Navigating Private Equity Dynamics: An Agency Theory Perspective

Bocconi University Thesis

How the current state of the Private Equity market is exacerbating the tension between Limited and General Partners

Stockholm School of Economics Thesis

Co-investments in private equity: a solution to the increasing tension between Limited and General Partners

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1. Introduction

The essence of the private equity industry has always revolved around the pivotal dynamic between the Limited Partner (referred to as "LP") and the General Partner (known as "GP"). Distinguishing itself from the realm of public markets, where transactions can occur with minimal interaction between buyers and sellers, the private equity landscape thrives on a robust relationship-based structure. Throughout history, the interplay between these two key players within the private equity sector has yielded substantial profits and a remarkable surge in fundraising activities. In fact, between 2006 and 2022 limited partners allocated an astounding $14.1 billion in capital to private equity funds, showcasing a compounded annual growth rate of 6% during this period (Prequin, 2023a). This data serves as a testament to the contentment experienced by both parties within the relationship as long as capital is diligently returned to Limited Partners. Thus, a virtuous circle of commitments and distributions is established, fostering mutual satisfaction. Within this context, the segregation of roles in the agency relationship between the General Partner and the Limited Partner functions seamlessly. The General Partner, serving as the agent, adeptly manages the fund's operational activities, while the Limited Partner is granted the authority to provide general guidance without interfering in the day-to-day operations. However, during times of deteriorating macroeconomic conditions and diminishing returns, Limited Partners naturally demand a heightened level of transparency and involvement in the fund managers' operational endeavors. Consequently, when confronted with unfavorable market conditions, Limited Partners seek a more comprehensive disclosure of information and an increased level of engagement in the fund's operational activities. The objective is to safeguard their interests and ensure that prudent decisions are made to navigate the challenges posed by the macroeconomic climate. Such circumstances prompt a shift in the dynamics of the LP-GP relationship, emphasizing the need for enhanced communication and collaboration to adapt and thrive in adverse environments.

The goal of this thesis is to provide a comprehensive description of the changing dynamics between investors and fund managers within the private equity industry, particularly in the face of a challenging market environment and deteriorating results.

To achieve this, the thesis leverages an in-depth analysis of the trends that have significantly impacted the industry following the increase of interest rates, with a specific focus on examining the effects these trends have on the agency relationship.
Two crucial instances have been identified, directly influenced by the current market conditions. Firstly, there is an increased risk of opportunistic behavior in the valuation techniques employed by fund managers to assess the portfolio companies. As market conditions fluctuate, the fair value of these assets can change, necessitating the adjustment of their valuation. Consequently, fund managers may need to mark down these assets, reflecting the updated fair value, but they are incentivized to delay such adjustments as long as they can. This activity profoundly influences the relationship between investors and fund managers, as it directly affects the perceived value and potential returns of the investments. Secondly, the thesis explores the Denominator Effect, which arises from the decline in valuations in public markets. This decline has a cascading effect on Limited Partners' allocation strategy and behavior toward their fund managers. As public market valuations decrease, the overall value of the Limited Partners' investment portfolio also diminishes. This reduction in portfolio value prompts Limited Partners to reevaluate their allocation strategy, potentially leading to a decrease in the capital they allocate to private equity funds. Consequently, fund managers must navigate the changing expectations and requirements of their Limited Partners in light of this shifting investment landscape. By delving into these two critical aspects, the thesis aims to shed light on the evolving agency relationship between investors and fund managers, highlighting the intricate interplay between market conditions, valuation techniques, portfolio adjustments, and allocation strategies. Understanding these dynamics is crucial for both investors and fund managers to navigate the challenges presented by the current market conditions and foster mutually beneficial relationships in the private equity industry.
The discussion necessarily starts from the notable developments within the private equity industry, particularly in light of the downturn that commenced in March 2022. This downturn was initiated by the Federal Reserve's decision to raise interest rates, consequently triggering the gradual closure of financing markets. The resulting macroeconomic landscape, characterized by elevated levels of inflation, escalating interest rates, and Russia's invasion of Ukraine, exerted immense pressure on global

