual perceptions relates and influence the PE investment processes.

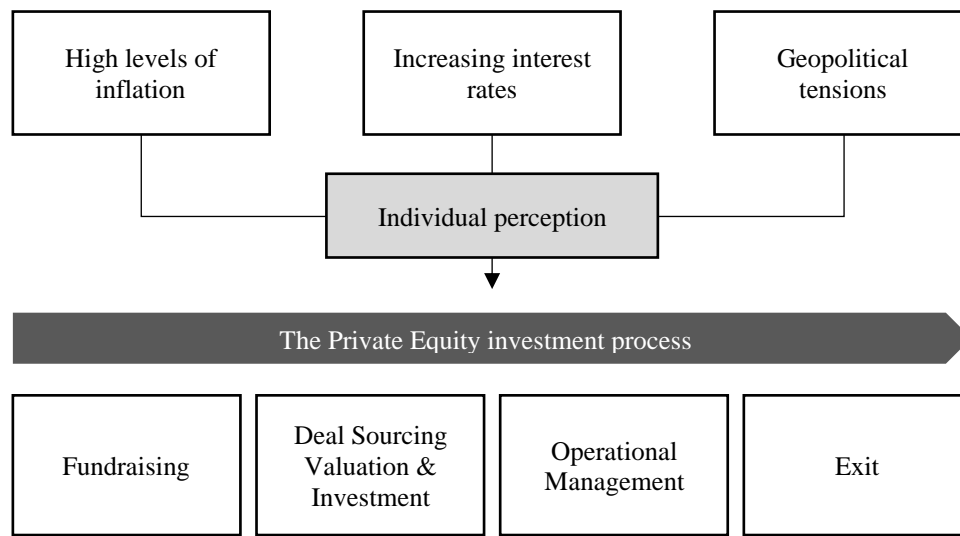


Figure 1: An overview of the relationship between current market uncertainties and the PE investment process

3. Research Methodology

The following chapter will outline the research methodology adopted throughout this study. Section 3.1 aims to provide a broad overview of the research design, including a description of the cross-sectional research approach (3.1.1), and the selection of the empirical setting (3.1.2). Section 3.2 describes the process and the development of the data collection activities. Section 3.3 outlines the process for analyzing the data collected. Section 3.4 concludes this chapter by discussing concepts of data quality and actions taken to cope with these concepts.

3.1. Research Design

3.1.1. Qualitative Research Approach in a Cross-Sectional Study Setting

This study aims to investigate how current market uncertainties affect Swedish PE firms' investment processes. To create a solid foundation through which the research question can be efficiently explored, the PE investment process was divided into four stages: Fundraising, Deal Sourcing Valuation and Investment, Operational Management, and Exit (Gilligan & Wright, 2020; Kaplan & Strömberg, 2009). These four stages were studied from an uncertainty lens, taking its base in the definition of uncertainty by Galbraith (1974) and Knight (1921), and its

effect on investors decision-making processes (see e.g., DeLong et al., 1990; Ricciardi & Simon, 2000; Rigotti & Shannon, 2005). Internal consistency between research design, research question, and theoretical contribution is imperative for ensuring high research quality. Thus, in order to provide coherence and strengthen the validity of the findings, the concept of methodological fit was considered (Edmondson & McManus, 2007).

As data is derived and analyzed from words of multiple voices rather than quantitative statistical models, a qualitative cross-sectional study was conducted with a philosophical base in the paradigm of interpretivism (Collis & Hussey, 2003; Corbin & Strauss, 2008). Qualitative researchers agree that reality is socially constructed through subjectively created and objectified human interactions, which in turn makes reality situational and subjective to individual perceptions, leading to the emergence of multiple realities (Berger & Luckmann, 1967; Chua, 1986). Hence, this methodology empowers researchers to study topics of socially complex natures, which is vital for the research question of this study, as the PE investment process is not independent of social influences and individual perceptions. Another important feature of qualitative research is that it is iterative by nature and continuous rethinking and revising are embraced (Edmondson & McManus, 2007). This study is therefore guided through abductive reasoning, which is the process of balancing the deductive and inductive approaches to create iterative interaction between data and theory (Hoque et al., 2017; Suddaby, 2006). Such iterative processes allow data collected over time to be analyzed through an ongoing reflection of its positioning against derived theoretical frameworks. This facilitates progressive modification of theories and contributions of new knowledge as the study evolves, allowing researchers to continuously refine the data collection process (Ahrens & Chapman, 2006; Edmondson & McManus, 2007; Eisenhardt, 1989; Hoque et al., 2017).

By allowing the investigation of multiple perspectives of a socially complex phenomenon, cross-sectional studies can help researchers refine existing theories and increase their credibility and generalizability beyond specific contexts, creating more robust and dynamic theoretical models (Lillis & Mundy, 2005; Ridder, 2017). The cross-sectional study further allows the contrasting of patterns and deviations over diverse settings to generate comparative insights that yield a high breadth of findings, creating broader context replicability (Eisenhardt, 1989; Lillis & Mundy, 2005).

Hence, by conducting a qualitative cross-sectional study with an interpretive and abductive approach, this study allows the researchers to comprehend and contextualize the participants diverging perspectives influenced by their subjective perceptions and contexts. This facilitates an environment in which uncertainty and its influence on PE firms' investment process can be efficiently investigated. To make meaningful contributions and develop a nuanced understanding of the researched phenomenon, the qualitative data of this study was derived from close interactive proximity with the participants and is considered evidential knowledge necessary to yield new understandings.

3.1.2. Selection of the Empirical Setting

The empirical setting for this qualitative cross-sectional study constitutes data collected from a group of 12 PE firms primarily focusing on investments in Sweden. However, as fundraising poses as one of the fundamental stages of the PE investment process in this study, the authors interviewed PE firms that had raised capital for new funds during or after the COVID-19 pandemic, with the earliest cutoff in 2020-12-31, to gain fresh insights of uncertainty's effect on the fundraising process. Moreover, the delicate sensitivity of strategic organizational insights rendered a constrained response rate from PE firms regarding our request for

participation in the study. Hence, as we do not strive to statistically generalize the findings from the sample to the population, the sample was not randomly determined. It was instead selected through a purposive sampling process, which Bryman & Bell (2017) explain focuses on a non-random sample selection of a population based on the strategic intention to provide relevant data for the posed research question. There were also some aspects of convenience sampling related to the sample due to limited interviewee interest (Bryman & Bell, 2017). As illustrated in Table 1 below, four out of twelve interviewees fall under the VC categorization while the GC and BO categorizations amounted to four and four respectively.

Due to the discretion required, no indicative values of total AUM nor focus descriptions are provided. Nor will any exact amounts of funds raised since the cutoff in 2020-12-31 be revealed in isolation for those discretionary reasons. However, to provide some indicative understanding regarding the size of the raised funds after 2020-12-31 of those interviewed ranged from SEK 1 - 40 billion. Based on the size of the respective funds raised by the interviewees since the cutoff period, together with the size of their initial investment tickets for target PCs and stage of maturity focus, a comparative analysis was conducted where the PE firms were divided into small, medium, and large, regardless of if they are VC, GC, or BO focused. Coincidentally for this sample, however, the size characteristics were aligned with PE firm type.

Table 1. List of firms interviewed

	Firm	Firm type	Size of fund	Interviewee Seniority
1.	Blue Equity	GC	Medium	Partner
2.	Green Capital	VC	Small	Associate
3.	Red Capital	VC	Small	Associate
4.	Yellow Equity	BO	Large	Partner
5.	Orange Equity	BO	Large	Partner
6.	Black Capital	GC	Medium	Associate
7.	Purple Equity	VC	Small	Partner
8.	Pink Capital	VC	Small	Junior Partner
9.	Grey Capital	BO	Large	Investment Director
10.	White Equity	GC	Medium	Partner
11.	Brown Equity	GC	Medium	Junior Partner
12.	Silver Equity	BO	Large	Associate

Total: 12 interviews

As described in section 2.3, the authors commonly refer to these different categorizations of PE firms collectively in line with the European usage of “PE firms” in accordance with Cuny & Talmor (2007) and SVCA (2023). However, throughout the empirical analysis, the authors will utilize the size characteristics to make comprehensive comparisons of the empirical data. This way of contrasting will yield broader conclusions and discoveries both between and within the different size categorizations. The authors recognize the inherent challenges in defining clear-cut boundaries for the size categorizations and that the presence of multiple factors may potentially influence the interviewees’ responses, resulting in ambiguous borders for the different categories.

3.2 Data Collection

Interviews, which serve as the primary source of data in this study, were conducted with a total of 12 different PE firms during the period of January-March 2023. Interviews have been established as particularly suitable in qualitative case studies where it is deemed to be one of the most important sources for data generation (Eisenhardt, 1989; Yin, 2014). The sample consisted of 12 different representatives, one per PE firm, with diverging seniority in a focused attempt to create additional layers of perspectives for the empirical findings and limit potential bias (Eisenhardt & Graebner, 2007). The authors found that 12 interviews were sufficient, and that further interviews would yield limited stimulation of new data. Secondary data in the form of email further complemented the primary data, although to a very limited extent and only in the case where clarification on certain data points was needed.

To be able to investigate the complex phenomena of the posed research question effectively, semi-structured interviews were conducted (Rowley, 2012). The researchers also established a non-extensive framework of some predetermined, yet adaptable, questions focusing on the main topics. This approach allows researchers to frame and maintain a topical trajectory throughout the interview whilst remaining agile for potential non-predetermined questions and interesting topics that could yield more in-depth insights and personal perceptions (Bryman & Bell, 2017; Collis & Hussey, 2003; Saunders et al., 2012). Furthermore, the predetermined questions were of open-ended nature, which allow the interviewees to subjectively interpret, form, and develop data-rich answers for a deeper understanding of the subject under study (Bryman & Bell, 2017; Collis & Hussey, 2003).

One week before each interview, the interviewees received additional information regarding the interview set-up and some key topics to be covered. However, the authors did not communicate the full interview guide to maintain a chance of obtaining more personal perceptions and opinions of the interviewee (Collis & Hussey, 2003). The time and place of interviews were determined based on interviewee preferences and convenience. Hence, both physical meetings, as well as digital meetings via Microsoft Teams, took place, with each interview lasting on average 45 minutes. The choice of language was dependent on the preference of the interviewee and was either held in Swedish or English. Moreover, both authors were present during all interviews and took turns leading the interview and writing notes as well as forming probing follow-up questions. Before the initiation of the interviews, a detailed briefing assuring the anonymity of the interviewees themselves, the unaggregated fund size, and their respective PE firm, was communicated. Each interview was recorded using a mobile device to prevent any loss of imperative data or subjectively filtered bias during the

interview process, with the prerequisite that the material is to be handled with confidentiality and is destroyed after the completion of the study.

All interviews were initiated with an introductory section in which the authors briefly presented themselves and the general scope and objective of the study. Thereafter, the interviewees introduced themselves and their firm, covering their background, role, and fund focus. Following the introduction, the interview began with the guidance of the predetermined framework of questions taking its base in the theoretical literature and research gaps. The application of an agile and semi-structured interview setting enabled the authors to collect viable and nuanced empirics for answering the posed research question of current macroeconomic uncertainties' effect on Swedish PE firms' investment processes.

3.3 Data Analysis

Given the limited sample size drawn from the population, an interpretive approach was deemed viable for analyzing the empirical data. This approach allowed increased focus on understanding the contextual and perceptual factors that influenced both the interviewees in the position of investment professionals, but also the interviewers, who tend to apply their knowledge and biases to shape their own reality to the data collected. Furthermore, due to the abductive nature of this qualitative cross-sectional study, the over-time collection of empirical data facilitated the continuous development of the empirical analysis, as the newly collected data became a driver of reflection, analysis, and synthesis between empirical findings and previously established theories (see e.g., Ahrens & Chapman, 2006; Edmondson & McManus, 2007; Eisenhardt, 1989). By utilizing this approach of data analysis, the authors were able to enhance the richness and depth of the analysis and findings, by contrasting contextual similarities and differences across the sample (Collis & Hussey, 2003).

Following each interview, the interviews were transcribed immediately, and the data was simultaneously discussed between the authors on a rolling basis considering the established theories in order to further contribute to the theoretical understanding of the phenomenon. This process also allowed the researchers to add potentially necessary questions to the interview guide for future data collection activities. After transcribing the data, the content was reviewed, discussed, and carefully streamlined to reduce any data abundance and thus make the empirical findings increasingly capable of providing a high-quality analysis (Linneberg & Korsgaard, 2019). After streamlining the empirical data, the content was thematically divided with color-coding activities in Microsoft Excel to facilitate an overview of the consensus similarities and outlier differences among the interviewees. These efforts of sorting and structuring the data were conducted to help the authors create a pedagogical and credible story of the collected empirical data, and by doing so, enable deeper and more comprehensive insights into the empirical analysis from which the conclusions of this study will build (Miles et al., 2014). The authors acknowledge however that there is an underlying risk of losing the ability to convey the holistic and comprehensive understandings provided by the interviewees as a result of coding and streamlining collected data (Linneberg & Korsgaard, 2019). To mitigate these risks and preserve the quality of the findings, the authors have throughout the data coding process consistently emphasized and discussed their comprehension of the studied phenomenon to ensure a certain degree of quality through the validity and relevance of the outcomes (Linneberg & Korsgaard, 2019).

3.4 Data Quality

Data quality can be measured through several different quality criteria. However, even though criteria such as reliability, replicability, and validity are among the most common ones, they are more often related to the philosophical research paradigm of positivism and are more applicable to quantitative studies compared to interpretivism and qualitative studies (Bryman & Bell, 2017). For interpretive qualitative studies, more emphasis tends to be directed towards concepts such as credibility and transferability as two key pillars of a framework for ensuring high quality and thus trustworthiness of the study (Lincoln & Guba, 1985).

To strengthen credibility, which refers to the probability of the results being true without being statistically proven (Bryman & Bell, 2017), the authors of this study implemented a rigorous data collection process conducted in a systematic manner. This process involved appropriate methods such as limited hands-on adjustments on collected data and color coding the results. Furthermore, the authors continuously discussed and reflected on the potential influences they might inflict on the data through their own biases, presumptions, and beliefs whereby self-reflexivity became a vital pillar for ensuring credible data. The authors recognize, however, that their positionality and biases may still yield some influence over the results, although limited through the suitable actions taken to limit the effects.

To enhance the transferability of the findings, which pertains to the extent of their applicability to other contexts (Bryman & Bell, 2017), a detailed explanation of the research methodology has been provided, including the selection of the research setting. Furthermore, the purposively sampled interviewees of this study were chosen such that it would provide insights into the three broad areas of PE firms, VC, GC, and BO, in Sweden. By providing a detailed scheme of methods used and explanations underlying their choice of methods, the authors enable a simple continuation of the same type of research to be extrapolated to a different sample base, or a different geographical area. The authors do however recognize that all PE firms interviewed in this study, as well as the individual representatives of these firms, carry peculiar characteristics in terms of investment focus, culture, individual experiences, and perceptions. Hence, generalizing the results of this study to a broader population may be difficult, as numerous influencing factors may affect individual representatives' provision of data in interviews. Therefore, any efforts to replicate this study may yield diverging results.

4. Empirical analysis

The following chapter will outline the empirical analysis of this study. Section 4.1 focuses on the Fundraising stage. Section 4.2 focuses on the Deal Sourcing Valuation and Investment stage. Section 4.3 focuses on Operational Management and section 4.4 focuses on the Exit stage. Section 4.5 concludes this chapter by providing a holistic summary of the empirical analysis of the four previous sections.

4.1. Fundraising - in times of uncertainty

Perception of fundraising market: Recent history

Fundraising is the initial process and critical stage that enables the subsequent stages of the PE investment process, and its significance has been widely covered in prior research by Kaplan

& Strömberg (2009). The success of fundraising, however, is dependent on various factors such as the overall health of the economy, previous fund track record, and investment focus.

The empirics insinuate a unanimous perception of the historical development related to the fundraising process and explain that it has been heavily influenced by the excess availability of capital. The historically high availability of capital, as a consequence of the CB's expansionary monetary policies over the last few decades, has led to a situation characterized by an ease of raising capital, both in terms of the amount raised and the speed of the process. These findings on CB activity during the recent decades share some similarities with Taylor's (1999) observation of the CB's expansionary policy and activities during the 1990s, where low interest rates and an increasing money supply allowed for an extensive amount of capital to be placed in alternative investment vehicles such as PE-, VC- and hedge funds. The fiscal environment during the 1990s enabled these subindustries to grow into the powerhouses they are today (Cloyne et al., 2023; Taylor, 1999). One large PE firm representative contrasted the CB's historical role over the last decades in relation to the PE fundraising market and the current levels of dry powder available in the PE sector.

We live in a world where most PE firms have experienced an extremely open and inviting fundraising market for a relatively long time, most of which is due to the unsustainably cheap and vast amount of capital available for allocation, which is a direct consequence of the central bank's monetary policies over the last thirty years. This has led to the excessive amount of dry powder that is currently available on the market. (Partner, Yellow Equity)

The high levels of dry powder in the PE-market, which is supported by Pitchbook (2023) data, may be a direct consequence of the availability of cheap capital that has allowed PE firms to raise funds very quickly over the last couple of years. Hence, the consensus concludes that fundraising has never been easier for PE firms during the last couple of years, due to the CB's expansionary monetary policies. However, due to the current macroeconomic uncertainties led by a high inflationary environment, CBs are implementing measures to curb inflationary pressures which, in accordance with previous literature, includes raising interest rates and selling government securities (Barro, 1995; Cecchetti, 2009; Mankiw & Reis, 2003). There is a common perception among the interviewees that the current economic uncertainties, and future monetary policy, will continue to significantly influence the fundraising environment going forward.

Perception of fundraising market: Current and future outlook

Looking at the current fundraising market, the empirical findings conclude that there is a clear tendency in which LPs are tightening their allocations of capital to PE firms in general. Consequently, the empirics indicate that there are, and will continue to be, fewer PE firms that can raise significant amounts of capital in the near future. Furthermore, there will also be prolonged fundraising processes for the closing of a fund which extends the entire PE investment process. The conclusion behind this phenomenon, as derived from the empirics, is constructed on two fundamental principles that are unanimously agreed upon to be the main reasons behind the currently observable characteristic of the fundraising market.

The first principle builds on uncertainty related to the world economy in general, and the Swedish economy's development in particular, where we have seen significant increases in both inflation levels and interest rates (see sections 2.2.1 and 2.2.2). As an effect, the empirical findings show that LPs have become increasingly prudent regarding their investment

allocations and seek to mitigate risks by increasing their liquidity positions, which quickly comes to affect the capital allocation to alternative asset classes, such as PE. These findings confirm the observations of Boyd et al. (1996) and Schreft & Smith (1997) who argued that high rates of inflation and interest rates hamper economic development so that the provision of capital decreases and interferes with the fundraising process. Noticeably, the impact of interest rates is perceived to be larger for smaller PE firms than for larger ones, which may be explained by differences in LP bases. Smaller PE firms tend to have more individuals and smaller LPs whose risk appetite commonly correlates to the broader market outlook. Larger PE firms, on the other hand, generally attract institutional investors with larger capital bases that, in general, are less sensitive to market uncertainty. Larger PE firms also tend to have higher competition among LPs to commit capital, which decreases their sensitivity to market fluctuations.

The second principle governing PE allocation levels from LPs is the denominator effect which, in essence, is related to the previous principle. In short, it is a mechanism where public market corrections cause a sharp drop in the overall portfolio value (denominator), while illiquid investments, such as PE investments (numerator), experience a much slower mark-to-market value contraction. If the LP wants to maintain the same portfolio allocation as before the drop in portfolio value, the correction to the imbalance is to lower their allocation to PE funds. The empirical findings concerning the dynamics of the denominator effect lie in line with previous literature by Metrick & Yasuda (2011) and Hege & Nuti (2011), conveying the important influence that the denominator effect yields over the fundraising process. The interviewees agree that this principle is bearing the largest influence over the availability of funds for the PE market. Given that most LPs allocate a set percentage of their overall portfolio to PE, the absolute value of this allocation going forwards will see a continuous decline if the LPs' public market equity and bond portfolios see a downturn in value, to re-balance LP portfolios.

Current macroeconomic uncertainties' effect on recent fundraising processes

The effect of these principles, namely uncertainty for the general economy and the denominator effect, can already be observed in the PE fundraising process. This became evident through the empirics as the majority of the sampled PE firms in this study closed their latest fund during the second half of 2022. During the fundraising process of these funds, the issues stemming from these principles caused significant disturbance from which there were two main takeaways. Firstly, the funds, regardless of size characteristic, took longer to close than initially expected. Most interviewees expressed that when they first started raising funds in 2021, there was still a very good market for fundraising. However, the initiation of Russia's invasion of Ukraine and the resulting macroeconomic effects served as a starting point from which the fundraising became more, and the process of closing the funds was prolonged. Secondly, no PE firm, regardless of size characteristic, managed to raise as much capital as initially expected by the start of the fundraising process. Although the availability of capital is decreasing for the broader PE industry, the interviewees argued that there are three primary remedies to combat market uncertainty and increase the potential for a successful fundraising process: good track record, brand reputation, and well-established LP-relationships.

Most of the PE firms could display good track records from previous funds and emphasized that this was imperative in attracting and convincing both old and new LPs to take part in their fundraising process. According to most interviewees, this track record is a determining factor in incentivizing LPs to provide additional funds going forward. These findings align with prior

literature by Berk & Green (2004), and Chung et al. (2012), highlighting the significance of historical track records in building LP confidence in new PE funds.

Furthermore, brand reputation seems to constitute another important factor, which is evident when contrasting two medium-sized PE firms with similar investment focus, both of which raised their first fund in 2022. One PE firm represents a renowned brand in the PE sector, while the other is significantly less renowned. The well-known brand noticed a general slowdown but still managed to go through the fundraising process without the need to show good historical returns based on its brand marketing advantage. The other firm lacked both a proven track record and a market-renowned brand, which led to concerns about the attractiveness of their new fund. These findings adhere to Cendrowski's (2012) explanation that funds raised with a name-brand PE firm usually facilitate the fundraising process in cases when it is difficult to look at historical returns, due to the trust LPs assign to that specific brand.

The last remedy involves the importance of partner experience and building long-term relationships with LPs. Although these relationships to some extent may be related to the previous remedy discussed on brand recognition, it is evident that the less renowned brands have been able to utilize more out of partners with long industry experience compared to that of other partners as LPs tend to place more trust on experienced partners in times of uncertainty. These findings align with the arguments of Metrick & Yasuda (2011) explaining that strong interpersonal relationships with a current LP base may become a key determinant in securing future funding for PE firms. These findings are further corroborated by Pitchbook (2023) statistics showing significant increases in capital distributed to experienced fund managers compared to those less experienced in times of uncertainty.

Altering perceived LP expectations on GPs during times of uncertainty

Despite the generally tighter fundraising market where there undoubtedly seem to be increased requirements for solid GP fund track record, brand recognition, and established relationships with LPs, there seems to be limited evidence implying that current market uncertainties have caused LPs to impose expectation-based pressure regarding transactions rates or returns upon GPs in order to participate in a new fund. On the contrary, the empirics show that the majority of LPs share the common viewpoint of the GPs and prefer prudence and hence slower transactions rate in general due to the current macroeconomic uncertainties and expect this to continue to be the case in the short term. The empirics imply that there has been a significant pivot from LPs, going from requiring a fast deployment to participate in a fundraising process, to a very idle and careful approach.

It's an interesting tendency to observe, although it is very reasonable. LPs have for a very long-time urged GPs to deploy their capital very quickly, just to get the capital working as soon as possible. However, the second we saw turmoil in the financial markets, LPs changed their preferences and became more careful in their pressure of preferences. Now, we experience no LP pressure to invest as soon as possible anymore. (Junior Partner, Brown Equity)

Additionally, most interviewees agreed that LPs had neither revised their expectations in terms of returns significantly, despite the current market uncertainties negatively affecting the financial markets across the globe. Even though the LPs are careful in pushing any expectations on returns upon GPs, the empirics show that LPs are increasingly looking for other ways to increase their returns. There has been a steep increase in LP demand for co-investment rights

in the limited partnership agreement (LPA) which allows LPs to invest directly in the same PC, ultimately reducing management fee expenses and indirectly increasing their potential returns.

However, one smaller PE firm expressed a rather deviating experience compared to the rest of the PE firms regarding both the issue of transaction tempo and returns. The interviewee explained that their LP base demanded a lower transaction tempo, but also communicated increased return expectations by pushing the PE firm to target a higher hurdle rate of return in order for them to continue to commit capital to a new fund.

The return expectations for early-stage VC are always high, but some LPs have told us that they are expecting us to increase our investment hurdle rate based on the current market. The same LPs showed quite a high level of persistence in pressuring us to keep a low transaction tempo, especially throughout 2023, to conduct more proper due diligence on targeted investments. (Junior Partner, Pink Capital)

Adapting fundraising communication strategies as a consequence of increased uncertainty

To mitigate the potential adverse effects of macroeconomic uncertainties on PE fundraising, clear communication and alignment of expectations among all stakeholders are crucial. Previous research by Gejadze et al. (2017) has emphasized the role of effective communication as a vital facilitator for successful fundraising campaigns, particularly in times of uncertainty.