private equity and venture capital markets. Consequently, there was a decline in fundraising activities, valuations, and deal flow, as highlighted by Prequin (2023). The macroeconomic uncertainties precipitated a considerable setback in total funds raised within the private equity and venture capital sectors in 2022, with figures plummeting to approximately $582 billion, representing a significant 29 percent drop compared to 2021 (Pitchbook, 2023). Moreover, this downturn also had a significant effect on the performance of private equity funds, marking the first negative result in the Private Equity asset class since 2008 (McKinsey, 2023). These developments illustrate the far-reaching implications of the adverse macroeconomic conditions on the private equity industry, with a substantial impact on fundraising activities, overall market valuations, and the performance of the asset class as a whole. Such dynamics underline the significance of examining the effects of these external factors and exploring potential strategies to mitigate risks and navigate the challenging landscape within the private equity sector.

Over the last few decades, the prominence of the Private Equity industry has significantly surged, and correspondingly, academic interest in PE research has experienced a noticeable upswing. One of the key facts that have gathered substantial attention is comprehending PE's role as an organizational function, delving into its intricate framework and objectives (Schoar and Lerner, 2002; Kaplan and Schoar, 2005, Kaplan and Strömberg, 2009). This area has undergone significant development, unraveling the complexities of PE operations. Moreover, scholars and experts alike have dedicated substantial efforts to explore the agency relationship existing between principals and agents within management theory (Jensen and Meckling, 1976; Fama and Jensen, 1983). This particular aspect has been a focal point of extensive research, shedding light on the dynamics and implications of this critical interplay.

Thus, it can be contended that there exists a noticeable void in the existing body of literature determined by the prevailing economic conditions, characterized by escalated inflation and surging interest rates, which have been witnessed before. The prominent and substantial influence of Private Equity in today's financial landscapes, coupled with the ongoing macroeconomic dynamics create an ambiance of uncertainty that permeates various stages of the PE investment process. Given this intricate scenario, the primary objective of this research is to explain the application of the agency framework to the domain of Private Equity and to delve into how the current state of the industry profoundly affects the dynamics within this principal-agent relationship.

The role of Private Equity in modern financial markets has become more pronounced than ever, exerting its impact on various sectors and companies. Amidst this backdrop of economic volatility, understanding the interplay between principals and agents in the context of PE becomes an imperative task. The agency theory, which explores the relationship between the owners (principals) and the managers (agents) of a firm, can serve as a valuable lens to analyze the complexities and challenges inherent in the PE domain. To proficiently explore the research inquiry at hand, this investigation will extensively examine the current state of the private equity sector and its interactions with the macroeconomic influences that have shaped the global economic landscape in the past year. This in-depth analysis draws from various sources, notably including the comprehensive market research on the industry offered by reputable entities like Bain & Company (2023) and McKinsey (2023) in their private equity reports. The objective is to gain a comprehensive understanding of how the private equity industry has been impacted by the prevailing macroeconomic factors, which have played pivotal roles in shaping economic conditions on a global scale. Moreover, it endeavors to identify potential challenges, opportunities, and strategic considerations that private equity firms have encountered amidst the recent economic shifts, ultimately providing valuable insights for investors, practitioners, and stakeholders in the field.

The study is organized in the following manner: Section 2 offers a comprehensive overview of the theoretical framework by examining prior literature and exploring the ways in which current market uncertainties, such as inflation, interest rates, and monetary policies, can exert an influence on the investment process within the private equity industry. Drawing upon existing literature on agency theory, this section introduces the application of this theory to the relationship between limited partners and general partners within the PE landscape and it highlights paradigmatic scenarios where opportunistic behavior may arise between these two parties. Moving on to Section 3, a comprehensive background of the private equity industry is provided, elucidating the prevailing challenging market conditions and their consequential impact on the most pertinent indicators within the industry. Section 4 delves into an analysis of how macroeconomic and industry variables are pushing PE funds towards a potential spiral, while also examining exceptions to this prevailing trend. Section 5 narrows the focus to the agency problem by highlighting two specific issues that have emerged as a result of the current market conditions. The first issue pertains to the deliberate avoidance by GPs to mark down the value of their assets, a phenomenon that has significant implications. The second issue is the denominator effect, which arises as a consequence of this opportunistic behavior. This section offers an in-depth exploration of both problems, shedding light on their causes and potential ramifications. Finally, in Section 6, the study concludes by summarizing the main findings and presenting key conclusions drawn from the research. Furthermore, it provides suggestions and recommendations for future research endeavors, aiming to contribute to a deeper understanding of the dynamics between LPs and GPs within the private equity industry.