All PE firms that closed their last fund in the second half of 2022 agree that it became increasingly important to clearly communicate the objectives of the new fund for their fundraising process to be attractive for LPs during times of uncertainty. Hence, one could argue that the findings of Bordia et al. (2004), focusing on the increasing need for high-quality communication within organizations in times of uncertainty, may be equally important for external communication in a PE context to ensure high LP trust. Furthermore, the empirics also imply that more communicative focus had to be directed not only toward new LPs but also toward LPs who had already committed capital to the fund to build trust in existing relationships. Hence, PE firms had to adapt their communicative strategy with LPs during the entirety of the fundraising process as a consequence of the uncertainties currently surrounding the PE market.

However, the way firms have adapted their LP communication varies. The smaller PE firms, who tend to have more frequent contact with their LP base, have in general experienced a larger concern from their LP base regarding the current market uncertainties, and have therefore been forced to enhance their communication network to mitigate these concerns, and build trust within their LP base.

We have noticed increasing uncertainty within our LP base, which has forced us to focus more on the quality and extent of our external communication. We consider this a necessity these times in order to build sustainable long-term relationships with our LPs. (Partner, Purple Equity)

Contrastively, it seems that the medium- and large-sized PE firms did not experience as significant a difference compared to that of the smaller PE firms in terms of their LP fundraising communication. Nonetheless, there have also been minor adaptations made to these PE firms' communication strategies as well. Two of the larger PE firms expressed how the current market uncertainties have led them to revise their communicated investment strategy slightly with a more clear and concise focus on the LPs. However, these initiatives were merely an adjustment to general uncertainty observations and not to LP-emphasized concerns. One medium-sized PE firm highlighted that they have tried to mitigate LP uncertainty concerns by emphasizing their increased focus on independent thinking and not succumbing to the common fallacy of herd

mentality when evaluating potential investment opportunities. This is an interesting finding as the interviewee has long experience in PE and displays an understanding of subjective investor biases, reinforcing the argument that self-assessment ability comes with experience (Gervais & Odean, 2001) and such characteristics lowers the tendency of succumbing to herding behavior (Brozynski et al., 2006). In general, any changes made to a PE firm's communication strategy during the fundraising process were solely made to accommodate the interests and preferences of their LPs to foster good relationships, although the pressure seems more tangible among smaller PE firms than larger PE firms.

We made a strategic decision to adapt our fundraising approach slightly compared to previous funds as a result of the current uncertainties in the financial markets including the crisis in Ukraine. We collaborated with an advisor to narrow down our investment strategy and geographical focus and, most importantly, re-packaged our offering differently to achieve a clearer outside-in perspective such that it could be communicated more efficiently and convincingly to our LPs. (Partner, Blue Equity)

Main Takeaways

In conclusion, the empirical evidence indicates that LPs are becoming more risk-averse due to the current macroeconomic uncertainties and are committing less capital to PE fundraising, with the denominator effect being of large influence. This creates an environment where firms with a previous track record of successful funds get first access to the capital available amongst LPs. Other firm characteristics, such as brand name recognition, partner experience, and high-quality communication also serve as remedies for enabling successful fundraising. These findings confirm our main hypotheses and add more dimensions to the literature by contrasting findings across PE firms. Moreover, the analysis provides insights regarding the generally low LP pressure on GPs for transaction rates and returns to consider future fundraising participation. Lastly, there was no empirical evidence indicating that cyclicity in capital calls in current macroeconomic uncertainties would constitute one of the three main factors that could harm fundraising. Hence, only uncertain macroeconomic environments and the denominator effect could be proved.

4.2. Deal Sourcing Valuation and Investment - in times of uncertainty

Perception of transaction market: Recent history and current conditions

Kaplan & Strömberg (2009) drew analytical parallels between the Fundraising process and the Deal Sourcing Valuation and Investment process and concluded that those are highly correlated in terms of their cyclicity. Hence, boom markets attracting high fundraising activity are typically followed by a corresponding boom period in terms of transaction volume and valuations. The same logic applies with contrarian effects during bust periods. Kaplan & Strömberg (2009), as well as Ljungqvist et al. (2007), researched the phenomenon of how the macroeconomic environment factored into the occurrence of these cyclical periods, both concluding that increasing interest rates have a negative correlation to transaction activity. The reasoning behind these findings appears to be twofold. Firstly, increased interest rates lead to a lower accessibility of capital within the broader financial industry. Secondly, this leads to declining valuations as the limited availability of capital yields lower competition for target PCs amongst competitive PE firms (Kaplan & Strömberg, 2009; Ljungqvist et al., 2007).

The interviewees share a unanimous perception that the PE market has been very favorable for investors over the last decade as a consequence of the generally low interest rate levels. This perception seems to remain constant across most PE submarkets as both the larger, medium,

and smaller PE firms have seen deal flow and valuations surge during the low interest period between 2010 – 2020 (as described in section 2.2.2). These findings align well with previous research on the correlation between interest rates and transaction rates by Kaplan & Strömberg (2009) and Ljungqvist (2007). One of the interviewees explained the market for early-stage smaller PE transactions during the market activity peak of 2021:

Deals could close within a week, spurring valuations beyond reasonability. Although many of those companies may become success stories one day, too many paid too high premiums and unreasonable valuations for a lot of companies that are not as hot anymore, especially in tech. So, I believe that they will see some negative consequences of their spending in the near future. (Associate, Green Capital)

The optimistic transaction market sentiment, however, changed towards the latter half of 2022, as the interviewees noticed a downturn in transaction volumes on the market. Most funds realized, due to rampant inflation and the following central bank policy activities, that financial markets will experience turbulence that bodes for further restrictive transaction behavior. One of the more experienced partners from a larger PE firm built on the observations of the Green Capital Associate and covered the recent decline in transaction rate and valuation hysteria:

What can you do when capital is both cheap and easily accessible? You cannot remain on the platform when the train leaves the station, because you quickly become irrelevant. You are basically forced to put your capital to work quickly. However, we have seen a recent period where some fund managers have invested unreasonable amounts in companies with too high risk and valuations, especially in early-stage processes, and we are already beginning to see the costs of this. People have not been reasonably careful. (Partner, Yellow Equity)

While most PE firms succumbed to the favorable interest rate environment and took part in spurring transaction rates and high valuations, one could argue that optimism may have led investors to misprice assets from their fundamental value. These activities may have been based on general optimistic investor sentiments with regard to future risky events (De Long et al., 1990), fueling herding behavior tendencies that may have created a situation for excess market volatility (Nofsinger & Sias, 1999). Furthermore, one could argue that the absence of large market uncertainties in the past decade (before the COVID-19 crisis) has caused investors' risk awareness to diminish for high-magnitude risks of low probability, causing investors to increasingly succumb to market sentiments (Kahneman & Tversky, 1974) more easily.

Current macroeconomic uncertainties 'effect on PE firms' expected transaction rate

Even though the unanimous perception is that the transaction rate for the PE market is slowing down, there are diverging views on how their firm will approach this phenomenon in the near future. Half of the empirical sample argues that they will maintain a transaction rate similar to before recent market uncertainties became apparent. These funds are either possessing an excessive amount of dry powder that they need to allocate over a long period or because their investment period is approaching its end. These reasonings do not specifically relate to any firm size characteristics, whereby a correlative conclusion beyond that of timing is difficult to argue. The other half of the sample explained that they plan to decrease their transaction rate, despite many of them sitting on relatively large amounts of dry powder. The common factor among those PE firms relates to the fund term timing, as most of these funds closed fairly recently and therefore have a long time to deploy their capital. These PE firms are awaiting more favorable market conditions where they hope to see good buy-side opportunities arising as an effect of other funds approaching the end of their fund term and are looking for exits.

Due to our favorable timing with closing our latest fund in late 2022, we will try to preserve the dry powder as much as possible over the next 1-2 years by decreasing our number of investments. We hope to avoid the effects of selling in unfavorable market conditions and to utilize cheap opportunities when others are forced to sell. This approach will also allow us to build more conviction in every case we are interested in. (Associate, Red Capital)

Among the smaller firms, most interviewees emphasized the need for a cautious approach by preserving capital and increasing selectivity for their investments. However, two outliers were observed among the smaller PE firm representatives who personally advocated for a more aggressive investment approach, effectively taking advantage of decreasing valuations by increasing the buy-side transaction activity, although their PE firm strategy did not follow. Interestingly, these outliers were identified as two of the less experienced PE firm representatives, while more experienced PE firm representatives generally preferred caution. The more senior investors emphasized the importance of having professionally experienced market setbacks to avoid common fallacies of overestimating abilities and taking on too much risk. Hence, the experience component is arguably a dividing factor between these two viewpoints. This can be explained through the arguments of Greenwood & Nagel (2009), who stated that experienced investors that have seen market bubbles and their subsequent crashes tend to become more risk averse. Furthermore, Gervais & Odean (2001) argued that experienced investors tend to be better at self-assessment and identifying their own behavioral biases and are therefore more likely to avoid common behavioral pitfalls in investing.

Current macroeconomic uncertainties' effect on PE firms' investment criteria

Drawing on the decreasing transaction rates within the broader PE market, many PE firms have been forced to review their investment strategies going forward. It is evident that PC profitability has taken over from growth potential as the primary performance metric in the process of evaluating investment opportunities. The empirical data suggests that these changes are fairly aligned across all PE firms, regardless of their size characteristics. However, their approaches to evaluating profitability slightly differ.

The larger PE firms display an increased emphasis on actual profitability when sourcing for potential target PCs. Although this has always been one of the key parameters considered in their analysis, it has gained more weight along with increasing market uncertainty. In recent favorable market conditions, a well-defined path toward future profitability was enough for some of the larger PE firms to commit their capital. Nowadays, however, a proven track record of historical profitability is becoming more of a necessity for all larger PE firms to invest. Another factor of essence in uncertain markets is stable, non-cyclical cash flows. Being able to fund your own operations and feed organic growth throughout cycles is increasingly considered by larger PE firms in times of uncertainty as this decreases the financial risk of an investment. The same principle of sourcing for profitability and stable cash flows also applies to the smaller funds, however, to a different extent. Given the nature of their investment niche, profitability is rarely realized during their investment stage. Therefore, a clear path toward profitability will serve as the guiding principle for these firms going forward. The medium-sized PE firms exhibit greater variance in their responses. For them, the issue becomes more complex and is more firm-specific, as some of their PC targets are in the early-stage, non-profitable bracket, while others are more mature, which is where profitability tends to be increasingly required.

The trend in the market is to look for stable cash flows. For us, profitability was rarely on the table at the time of investment a few years ago, but it has now grown to become the number one factor we look for in target companies. Earlier, we always talked about growth potential and laid out plans for

expansion in our PCs – now we instead focus on minimizing costs and making efficient use of our cash flows. (Associate, Black Capital)

Current macroeconomic uncertainties' effect on PE firms' investment focus

As a result of the current market uncertainties, certain companies have become more or less attractive to PE investors. One of the most common principles derived from the sampled PE firms is to avoid investments in margin- and capital-intense businesses. First of all, this means that companies with constrained gross margins are perceived to pose a significant pricing risk and therefore become less attractive. Furthermore, these firms also tend to be highly exposed to a steady state of consumer demand since they are reliant on high sales volumes to compensate for their low margins. Second of all, capital-intense businesses that rely on significant investments in capital expenditures face increased financing risk with the rise in interest rates. There is, however, one notable exception in the capital-intense clean energy sector, which continues to attract substantial amounts of capital. This trend can be attributed to the established ESG-movement and its long-term growth potential, in which investors have found a safe haven to park their capital through times of uncertainty.

Due to the reiteration of focus on investment opportunities, the empirical data suggests that specific sectors become more, or less, attractive than others. The empirics suggest that sector-quality stamps, such as non-cyclical and naturally recurring revenues, that indicate potential for resistance during economic turmoil are preferred.

When uncertainty increases, there is a flight to quality where the top-quality firms tend to get all the attention while companies of less quality tend to be left on the sideline. You, together with everyone else, tend to look for less cyclical investment opportunities offering must-have, rather than nice-to-have solutions. (Partner, White Equity)

Consequently, the empirical findings suggest that the importance of quality as a determining factor for potential investments tends to increase during periods of uncertainty. However, this increased focus on quality also intensifies investor competition. These findings align with the previous literature of Marsh & Pfleiderer (2013), who highlights the tendency of investors to prioritize top-quality companies in times of uncertainty as a risk mitigation strategy.

Perception of macroeconomic uncertainties' influence on PC valuations

Financial markets have been increasingly volatile in recent years with COVID-19 causing a significant downturn in company valuations, which quickly recovered by mid-2021 following near-zero interest rates and an abundance of capital inflows. In line with the increase in current market uncertainties, a new downturn in public markets was observed. Notably, among the sampled PE firms, there are diverging views regarding the impact of current market uncertainties on valuations. The empirics suggest that larger PE firms tend to be the least affected by decreasing PC valuations in relation to the current market uncertainties. On the other hand, smaller PE firms also experience a limited valuation effect, but with somewhat higher variance compared to larger PE firms.

These empirical findings deviate from previous research by Perez-Quiros & Timmermann (2001) and Fernández-Amador et al. (2013), who concluded that smaller firms are more cyclical in nature and therefore more sensitive to recessionary cycles than larger firms on public markets. One potential explanation for the deviation between the empirical findings and prior

literature could be the significant difference in liquidity between private and public markets, exposing a situation in which private markets are lagging in their mark-to-market adjustments.

We focus on early-stage companies. Therefore, we focus on companies with significant growth potential and simultaneously low market shares. So, as we operate within a 'riskier' segment compared to larger PE firms, we experience slightly more effects on valuations, although the current market uncertainties do not impose significant effects on our PCs. (Associate, Green Capital)

The primary reason for the mark-to-market lag is the clear buy-sell valuation spread within PE markets. Such spread exists primarily because sellers are looking at recent market transactions to value their assets, many of which occurred during mid-2021 when both transaction values and volumes peaked, while buyers are turning toward public markets peers to value those same assets. However, valuation differences are complex and multifaceted, and numerous reasons may underly such observed phenomenon, including e.g., information asymmetry and liquidity constraints. In this context, observed valuation differences might also be partly explained by psychologically influencing factors related to increasing market uncertainty as explained by Ricciardi & Simon (2000).

Differences in valuations may therefore be influenced by factors such as framing effects, which may shape individuals' perceptions of the same asset and potentially lead to irrational valuations. Such situations may occur when individual actors consider the same asset from different perspectives, such as a buy- or sell-side, resulting in different interpretations of the available information, as explained by Kahneman & Tversky (1981). Furthermore, endowment effects, explaining that investors tend to value assets they currently own higher than an identical asset they do not own (Thaler, 1980), may constitute another influencing factor. In the context of this study, PE firms may therefore irrationally overvalue PCs they currently possess, leading to valuation divergences and decreased transaction rates.

Main Takeaways

The empirical data suggests that the overall transaction rate within the broader PE industry has experienced a downturn and is expected to remain low in the short term, which was initially hypothesized. However, there are limited effects on PE valuations compared to public markets indicating that the hypothesis of decreasing valuations is not currently fulfilled, which may be an effect of prolonged mark-to-market corrections due to the illiquid nature of PE markets. Furthermore, the empirics confirm the initial hypothesis of flight to quality during times of uncertainty, as PE firms increasingly look for quality stamps of profitability, organic growth, and non-cyclical investment opportunities.

4.3. Operational Management - in times of uncertainty

Uncertainties' influence on the process of defining and implementing new KPIs

The empirics unanimously concluded that the main objective after entry into a PC is to focus on operational improvement through the implementation of efficient measurements and strategic adjustments to enable their PC to reach the full operational potential of its overall strategy. Such activity aligns with previous research addressing PE firms and their general activities and effects on PC operations after entry (see e.g., Cuny & Talmor, 2007; Guo et al., 2011; Jensen, 1989; Kaplan & Strömberg, 2009).

By aiming for the achievement of full operational potential, PE firms simultaneously strive for optimal value creation in PCs in order to reach return targets set at the initial LPA. Following past literature, operational engineering is growing increasingly important in order to create competitive advantage and thus high returns (see e.g., Guo et al., 2011; Kaplan & Strömberg, 2009). However, the empirics suggest that the approaches that PE firms adhere to in order to achieve these objectives differ across firms, with numerous factors influencing their strategic choices, such as the size of the PC, the experience of management, ownership stake, and more. Naturally, these general findings align with Tosi & Slocum's (1984) explanation of contingency theory, in which there is no one best way of managing an organization, and that strategic decisions are dependent on the circumstances at hand. Some of the interviewees, especially among medium and large PE firms that are holding larger ownership stakes in their PCs, have displayed more active involvement in their PCs' organizational development in terms of strategic implementation and monitoring, while smaller PE firms with smaller ownership stakes have displayed a more self-contained approach.

At the beginning of the holding period, all PE firms confirm that actions are taken to establish a guiding framework that includes KPIs and clearly defined strategies for their PC. However, the process of establishing such a fundamental framework for which the PC will be measured and managed is largely dependent on the experience of the PC management team, the maturity of the company, and the PE ownership stake. The empirical data unanimously suggests that the framework for such measurements is commonly produced through an interactive process between the PE firm and knowledgeable top-level management in the respective PCs. There is also an obvious tendency where larger and medium-sized PE firms tend to take more responsibility in making sure that the PC top target metrics are measured correctly in line with the full potential strategy and also that the downstream flowing metrics throughout the organization measure the right things as well. This initiative becomes increasingly important along with larger stakes of ownership as smaller PE firms, that in general hold minority ownership stakes, generally trust the highly incentivized founders and management team's initiatives as they would be the most affected by negative outcomes. Even though larger PE firms tend to be more decisive and hands-on, all PE firms encourage an interactive process to facilitate the exchange of knowledge and experiences with the management team in order to build efficient and suitable measures for monitoring and strategic objectives.

These findings are largely in line with previous research of e.g., Behn (2003) and Jones (1992) who argued that PE firms exclusively involve top-level managers with suitable experience and knowledge in the decision-making process of establishing key measurements for operational efficiency. Hence, they involve actors that may provide important insight not only into what to measure to reach organizational objectives but also how to deploy these measures and interpret the results. However, in the presence of market uncertainties, the extent of hands-on involvement of the PE firms in the interactive KPI establishment process tends to diverge. As uncertainty increases, larger PE firms tend to be more inclined to increase their hands-on involvement to make sure that the PC management team will focus on the right measures and strategies from the get-go.

The initial KPIs that we interactively agree upon with PC management are of course vital in setting the initial direction for the company under our wings. The process depends a lot on the PC's maturity as well as the management team's knowledge and experiences. However, as the uncertainty in the financial markets has increased over recent years, we have become more varied with who is involved

in this process and taken more lead on the process itself to make sure we are in the driving seat, especially if we have large ownership stakes to protect. (Investment Director, Grey Capital)

Medium-sized PE firms tend to be more scattered in their responses and emphasize the importance of ownership stakes monetary and incentives as a decisive factor of hands-on involvement. However, the findings for smaller PE firms insinuate that current market uncertainties yield very limited effects on their hands-on involvement, which is an interesting finding since these PE firms, nevertheless, tend to have indirect control over PCs through control provision clauses in their investment contracts. Hence, such phenomenon may partly be a result of the smaller stake of ownership these PE firms tend to have, but mainly as an indirect result of the monetary incentives being distributed to other parties.

After initial investment, there is a process in which we, together with the founders set a framework of main KPIs which will serve as a guiding tool for the PC going forward. Our approach to this has not really changed as uncertainty has increased over the last couple of years. We usually trust the founders to do what is right due to their significant skin-in-the-game. (Associate, Red Capital)

Hence, one could argue that larger and medium-sized PE firms having majority ownerships in PCs in general follow previous research by Kut et al. (2007), and Harrigan et al. (2009) who explained that PE firms diverging in their hands-on involvement in PCs is a common phenomenon, but that it becomes increasingly important in times of uncertainty. However, it is evident that smaller PE firms somewhat diverge from the previous literature, despite being able to exercise influence over the PC, with the primary reasoning being their relatively smaller exposure to monetary incentives.

Adjusting PC KPIs to mitigate current macroeconomic uncertainties' effect on operations

The focus on achieving full operational potential in PCs highlights the importance of implementing an agile setting of measurement controls that can adapt to changing environmental circumstances throughout the entire holding period. Such again le approach enables a continuous assessment of information and ensures the attainment and maintenance of long-term operational efficiency. This significant focus on measurements for managing operations aligns with previous research by Otley (1999), who highlighted the importance of controls in organizational environments and how formal controls, such as quantifiable KPIs, can generate imperative comprehensible information for the organization's long-term strategic objectives. The extent to which these types of controls are applied to PCs tends to differ among PE firms and is influenced by the difference in ownership stakes, PC characteristics, and maturity. Larger PE firms typically place greater emphasis on the importance of measurement controls, particularly in comparison to smaller PE firms. These findings also reinforce the arguments of Bedford & Ditillo (2022) who argued that formal controls, such as tangible KPIs, play a paramount role in establishing a solid foundation for effective PC governance over time.

The empirics further show that the importance of possessing an agile management control system for governing PCs became extremely apparent for PE firms during the COVID-19 crisis. It prompted the majority of the PE firms to reassess their management controls and measurement systems to parry the uncertainty posed by COVID-19 to ensure long-term sustainable operations for their holdings. The crisis led PE firms to change their general focus on financial measures more towards profitability and cash flows rather than growth and expansion. However, not only did the focus on financial metrics change due to the market uncertainty, but there was also an increasing emphasis directed toward operational metrics instead of financial metrics. Even though these types of measures had always been readily

available as a metric, the COVID-19 crisis made them more than mere footnotes. Notably, however, there was a distinct difference between PE firms in the extent to which this redirection of emphasis toward operational metrics actually occurred. Larger and medium-sized PE firms focusing on more mature investments and larger ownership stakes were prominent in emphasizing the importance of switching focus from financial to operational metrics. This would help them understand the true operational efficiency and distinguish value-creating operations from potential inefficiencies in need of improvement. However, smaller and medium-sized PE firms investing in early stage- and less mature companies, and with smaller ownership stakes, argued that the default focus of these PCs already was on operational metrics due to their risky nature, whereby an insignificant shift of focus was observed.

I think much hinges on the maturity of the PC. Our PCs operate in an environment in which they are always exposed to significant risk due to the nature of being start-ups. These companies operate in risky environments daily and do not necessarily have to make any significant adjustments to their strategies now that we see increasing uncertainty in the markets. (Junior Partner, Pink Capital)

The dynamic development of control systems in times of uncertainty

The empirics show that the COVID-19 crisis proved to be a vital facilitator for PE firms to understand the need of managing their measurement controls of PCs agilely. The imperative measures that came along during the COVID-19 crisis were temporary to parry operations against immediate short-term uncertainties. However, these temporary measures would prove to eventually become long-term tools for ensuring continuous operational success over time. As a result, the PE firms argue that even though the current macroeconomic uncertainties differ from the COVID-19 crisis, they are better prepared to handle current uncertainties. These findings can be explained in the context of Simon's (1995) discussion on diagnostic and interactive control systems in the sense that interactive control systems became paramount, especially among large- and medium-sized PE firms, during the COVID-19 crisis which facilitated the development of agile and temporary KPIs. This enabled strategic pivots within PCs to parry current uncertainties and mitigate their effect on the company.

This further proves the arguments of Goretzki & Krauss (2020) who explained that in times of uncertainty, it becomes increasingly important for managers to balance the usage of interactive controls efficiently with diagnostic controls in such a way that is most efficiently tailored given the specific circumstances. However, the temporary interactive control systems eventually became an imperative part of the long-term diagnostic measures. These controls arguably lost their interactive control characteristics as they became a continuous component for ensuring strategic maintenance rather than enabling strategic change. One of the larger PE firms expressed an interesting viewpoint on the need for agile measurements. The interviewee emphasized the significant importance of maintaining an agile approach to controls not only during times of uncertainty but also when uncertainty diminishes, highlighting the value of sustained agile management throughout the entire holding period.

Just as there are different KPIs used in the different development phases of a company, there is a continuous need to steer and tighten measurements connected to the strategy depending on the market outlook. In uncertain times, there is a lot of focus on directing KPIs toward cost controls, securing cash flows, and other operative measures, but you cannot fully give up what was working in better times as the uncertainty pendulum quickly changes. Take COVID-19 for example, it was equally important to act on extreme uncertainty as it was to dynamically switch and hit the gas again when we saw market sentiments changing for the better. (Partner Yellow equity)

Hence, the empirics show that there was a significant difference in the importance of adjusting the management controls in PCs during COVID-19 compared to today's market uncertainties. The reasoning being the perception that COVID-19 was more tangible compared to the more abstract current uncertainties of inflation and interest rates. Hence, as the PE firms had already made concrete adjustments to measurements and controls for PC holdings during COVID-19, as well as received fresh crisis experience, there is a smaller need for making any further significant adjustments in relation to today's uncertain environment.

When we sort of knew what COVID-19 meant, it was possible to somewhat prepare for the effects it would yield on our PCs' operations. You saw lockdowns, stacking of supplies, infinite media coverage, etc. However, today's macroeconomic environment is more abstract and therefore more uncertain in the sense that it is more difficult to predict what will actually happen in the long-term, which is why many investors are more idle in their investment strategies today. (Partner, Blue Equity)

One could argue that such a statement, in contrast to Galbraith (1974) and Knight (1921) indicates that the perception of abstract versus tangible uncertainties may influence the perceived extent to which the unknown factor in the outcome of future events may be more or less significant. Hence, true uncertainty, as an influencing factor over PE firms' activity may be shaped by the investor's individual perception and psychological influences of the macroeconomic challenges facing their PCs. These findings could therefore be contrasted with the findings of Ricciardi & Simon (2000) and Kahneman & Tversky (1981), implying that psychological factors may alter individual actors' perceptions of given issues at hand. Thereby, how uncertainty is framed and ultimately perceived may bear influence over the investor's decision-making behavior and hence PE strategy.

Main Takeaways

Most PE firms intensify their hands-on involvement in uncertain times to take more control of PC initiatives. However, smaller PE firms, despite indirect control of PCs, do not conform to the initial hypothesis and monetary incentives are likely the key dividing factor. Moreover, interactive controls are increasingly utilized to navigate PC operations in times of uncertainty, however, such initiatives were imposed already during COVID-19, and not renewed for current uncertainties as the PCs were deemed sufficiently agile in nature. Moreover, it became evident that PE firms tend to adopt new KPI portfolios with shifting weight between operational and financial KPIs in times of uncertainty. These findings confirm parts of our hypothesis, but also add a new dimension to the knowledge of management control.

4.4. Exit - in times of uncertainty

Current macroeconomic uncertainties effect on preferred exit strategies

As previously established, exits are a crucial component of the PE investment process, as it enables the realization of returns and facilitates the return of capital to LPs. Three primary exit strategies were discussed among the sampled PE firms: IPOs, strategic buyers, and financial buyers (such as other PE firms), each with their distinct advantages and disadvantages. The consensus of the interviewees' general reasoning on exit strategies is largely in line with previous research, arguing that the suitable exit strategy tends to hinge on the size and characteristics of the PCs (Gompers et al., 2016). However, it is widely agreed among the PE firms that the current market uncertainties have caused significant disturbance within the PE exit market, leading to a general decrease in exit activities, and to certain exit strategies becoming less viable. Hence, the empirics effectively corroborates Kaplan and Strömberg's

(2009) argument that transaction markets are significantly impacted by credit market conditions, with higher interest rates leading to fewer deals being finalized.

As general market uncertainty increases, the empirics show that large and medium-sized PE firms tend to look for either strategic- or larger financial buyers with dry powder to deploy in case of an exit, neglecting the possibility of an IPO. However, two of the large PE firms noted that in their experience, strategic buyers tend to be very on-or-off in their risk-willingness during times of uncertainty. Thus, if strategic buyers are to exhibit tendencies of risk aversion, funds near the end of their lifespan may struggle to sell at reasonable prices even to such buyers.

One of the large PE firms explained that there may be few potential buyers that can pay a sufficient consideration today for sizable PC holdings without taking in large amounts of debt in their investment capital structure, which is rather unattractive considering today's interest rate levels. This finding supports Van Binsbergen et al.'s (2010) research, indicating that investors are hesitant to raise large amounts of debt to fund investments due to increased financial risk associated with higher costs of debt. This trend may be exacerbated in current market uncertainties and high-interest rate environments, potentially hindering large-scale strategic acquisitions. However, one representative from a medium-sized PE firm stands out in their reasoning regarding the exit market. They emphasized their ability to approach investment strategy differently due to their large amount of unallocated capital since closing their fundraising process in late 2022, allowing for more careful consideration of the future exit market.

If we know that one investment should become a public market story, we will adapt our strategy to that and await a more appealing IPO environment. If we consider another potential PC to most likely be acquired by a strategic buyer, we make sure that there is enough liquidity or actors in that segment before we invest. So, the exit strategies in themselves have not changed as we consider all potential exit strategies, but given the currently shaky environment, it influences our way of evaluating potential investments. (Associate, Black Capital)

On the other hand, smaller PE firms also tend to consider strategic buyers as well as larger financial buyers as the most viable exit strategies today and going forward, with a slightly heavier emphasis towards strategic buyers. Little to no emphasis is directed to IPOs in the short-term. One interviewee from a smaller PE firm argues that the current market uncertainties may have rippling effects, particularly on smaller PE firms' PCs, as many early-stage companies might experience difficulty in continuing their operations in these environments. As a result, these holdings may be at risk of either going bankrupt or being sold at an immaterial value to strategic buyers who are looking to acquire cheap businesses with synergy potential that is out of scope for PE investors. Contrastively, another small PE firm argued that smaller PCs that experience significant growth and become success stories are particularly suitable for strategic acquirers as opposed to other exit strategies, given these macroeconomic circumstances. The interviewee argued that despite the generally high competition for good PCs, strategic buyers are more likely to recognize the long-term synergy value of acquiring suitable firms for their operational objectives, even if it means paying a high premium. In contrast, financial buyers are typically less inclined to do so.

The IPO environment in the Swedish market has swiftly changed during the last couple of years. In 2021, the number of IPOs carried out across all Swedish public lists amounted to 222, which was the highest number recorded to date (Nyemissioner, 2023). However, there was a significant setback in 2022 when the number of IPOs across all Swedish public lists declined to a total of 97 (Nyemissioner, 2023), a rather significant year-on-year decrease. Hence, the empirical finding that IPOs are deemed less attractive than other exit strategies is rather unsurprising. The empirical data suggests that the IPO market will likely remain unfavorable

in the short-term, as none of the interviewed PE firms, regardless of size characteristics, direct any focus toward taking their holdings public in the short term.

The interviewees provide a couple of potential explanations for this development. First of all, the smaller PE firm Purple Equity explained that investors tend to demand higher return premiums to compensate for the higher risk and uncertainties associated with the public market in situations where inflation and increasing interest rates drive volatility and unpredictability. Secondly Silver Equity described that when interest rates are high, it is more difficult to raise debt as a tool for funding growth and expansion whereby it takes longer time to get to the necessary organizational stage for considering an IPO. Lastly, there was a unanimous consensus among the interviewees that the current difference in public- and private market valuations makes it rather unfavorable to take PCs public. Hence, the decreasing attractiveness of the IPO market under current macroeconomic circumstances is likely an effect of high-risk perception as well as private vs public valuation divergences, and this development will most likely continue in the short term.

Based on the public vs private market valuations we see today; it is in many cases reasonable to not go public with your holdings. Why would you take something public when valuations are higher on private markets, if not necessary? We will see low levels of IPOs in the short-term and there is even potential for an increase in public buyouts due to the current valuation differences. It is, however, difficult to speculate regarding the long-term development, as always. (Partner, Yellow Capital)

Hence, the empirics display a clear consensus of a tendency in which the exit environment is significantly influenced by macroeconomic circumstances in the short-term. The current market uncertainties have taken their toll on investor confidence and risk aversion, increasing the premium requirements of risky investments and hence disturbing the transaction propensity. As a result, the number of suitable buyers on the market becomes increasingly limited. Furthermore, taking into consideration the decreasing popularity of IPOs as previously explained, the empirical findings largely adhere to Kaplan & Strömberg's (2009) findings on exit markets being highly cyclical and significantly influenced by multiple macroeconomic conditions. Furthermore, the specific influences that inflation and interest rates yield on the transaction market are highly complex, however, they have been partly discussed in previous research. Boyd et al. (2001), explain that high levels of inflation tend to negatively affect the liquidity of financial markets. Therefore, private markets with already limited liquidity become even more strained with ricocheting effects on the transaction activity. It has also previously been extensively theorized that the state of the credit market, and hence the interest rate levels, serves as a vitally influencing component for the buyers' market and implicitly the PE exit transactions market (see e.g., Van Binsbergen et al., 2010; Kaplan & Strömberg, 2009).

Macroeconomic uncertainties' effect on expected holding periods

Even though a majority of the interviewees argue that they are neither in dire need nor expecting significant numbers of exit transactions in the short-term, the empirics, as previously explained, displays indicative tendencies that there is, and will continue to be, a significantly idle PE exit market across the Swedish private markets in the short-term. These general findings are supported by past research by Gompers et al. (2016), who showed that one of the two most important factors PE firms consider when opting for an exit is the timing of optimal market conditions, suggesting that if PE firms are not in dire need of selling a PC, they will hold onto the investment until the market sentiment has improved. This suggests that ongoing decreases in transaction rates should not only be framed from a buyer-market perspective but should also be viewed as a result of sell-side incentives to hold investments longer. This dual viewpoint becomes important for the reader of this study as the framing of a given issue may

psychologically influence the perception of the issue at hand (Kahneman & Tversky, 1981), and therefore also influence any given decision made upon the findings presented.

In light of the focus on longer holding periods, a Partner from a larger PE firm emphasized that funds approaching the end of their lifetime are increasing the usage of continuation vehicles, explaining that they have become a convenient tool for enabling longer holding periods and help fund managers avoid selling PCs prematurely in unfavorable market conditions. This adds further dimensions to the findings on exit timing by Gompers et al. (2016). Furthermore, Gompers et al. (2016) argue that the second most crucial factor revolves around how successfully PE firms have managed to implement strategic operational plans before an exit. In this regard, continuation vehicles play a significant role in enabling further operational development. These two factors tend to override the importance of reaching a set IRR target (Gompers et al., 2016), and the empirical data indicate confirmation of this hypothesis.

We are willing to hold onto our PCs longer in order to sell our holdings in a more favorable exit environment and are not afraid to make write-downs on the current values of our PCs in the processes.
(Partner, Purple Equity)

Hence, due to the currently unfavorable market conditions, the PE market will experience low exit transaction rates going forward, as an effect of both the buyers- and sellers' market conditions. These conditions yield longer holding periods in general and thus give the GPs more time to refine and optimize the strategic operational plan for PCs and hence increase the potential of maximizing returns when market conditions are more favorable.

The common tendency historically is that after every crisis, during which the PC holding periods tend to be longer, there is often a clear peak of exits in the market. The reasoning being that GPs have had more time to invest more of their focus and resources on developing the operations of their PCs, and thus given the companies time to mature. (Partner, Yellow Capital)

Main Takeaways

In line with what was earlier hypothesized, PE firms are seeing a seemingly cold exit market with longer holding periods of PCs with the intention of awaiting more favorable exit market conditions, as timing together with successful operational implementation become more important than fast returns enhancing IRR. Moreover, it is evident that the IPO market is, and will remain cold in the short term and that strategic buyers will continuously be the most active sell side-participant, from which PE firms expect to be able to receive the highest consideration.

4.5. Empirical Summary

To efficiently comprehend the empirical findings derived from this study, it is important to emphasize that there is no one best solution for how PE firms adhere to uncertainty in financial markets during their investment process. Hence, how market uncertainties influence the PE investment process is contingent on the characteristics and specific environment under which each firm operates. Taking this into account, the following summary considers the key findings of the empirics and provides insights into how PE firms navigate the complexities of the uncertain market landscape in light of their unique characteristics and environments.

Fundraising

The empirical data show a clear tendency where LPs are tightening their capital allocations to PE firms as a result of the indirect influence that current market uncertainties have over the denominator effect. There is therefore a clear influence of uncertainty over the general fundraising process, where the main effects are two-fold. Firstly, the process between the

opening and closing of a fund is prolonged. Secondly, less capital is raised compared to the pre-uncertainty expectations. These effects are evident across all PE firms regardless of size characteristics.

However, there are remedies that can help PE firms navigate the decreasing LP demand for investments in PE firms. The empirical findings imply that LPs are increasingly considering certain factors, such as previous track record, brand recognition, and partner experience, before committing capital to PE firms during times of uncertainty. These factors were proven to be vital for many PE firms in facilitating a relatively successful closing of their latest fund. Hence, by looking at the empirical data on the fundraising process holistically and considering the context of uncertainty, the differences between PE firms are not as apparent as in the other stages of the PE investment process. One notable finding derived from the analysis, however, pertains to the observed tendency in which funds that cannot display a track record from previous funds but are related to industry-renowned PE firms do not experience as significant of a decrease in LP demand as less renowned firms in equivalent situations. This finding highlights the importance of brand recognition in the fundraising process, as PE firms with a strong reputation appear to be more resilient to market uncertainty while firms without a renowned brand or track record may struggle more to attract investors.

Despite a fundraising market with high barriers to attracting LP investments, there is limited pressure imposed by LPs with regard to transaction rates and returns as prerequisites to participate in future fundraising. Contrarily, the historical pressure of rapid capital deployment has diminished in conjunction with increased uncertainty, which could be a result of LPs recognizing the current challenges faced by GPs, as well as LP's willingness to collaborate to achieve mutually beneficial outcomes. The deviating finding, as presented by Pink Capital, is rather interesting, however, as increasing uncertainty for an investment reasonably would yield an incremental risk premium incorporated in LPs calculations of required returns. One could therefore argue that there is a balance between rationally demanding higher returns and empathetically understanding the situation of GPs and working collaboratively to succeed. To be able to draw more fruitful conclusions from this finding, further research is encouraged.

Another crucial discovery derived from the analysis of the fundraising process highlights the importance of high-quality external communication during times of uncertainty. Although the volume of communication may differ among PE firms based on their size characteristics, high-quality communication is imperative throughout the sample. LPs invest considerable amounts into PE firms and want their investments to be appropriately handled. Hence, increasing high-quality communication with current and potential future LPs may help build trust, strengthen relationships, and ultimately lead to increasingly successful fundraising in the future.

Deal Sourcing Valuation and Investment

There is a clear tendency where the market sentiment for a long time was driven by optimism simultaneously as the Swedish markets experienced expansionary monetary policy with low interest rates. However, current financial market uncertainty has changed the market sentiment, and investors have become increasingly careful in their approach to finding suitable investment opportunities and conducting thorough valuations before deploying capital to investments.

It is evident that uncertainty in Swedish PE markets has caused a collective shift on the risk-appetite continuum where all interviewed PE firms have moved towards less risk, although there are of course diverging risk profiles between the different firms in relation to their size characteristics. As an effect, increasing market uncertainties have pushed PE firm investors to focus increasingly on high-quality investments. This trend of flight to quality could eventually

cause a crowding-out effect on investments of relatively low quality in general, causing long-term detrimental effects on less attractive investment opportunities.

The empirical evidence suggests that one key determinant between poor- and good-quality companies in the Swedish PE market today is profitability. Even though profitability always has been critical for larger, and some medium-sized PE firms when considering potential investments, increasing market uncertainties have caused further increases in the emphasis on profitability. Smaller and some other medium-sized PE firms, on the other hand, tend to invest in companies whose nature rarely allows a requirement of profitability to be viable. Hence, these PE firms tend to not require profitability today but may rather focus on firms being able to display a clear path to profitability and a low need for future capital raising. Therefore, it becomes clear that the risk-appetite continuum metaphor applies with the same dynamics for the focus on profitability, where all PE firms have moved towards increasing the importance of profitability, although the starting- and ending-point may differ across PE firms. As a result of the shifting risk appetite and the consequential increasing interest in high-quality companies, the findings suggest that margin- and capital-intensive businesses, as well as those with significant top-line cyclicalities, are increasingly shunned by PE firms. Hence, business models reliant on the zero-interest-rate-phenomena are perceived to become less viable investments.

As an effect of the increasing market uncertainties, public market valuations have decreased. However, the valuation development on the general PE market today seems to differ compared to the public markets, which could be a result of a lag in mark-to-market activity, likely due to the illiquid nature of private markets. The findings further suggest that larger PE firms are yet to experience any material decline in their valuations due to the current market uncertainties. Although some of these firms display some write-downs of assets, much of it is deemed to be attributable to operational shortcomings rather than the current market uncertainty. Contrastively, smaller PE firms show more variance as some firms have experienced decreasing valuations, while others have not. One could argue that it would be reasonable to expect a larger valuation effect between smaller and larger PE firms, as previously explained in the context of Perez-Quiros & Timmermann (2001). While one of the main contributing factors to the valuation effect observed between smaller and larger PE firms may be attributed to the more frequent need for capital, and hence frequent revaluations by smaller PE firms, there is still a very illiquid market potentially withholding quick major corrections.

Furthermore, PE firms are observing a general slowdown in transaction rates due to current market uncertainties. However, the empirics suggest that there are two schools of thought regarding how PE firms approach investment strategies in times of market uncertainty. The PE firms either strive to maintain or decrease their transaction rate, whereby no evidence is provided of PE firms strategically focusing on increasing the transaction rate to take advantage of falling valuations in the general PE market. As there seem to be clear strategic paths of PE firms, there are also individual deviations. While more experienced investors tend to emphasize caution and the importance of avoiding potential value traps, some less experienced interviewees tend to advocate for an increased buy-side activity to utilize falling valuations, displaying contrarian characteristics to the general trend observed among most PE firms.

Operational Management

The main objective of this stage of the PE investment process is to implement value-adding measures and strategic initiatives that enable PCs to reach full operational potential and hence value creation. However, the empirics show that some underlying factors tend to influence this process, whereby PE firms commonly differ in their approach.

Interactive processes allow PE firms and PC management to exchange knowledge and experience and enable the development of efficient monitoring measures and the identification of effective strategic goals. One of the most prominent findings derived from the empirical data, however, suggests that as uncertainty increases, large and medium-sized PE firms tend to increase their degree of hands-on involvement with their PC in terms of strategic management and measurement, and thus take more control of the interactive process. Such development is not as significant amongst smaller PE firms. Even though some of the reasoning may be derived from the stake of ownership the PE firm has over the PC, where larger and medium-sized PE firms tend to take on more majority positions compared to that of smaller PE firms, it does not explain the entire phenomenon. Most of the smaller PE firms interviewed commonly include control provision clauses in their contracts with PCs, making the control argument somewhat weak. One could rather argue that monetary incentives are the decisive factor in how much hands-on activity PE firms apply to their PCs. The incentives to increase hands-on activity thus become stronger as PE firms move towards risk aversion on the risk appetite continuum. Smaller PE firms, however, do not seem to be significantly influenced by market uncertainty in terms of their active involvement in PCs and frame the issue differently by emphasizing that the highest monetary incentive to conduct viable business in times of uncertainty remains at PC management levels. This finding regarding the insignificant change of hands-on involvement of smaller firms is notable considering that previous literature by Kut et al. (2007) argues that PE firms should increase their hands-on involvement in times of uncertainty.

Another key finding derived from the empirical data pertains to the use of operational measures, such as KPIs, and how they change in line with increasing market uncertainty in order to maintain focus on full operational potential during the holding period. The approach that PE firms take towards changing KPIs, is largely influenced by the maturity of the PCs in question. In general, larger, and medium-sized PE firms that tend to invest in relatively mature companies emphasize the importance of being able to shift focus toward more operational measures in times of uncertainty to increasingly understand operational efficiency. On the other hand, smaller and medium-sized PE firms that tend to invest in less mature companies, however, argue that the inherently high-risk nature of these PCs automatically necessitates a focus on operational efficiency, and hence operational KPIs. Hence, KPIs are contingent on the general maturity level of the PC. As a result, less mature companies naturally tend to prioritize operational KPIs over financial KPIs, both before and during market uncertainties, given their inherently high-risk nature. On the other hand, more mature companies that have moved away from the risky growth phase and automatically become increasingly focused on financial KPIs tend to invert their focus back to operational KPIs during times of uncertainty.

Lastly, the empirical findings add valuable insights into the discussion of interactive and diagnostic controls in PE firms in times of market uncertainty. During the COVID-19 crisis, large and medium-sized PE firms, in particular, demonstrated an agile approach by adjusting their current portfolio of control measurements and adding temporary measures to cope with the market uncertainties that came with the pandemic. Due to the long-term market uncertainty that followed the pandemic, the empirical evidence suggests that these interactive control measures, which were merely intended as short-term tools to handle the current circumstances, instead remained as a long-term tool for ensuring continuous operational success over time. Hence, one could argue that the interactive controls gradually lost their temporary and agile characteristics and developed into diagnostic controls over time, especially as the need for adding interactive measures during current market uncertainties was deemed insignificant. Such findings were however not attributable to smaller PE firms due to their risky nature and low need for adjusting measurements to uncertainty in general, as previously explained.

Exit

The empirical data suggests that there is acknowledgment among PE firms that current market uncertainties have led to changing exit markets. Even though the PE firms under study are neither in dire need nor expecting numerous exit transactions in the short term, there is a unanimous understanding of how these market uncertainties have led to a notable decrease in the number of exit transactions for the general PE market as well as a shift in the composition of potential buyers being pursued in a potential exit process.

There seems to be a perceived agreement that larger PE firms that consider a PC exit in current market uncertainties increasingly look for strategic- or financial buyers with capital to deploy while dismissing the IPO as a viable option. The same tendency can be observed among both smaller and medium-sized PE firms, however with slightly greater emphasis on strategic buyers as the most prominent alternative. Strategic buyers demonstrate a greater propensity to pay a premium for a PC due to their ability to detect synergistic advantages arising from integrating the PC with their existing organization. These tendencies tend to become even more obvious in times of uncertainty when certain PCs are deemed as high-risk investments that financial buyers become hesitant to invest in. In contrast, strategic buyers are often better at recognizing the potential value in these companies as they typically tend to be more adept at integrating such PC firms into existing operations to create synergies, whereas financial buyers may struggle to develop that same company further through operational or expansionary activities.

Lastly, exits are ultimately conducted to be able to realize returns and provide a payout to LPs. Notably, the empirical findings of this study suggest that the primary focus of PE firms during times of uncertainty is rather to time favorable market conditions than to achieve fast returns to enhance IRR, which is a potential consequence of falling PC valuations. This may, partly, explain the significant surge in interest in continuation vehicles during market uncertainties, such as the COVID-19 pandemic and the current market environment. By doing so, PE firms get more time to implement strategic operational plans into the PC due to the facilitation of longer holding periods, which may be one of the reasons behind the generally decreasing activity on the PE exit market going forward.

5. Conclusion

5.1 General Conclusions and Contributions

As the PE industry has grown to become increasingly significant as an integrated part of the global economy, a corresponding increase in academic literature revolving around PE academia has been observed. Although there are numerous studies conducted involving different parts of the PE investment process (see e.g., Guo et al., 2011; Jensen, 1989; Jones, 1992; Kaplan & Strömberg, 2009), uncertainty and its holistic effects on the PE investment process has been sparingly investigated. The reasoning behind the limited literature coverage of uncertainty in the PE investment process context is twofold. Firstly, the PE industry is 3x bigger today than it was during the financial crisis in the late 2000s. Secondly, since its significant rise in importance, there has been limited uncertainty on the Swedish financial markets significant enough for influencing the PE investment process and market materially.

Thus, although high rates of inflation and increasing interest rates are not unprecedented in the Swedish market, this is the first time we observe the phenomenon during a time in which the PE market has grown to become fundamentally important for the financial markets such that the effect of uncertainty gets larger than ever before. This is why this study is of high relevance.

This study seeks to contribute to the existing body of knowledge within PE academia by bridging the gap between current PE and uncertainty literature, specifically studied by examining the current uncertainties affecting the market in Sweden. In order to do so, this study strived to present a holistic explanation of the influence current market uncertainties may yield on the different stages of the PE investment process as derived from industry expert perceptions, in the context of the Swedish market. To reach these objectives, a research question was formed such that it would help fulfill the purpose of the study: *How are current market uncertainties affecting the investment process for Swedish Private Equity firms?*

To answer the posed research question, a qualitative cross-sectional study was conducted with a sample of 12 PE firms. The study adheres to a theoretical framework derived from the studies of Kaplan & Strömberg (2009) and Gilligan & Wright (2020) and considered in the context of uncertainty (see e.g., Galbraith, 1974; Knight, 1921) as well as decision-making processes (see e.g., De Long et al., 1990; Ricciardi & Simon, 2000; Rigotti & Shannon, 2005). By utilizing this theoretical lens, four key stages of the PE investment process were identified: Fundraising, Deal Sourcing Valuation and Investment, Operational Management, and Exit. These four stages, and their foundation in the relevant theoretical literature, were then continuously contrasted and analyzed through the considerations of the individual perceptions of how current macroeconomic uncertainties such as high levels of inflation and increasing interest rates affect the PE markets. Through this approach, this study strived to add perspectives on the PE market and uncertainty dynamics from the derived empirical data.

This study aims to provide fresh practical and theoretical insights with perspectives that would comprehensively answer the stated research question and build on previous literature without statistically confirming or debunking a specific hypothesis. In the pursuit of doing so, the study provides several findings and contributions. First of all, this study illuminates the dynamic relationship between the risk appetite of PE firms and their investment process, while simultaneously examining how specific firm characteristics may impact their position on the risk appetite continuum and their decisions.

More specifically, this study provides valuable insights for PE firms seeking guidance and understanding regarding the challenges of navigating successful fundraising activities in uncertain markets with high LP risk aversion. The study finds that the key remedy for enabling successful fundraising relates to the ability to showcase a strong fund track record. However, brand recognition, partner experience, and high-quality communication skills further increase the potential for a successful fundraising process in uncertain environments. Furthermore, the study unveils that the prevailing market uncertainty has resulted in a decrease in investment transaction rates, yet its impact on PE portfolio valuations remains limited. Notably, this market environment has fostered an amplified focus on high-quality investments, where profitability has emerged as the primary criterion for viable investments, and as a consequence, competition for financially stable PCs has intensified. Moreover, this study illuminates the significance of adaptive management control strategies in effectively navigating operational strategies amid uncertain market conditions. It reveals that interactive controls were widely adopted by PCs during the COVID-19 crisis, as a means of providing temporary and agile strategic guidance. Over time, these controls have evolved to become integrated into the long-term strategic focus, assuming a more diagnostic role. This indicates that organizations have naturally become more agile and proficient in navigating uncertainty through their management control systems. Lastly, this study uncovers a shift in focus within PE exit markets in times of uncertainty. PE firms tend to become increasingly inclined to extend their holding periods by prioritizing PC operational improvement while awaiting favorable market conditions instead of realizing quick

returns. As a result, the emphasis on IRR as the primary performance measure diminishes with increasing uncertainty.

These findings offer valuable practical contributions for PE practitioners, servicing as a tool for self-reflection and enabling them to gain insights into the broader implications of uncertainty on their peers. By understanding how peers navigate uncertain markets and make investment decisions, practitioners can refine their strategies and enhance their ability to thrive in challenging environments. Additionally, these findings provide valuable information for LPs and investors who are aiming to gain a deeper understanding of how PE firms navigate uncertain markets, allowing LPs to make more informed decisions on capital allocation in times of uncertainty. Hence, these practical contributions can assist various stakeholders in making well-informed decisions amid market uncertainty within the PE market. Furthermore, this study makes some important contributions to existing literature by offering fresh perspectives on the conceptual understanding of uncertainty as outlined by Galbraith (1974) and Knight (1921). It provides a unique context by examining uncertainty within the relatively novel yet crucial component of the world economy, the PE market, bringing a new level of relevance to the field. Moreover, the study expands the theoretical dimensions of the PE investment process and its four distinct stages by incorporating the comprehensive work of Kaplan & Strömberg (2009) and Gilligan & Wright (2020) and thereby shedding light on the complexities and challenges faced by practitioners. Through the integration of finance and accounting disciplines, this research synthesizes existing literature and offers valuable academic insights into the PE market during times of uncertainty.

5.2 Research Limitations

While this study has contributed valuable insights into the researched phenomenon, it is important to acknowledge that this study naturally is not free from limitations. The researched phenomenon constitutes a highly complex topic where numerous multifaceted influencing factors may contribute to certain outcomes. Hence, it is difficult to argue that this study fully covers the complexity that follows the posed research question. However, in order to as efficiently as possible study and explain the wider phenomenon a cross-sectional qualitative study was conducted. Arguably, such an approach of method used in this study yields certain degrees of uncertainty regarding the generalizability of the empirical findings. Additionally, it is reasonable to argue that the intricacies of uncertainty, as a subject matter, are characterized by intangibility and facilitate a propensity for diverse interpretations. Therefore, the empirical data provided by the interviewees may be critically viewed. Moreover, the sample size of 12 PE firms with the equivalent number of interviewees may be considered small for a cross-sectional study whereby additional interviews could yield stronger and increasingly comparable empirical findings. However, considering the time and resources for this study, 12 interviewees were deemed to have produced sufficient data for the authors to be able to provide a holistic view of the phenomenon under study. In addition, it could be argued that the sample of PE firms used in this study may be biased towards those that do not currently need to sell any PCs, which may limit the insights into the exit stage. However, on the other hand, this may yield fresh and multiple insights into recent activities of the fundraising process.

5.3 Future Research

Given the growing significance of the PE sector in the global economy and the unique characteristics of the PE industry dynamics, the authors recognize the potential value of further exploring the phenomenon of uncertainty within the field of financial studies. The authors of this study would encourage future researchers to conduct increasingly profound studies on the respective areas of each stage of the PE investment process in the context of current market uncertainty to yield more in-depth theoretical contributions. As this study focused on shedding light on the width of current market uncertainties' influences on the PE investment process and contrasting the findings across multiple PE firms, greater attention on the provision of the depth of findings through single case studies could be conducted. Furthermore, one could apply an LP angle to the study by considering the influences that current market uncertainties may yield on the LP investment process. Such focus would contribute to this study by further exploring and potentially providing important information for understanding the PE fundraising dynamics. The authors of this study want to highlight an interesting quantitative approach in which one could study the returns provided by the funds in a specified timeline and contrast these findings to those PE firms' strategic decisions on transaction rates during the current period of macroeconomic uncertainties. By engaging in these suggestions for future research, it is the aspiration of the authors that a more profound and comprehensive understanding of uncertainty concerning the PE industry will be obtained.

6. References

- Acharya, V. V., Gottschalg, O. F., Hahn, M., & Kehoe, C. (2013). Corporate governance and value creation: Evidence from private equity. *Review of Financial Studies*, 26(2), 368-402.
- Acharya, V. V., & Pedersen, L. H. (2005). Asset pricing with liquidity risk. *Journal of Financial Economics*, 77(2), 375-410.
- Acharya, V., Kehoe, C., & Reyner, M. (2009). The voice of experience: Public versus private equity. *The McKinsey Quarterly*, 28, 1-7.
- Ahrens, T., & Chapman, C. S. (2006). Doing qualitative field research in management accounting: Positioning data to contribute to theory. *Accounting, Organizations and Society*, 31(8), 819-841.
- Ball, L. M. (1990). Why does high inflation raise inflation uncertainty? *National Bureau of Economic Research*.
- Barber, F. (2008). *The strategic secret of private equity*. Strategic Direction (Bradford, England). [Online] 24(2).
- Barberis, N., & Thaler, R. (2003). Chapter 18: A survey of behavioral finance. *Handbook of the Economics of Finance*, 1, 1053-1128.
- Barro, R. J. (1995). Inflation and economic growth. *National Bureau of Economic Research*.
- Bedford, D. S., & Ditillo, A. (2022). From governing to managing: Exploring modes of control in private equity relationships. *European Accounting Review*, 31(4), 843-875.
- Behn, R. D. (2003). Why measure performance? different purposes require different measures. *Public Administration Review*, 63(5), 586-606.
- Berger, P. L., & Luckmann, T. (1967). *The social construction of reality: A treatise in the sociology of knowledge*. New York: Anchor books. [Online].
- Berk, J. B., & Green, R. C. (2004). Mutual Fund Flows and Performance in Rational Markets. *Journal of Political Economy*, 112(6), 1269–1295.
- Bernanke, B. S., & Blinder, A. S. (1992). The federal funds rate and the channels of monetary transmission. *American Economic Review*, 82(4), 901-921.
- Blinder, A. S., Ehrmann, M., Fratzscher, M., de Haan, J., & Jansen, D. (2008). Central bank communication and monetary policy: A survey of theory and evidence. *Journal of Economic Literature*, 46(4), 910-945.
- Bloom, N., Sadun, R., & Van Reenen, J. (2015). Do private equity owned firms have better management practices? *American Economic Review*, 105(5), 442-446.
- Bordia, P., Hunt, E., Paulsen, N., Tourish, D., & DiFonzo, N. (2004). Uncertainty during organizational change: Is it all about control? *European Journal of Work and Organizational Psychology*, 13(3), 345-365.
- Boyd, J., Choi, S., & Smith, B. D. (1996). Inflation, financial markets, and capital formation. *Review – Federal Reserve Bank of St. Louis*, 78(3), 9-39.
- Boyd, J. H., Levine, R., & Smith, B. D. (2001). The impact of inflation on financial sector performance. *Journal of Monetary Economics*, 47(2), 221-248.

- Brown, G. W., Gredil, O. R., & Kaplan, S. N. (2019). Do private equity funds manipulate reported returns? *Journal of Financial Economics*, 132(2), 267-297.
- Brozynski, T., Menkhoff, L., & Schmidt, U. (2006). The impact of experience on risk taking, overconfidence, and herding of fund managers: Complementary survey evidence. *European Economic Review*, 50(7), 1753-1766.
- Bruno, M., & Easterly, W. (1998). Inflation crises and long-run growth. *Journal of Monetary Economics*, 41(1), 3-26.
- Bryman, A., & Bell, E. (2017). *Företagsekonomiska forskningsmetoder* (3rd ed.). Malmö: Liber AB.
- Campbell, J. Y., & Viceira, L. M. (2005). The term structure of the Risk–Return trade-off. *Financial Analysts Journal*, 61(1), 34-44.
- Cecchetti, S. G. (2009). Crisis and responses: The federal reserve in the early stages of the financial crisis. *Journal of Economic Perspectives*, 23(1), 51-76.
- Cendrowski, H. (2012). *Private equity: History, governance, and operations* (2nd ed.). Hoboken, N.J: John Wiley & Sons.
- Chen, N., Roll, R., & Ross, S. A. (1986). Economic forces and the stock market. *The Journal of Business*, 59(3), 383-403.
- Christie, A. A. (1982). The stochastic behavior of common stock variances: Value, leverage and interest rate effects. *Journal of Financial Economics*, 10(4), 407-432.
- Chua, W. F. (1986). Radical developments in accounting thought. *Accounting Review*, 61(4), 601-632.
- Chung J. W., Sensoy, B. A., Stern, L., & Weisbach, M. S. (2012). Pay for Performance from Future Fund Flows: The Case of Private Equity. *Review of Financial Studies*, 25(11), 3259–3304.
- Cloyne, J., Ferreira, C., Froemel, M., & Surico, P. (2023). Monetary policy, corporate finance and investment. *Journal of the European Economic Association*, jvad009.
- Collis, J., & Hussey, R. (2003). *Business research: A practical guide for undergraduate and postgraduate students*. Palgrave Macmillan.
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks: SAGE.
- Courtney, H., Kirkland, J., & Viguerie, P. (1997). Strategy under uncertainty. *Harvard Business Review*, 75(6), 66-79.
- Cuny, C. J., & Talmor, E. (2007). A theory of private equity turnarounds. *Journal of Corporate Finance*, 13(4), 629-646.
- De Long, J. B., Shleifer, A., Summers, L. H., & Waldmann, R. J. (1990). Noise trader risk in financial markets. *Journal of Political Economy*, 98(4), 703-738.
- Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of Management Review*, 32(4), 1155-1179.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.

- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25-32.
- Ellsberg, D. (1961). Risk, ambiguity, and the savage axioms. *Quarterly Journal of Economics*, 75(4), 643-669.
- ECB (2023a). Asset purchase programs. Available at: <https://www.ecb.europa.eu/mopo/implement/app/html/index.en.html>.
- ECB (2023b). Key ECB interest rates. Available at: https://www.ecb.europa.eu/stats/policy_and_exchange_rates/key_ecb_interest_rates/htl/index.en.html.
- Fama, E. F., & Schwert, G. W. (1977). Asset returns and inflation. *Journal of Financial Economics*, 5(2), 115-146.
- Fernández-Amador, O., Gächter, M., Larch, M., & Peter, G. (2013). Does monetary policy determine stock market liquidity? new evidence from the euro zone. *Journal of Empirical Finance*, 21, 54-68.
- Fischer, S. (1993). The role of macroeconomic factors in growth. *Journal of Monetary Economics*, 32(3), 485-512.
- Galbraith, J. R. (1974). Organization design: An information processing view. *Interfaces*, 4(3), 28-36.
- Gejadze, M., Giot, P., & Schwenbacher, A. (2017). Private equity fundraising and firm specialization. *Quarterly Review of Economics and Finance*, 64, 259-274.
- Gervais, S., & Odean, T. (2001). Learning to be overconfident. *Review of Financial Studies*, 14(1), 1-27.
- Gilligan, J. & Wright, M. (2020). Private equity demystified: an explanatory guide (4th ed.). Oxford, England: Oxford University Press.
- Gompers, P., Kaplan, S. N., & Mukharlyamov, V. (2016). What do private equity firms say they do? *Journal of Financial Economics*, 121(3), 449-476.
- Goretzki, L. & Kraus, K. (2020). Balancing diagnostic and interactive control systems. *Stockholm School of Economics Institute of Research*. [Online].
- Greenwood, R., & Nagel, S. (2009). Inexperienced investors and bubbles. *Journal of Financial Economics*, 93(2), 239-258.
- Guo, S., Hotchkiss, E. S., & Song, W. (2011). Do buyouts (still) create value? *Journal of Finance*, 66(2), 479-517.
- Hege, U., & Nuti, A. (2011). The private equity secondaries market during the financial crisis and the "Valuation gap". *Journal of Private Equity*, 42-54.
- Hirshleifer, D. (2015). Behavioral finance. *Annual Review of Financial Economics*, 7, 133-159.
- Hoque, Z., Parker, L. D., Covalleski, M. A., & Haynes, K. (Eds.). (2017). *The Routledge companion to qualitative accounting research methods*. Routledge.
- IMF (2023). GDP, current prices. Available at: <https://www.imf.org/external/datamapper/NGDPD@WEO/SWE?zoom=SWE&highlight=SWE>.

- Israel, R (1991). Capital Structure and the Market for Corporate Control: The Defensive Role of Debt Financing. *Journal of Finance*, 46(4), 1391–1409.
- Jensen, M. C., Light, J. O., & Baker, G. F., Jr. (1989). Eclipse of a public corporation. *Harvard Business Review*, 67(5), 61.
- Jones, C. S. (1992). The attitudes of owner-managers towards accounting control systems following management buyout. *Accounting, Organizations and Society*, 17(2), 151–168.
- Kahneman, D., & Tversky, A. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185(4157), 1124-1131.
- Kahneman, D., & Tversky, A. (1981). The framing of decisions and the psychology of choice. *Science*, 211(4481), 453-458.
- Kaplan, S. N., & Schoar, A. (2005). Private equity performance: Returns, persistence, and capital flows. *Journal of Finance*, 60(4), 1791-1823.
- Kaplan, S. N., & Stein, J. C. (1993). The evolution of buyout pricing and financial structure in the 1980s. *Quarterly Journal of Economics*, 108(2), 313-357.
- Kaplan, S. N., & Strömberg, P. (2009). Leveraged buyouts and private equity. *Journal of Economic Perspectives*, 23(1), 121-146.
- Krugman, P., & Wells, R. (2015). Microeconomics (4th edition). *Worth Publishers*.
- Harrigan, K. R., Klier, D. O., & Welge, M. K. (2009). The changing face of private equity: How modern private equity firms manage investment portfolios. *Journal of Private Equity*, 12(4), 7-13.
- Knight, F. H. (1921). *Risk, uncertainty and profit*. Boston: Houghton Mifflin.
- Kut, C., Pramborg, B., & Smolarski, J. (2007). Managing financial risk and uncertainty: The case of venture capital and buy-out funds. *Global Business and Organizational Excellence*, 26(2), 53-64.
- Kraay, A., & Ventura, J. (2005). The dot-com bubble the Bush deficits, and the U.S. current account. *National Bureau of Economic Research*.
- Langfield-Smith, K. (1997). Management control systems and strategy: A critical review. *Accounting, Organizations and Society*, 22(2), 207-232.
- Lillis, A. M., & Mundy, J. (2005). Cross-sectional field studies in management accounting research-closing the gaps between surveys and case studies. *Journal of Management Accounting Research*, 17, 119-141.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. *Sage*.
- Linneberg, M. S., & Korsgaard, S. (2019). Coding qualitative data: A synthesis guiding the novice. *Qualitative Research Journal*, 19(3), 259-270.
- Ljungqvist, A., Marston, F., Starks, L. T., Wei, K. D., & Yan, H. (2007). Conflict of interest in sell-side research and the moderating role of institutional investors. *Journal of Financial Economics*, 85(2), 420-456.
- Ljungqvist, A., Richardson, M., & Wolfenzon, D. (2020). The investment behavior of buyout funds: Theory and evidence. *Financial Management*, 49(1), 3–32.

- Ljungqvist, A., & Richardson, M. P. (2003). The cash flow, return and risk characteristics of private equity. *National Bureau of Economic Research*.
- Mankiw, N. G., & Reis, R. (2003). What measure of inflation should a central bank target? *Journal of the European Economic Association*, 1(5), 1058-1086.
- Marsh, T., & Pfleiderer, p: (2013). Flight to Quality and Asset Allocation in a Financial Crisis. *Financial Analysts Journal*, 69(4), 43-57.
- McKinsey (2022). McKinsey Global Private Markets Review 2022. Available at: <https://www.mckinsey.com/~media/mckinsey/industries/private%20equity%20and%20principal%20investors/our%20insights/mckinseys%20private%20markets%20annual%20review/2022/mckinseys-private-markets-annual-review-private-markets-rally-to-new-heights-vf>
- Metrick, A., & Yasuda, A. (2010). The economics of private equity funds. *Review of Financial Studies*, 23(6), 2303-2341.
- Metrick, A., & Yasuda, A. (2011). Venture capital and other private equity: A survey. *European Financial Management*, 17(4), 619-654.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook (3rd ed.)*. Los Angeles, CA: Sage.
- Miller, M. H., & Modigliani, F. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review*, 48(3), 261-297.
- Nofsinger, J. R., & Sias, R. W. (1999). Herding and feedback trading by institutional and individual investors. *Journal of Finance*, 54(6), 2263-2295.
- Nyemissioner (2023). Börsnoteringar. Available at: <https://nyemissioner.se/foretag/planerad-noteringar/sokning/115346>.
- Oreg, S. (2006). Personality, context, and resistance to organizational change. *European Journal of Work and Organizational Psychology*, 15(1), 73-101.
- Otley, D. (1999). Performance management: A framework for management control systems research. *Management Accounting Research*, 10(4), 363-382.
- Perez-Quiros, G., & Timmermann, A. (2001). Business cycle asymmetries in stock returns: Evidence from higher order moment and conditional densities. *Journal of Economics*, 103(1), 259-306.
- Phalippou, L., & Gottschalg, O. (2009). The performance of private equity funds. *Review of Financial Studies*, 22(4), 1747-1776.
- Pitchbook (2023). Global Private Equity Fundraising Report. Available at: <https://pitchbook.com/news/reports/2022-annual-global-private-market-fundraising-report>.
- Preqin (2023). Preqin Global Report 2023: Alternative Assets. Available at: <https://www.preqin.com/insights/research/reports/alternatives-in-2023/introduction>.
- Ricciardi, V., & Simon, H. K. (2000). What is Behavioral Finance? *Business, Education & Technology Journal*, 2(2), 1-9.
- Ridder, H. (2017). The theory contribution of case study research designs. *Business Research*, 10(2), 281-305.

- Rigotti, L., & Shannon, C. (2005). Uncertainty and risk in financial markets. *Econometrica*, 73(1), 20-243.
- Riksbank (2023). Styrränta, in- och utlåningsränta. Available at: <https://www.riksbank.se/sv/statistik/sok-rantor--valutakurser/styrranta-in--och-utlaningsranta/>.
- Robinson, D. T., & Sensoy, B. A. (2016). Cyclicalities, performance measurement, and cash flow liquidity in private equity. *Journal of Financial Economics*, 122(3), 521-543.
- Rowley, J. (2012). Conducting research interviews. *Management Research News*, 35(3), 260-271.
- Sarel, M. (1996). Nonlinear effects of inflation on economic growth. *IMF Staff Papers*, 43(1), 199-215.
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (6th ed.). Harlow: Pearson.
- Schreft, S. L., & Smith, B. D. (1997). Money, banking, and capital formation. *Journal of Economic Theory*, 73(1), 157-182.
- Scott, J. (2000). Rational choice theory. *Understanding Contemporary Society: Theories of the Present*, 129, 126-138.
- Sensoy, B., Wang, Y., & Weisbach, M. S. (2014). Limited partner performance and the maturing of the private equity industry. *Journal of Financial Economics*, 112(3), 320-343.
- Simons, R. (1995). *Levers of control: How managers use innovative control systems to drive strategic renewal*. Boston: Harvard Business School Press.
- Sorensen, M., Wang, N., & Yang, J. (2014). Valuing private equity. *Review of Financial Studies*, 27(7), 1977-2021.
- SCB (2023a). Underliggande inflation enligt KPIF, 12-månadersförändring, procent. Available at: <https://www.scb.se/hitta-statistik/statistik-efter-amne/priser-och-konsumtion/konsumentprisindex/konsumentprisindex-kpi/>
- SCB (2023b). Inflationstakten enligt KPIF 10,2 procent i december 2022. Available at: <https://www.scb.se/hitta-statistik/statistik-efter-amne/priser-och-konsumtion/konsumentprisindex/konsumentprisindex-kpi/pong/statistiknyhet/konsumentprisindex-kpi-december-2022/>
- Strömberg, P. (2008). The new demography of private equity. *American Economic Review*, 98(2), 442-448.
- Suddaby, R. (2006). From the editors: What grounded theory is not. *Academy of Management Journal*, 49(4), 633-642.
- SVCA (2023). Om Private Equity. Available at: <https://www.svca.se/om-private-equity/>.
- Taylor, J. B. (1999). *Monetary policy rules*. Chicago, Ill: University of Chicago Press.
- Thaler, R. (1980). Toward a positive theory of consumer choice. *Journal of Economic Behavior & Organization*, 1(1), 39-60.
- Tosi Jr., H. L., & Slocum Jr., J. W. (1984). Contingency theory: Some suggested directions. *Journal of Management*, 10(1), 9-26.

- Van Binsbergen, J. H., Graham, J. R., & Yang, J. (2010). The cost of debt. *Journal of Finance*, 65(6), 2089-2136.
- Wall Street Journal (2012). *A short (sometimes profitable) history of Private Equity*. Available at: <https://www.wsj.com/articles/SB10001424052970204468004577166850222785654>.
- Wood, G., & Wright, M. (2009). Private equity: A review and synthesis. *International Journal of Management Reviews*, 11(4), 361-380.
- Wright, M., Amess, K., Weir, C., & Girma, S. (2009). Private equity and corporate governance: Retrospect and prospect. *Corporate Governance: An International Review*, 17(3), 353-375.
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). London: SAGE.

7. Appendices

7.1. Appendix 1: Conducted Interviews

Interview information overview

Nr.	PE Firm	Interviewee Seniority	Interview no.	Forum	Duration (min.)	Date
1.	Blue Equity	Partner	1	In-person	45	2023-01-31
2.	Green Capital	Associate	1	Teams	40	2023-02-09
3.	Red Capital	Associate	1	Teams	35	2023-02-10
4.	Yellow Equity	Partner	1	In-person	45	2023-02-14
5.	Orange Equity	Partner	1	In-person	55	2023-02-22
6.	Black Capital	Associate	1	Teams	50	2023-02-23
7.	Purple Equity	Partner	1	In-person	50	2023-03-09
8.	Pink Capital	Junior Partner	1	Teams	45	2023-03-10
9.	Grey Capital	Partner	1	Teams	35	2023-03-15
10.	White Equity	Partner	1	Teams	40	2023-03-20
11.	Brown equity	Junior Partner	1	In-person	45	2023-03-22
12.	Silver equity	Associate	1	Teams	50	2023-03-27
TOTAL			12	Average	45	

7.2. Appendix 2: Interview Guide

As the study progressed, the interview guide was to some degree adapted and customized for two main reasons. First of all, the authors continuously developed their proficiency in asking suitable questions challenging the empirical findings and previous literature. Secondly, it was adapted for the position of the interviewee and the characteristics of the PE firm. Below is a list providing an overview of the themes that were holistically covered during the interviews.

Background information of interviewee:

- Education
- Professional experience
- Current role
- Fund focus

(1) Fundraising:

- Perception of the fundraising market in recent history
- Perception of the current and future fundraising market
- Current market uncertainties' effect on recent fundraising processes
- Uncertainties' influence on LP expectations of GPs
- The importance of communication in a fundraising process in times of uncertainty

(2) Deal Sourcing Valuation and Investment:

- Perception of the transaction market - in recent and current market conditions
- Current market uncertainties' effect on the expected investment tempo
- Current market uncertainties' effect on investment criteria
- Current market uncertainties' effect on the investment focus
- Perception of current market uncertainties' influence on valuations

(3) Operational Management:

- Uncertainties' influence on the process of defining and implementing new KPIs
- The need for effective communication for operational management in times of uncertainty
- Adjusting PC KPIs to mitigate current macroeconomic uncertainties' effect on operations
- The dynamic development of control systems in times of uncertainty

(4) Exit:

- Current market uncertainties' effect on preferred exit strategies
- Current market uncertainties' effect on expected holding periods

Other:

- Historical bull market's influence on risk awareness and confidence among PE firms
- Make sure that this interview fully grasped the PE investment process in such a manner as expected by the interviewee
- Other thoughts and the input from interviewee