2. Review of the Relevant Literature

In this chapter, I will present the academic literature this study is based on. Section 2.1 summarizes the theoretical framework concerning the relationship between the Private Equity industry and macroeconomic variables, including economic growth, inflation, and interest rates. Section 2.2 moves focus on the relationship between Limited and General partners, presenting the different contexts in which an agency problem between the two arises. Finally, Section 2.3 introduces the concept of the Denominator Effect through the, albeit limited, literature on the topic.

2.1 The Macroeconomic Impact on Private Equity

The Private Equity industry is closely intertwined with macroeconomic variables such as uncertainty, economic growth, inflation, and interest rates. Different academic papers shed light on the complex relationship between the macroeconomic environment and the performance, dynamics, and decision-making within the Private Equity industry.

One crucial factor examined in the literature is economic growth. Kaplan and Schoar (2005) highlight the significance of growth in driving Private Equity returns by emphasizing that a robust and expanding economy provides favorable conditions for value creation and exit opportunities. Similarly, Fischer (1993) underlies the importance of stable macroeconomic conditions, including controlled inflation and appropriate interest rate policies, for fostering sustainable economic growth. These findings suggest that a thriving economy can positively impact the Private Equity industry by creating a conducive environment for investment and value generation.

As we have experienced in the second half of 2022, another relevant macroeconomic variable able to significantly affect the Private Equity industry is inflation. Ball (1990) argues that high inflation can lead to increased uncertainty due to its disruptive effects on economic decision-making and price-setting behavior. Bruno and Easterly (1998) delve into inflation crises and their impact on long-run growth, emphasizing the negative effects on investment and productivity. Sarel (1996) investigates the nonlinear consequences inflation has on growth, suggesting that moderate inflation rates may have a positive impact while high and volatile inflation rates can be detrimental. These studies imply that controlling inflation and maintaining price stability are crucial for promoting sustainable economic growth, which, in turn, can affect the Private Equity industry.

The effect of the two variables mentioned above then quantifies in changes of interest rates. Kaplan and Schoar (2005) suggest that low interest rates can incentivize increased Private Equity investment activity and higher valuations. Boyd, Choi, and Smith (1996) explore the relationship between inflation, financial markets, and capital formation, underscoring the importance of interest rates in shaping investment decisions and capital allocation. These findings highlight the sensitivity of the Private Equity industry to interest rate movements and emphasize the potential impact on investment strategies and returns.

The overall trajectory of economic growth, along with the unpredictable influence of inflationary conditions, will have diverse implications for market participants, including private market investors like PE firms. These implications will manifest in various aspects of their investment processes and decisions. They may shape expectations regarding future investment returns (Fama & Schwert, 1977), impact the ability to raise capital (Boyd et al., 1996), and affect exit opportunities (Acharya & Pedersen, 2005).

In conclusion, the literature demonstrates a clear link between the Private Equity industry and different macroeconomic variables. Economic growth provides a favorable environment for Private Equity investments, while inflation and interest rates can impact the industry through their effects on uncertainty, investment decisions, and capital allocation. Understanding the effect of such variables can help to inform investment strategies, risk management, and the dynamics between LPs and GPs in the Private Equity industry. In Section 3 we will see how, starting from June 2022, the macroeconomic scenario has deeply affected the PE industry, with significant consequences for the LP-GP relationship.

2.2 Agency Problem between Limited and General Partners

Jensen and Meckling (1976) define the agency relationship and the related problem as follows:

> *"An agency relationship is a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating*

some decision-making authority to the agent. If both parties to the relationship are utility maximizers, there is good reason to believe that the agent will not always act in the best interests of the principal."

What I have always found interesting in the Private Equity and Venture Capital industry is that the agency relationship observed between the General Partner and the entrepreneur or the management of a target company is comparable to the one between LPs and GPs. While the agency problem arising between shareholders and management of a company has been largely analyzed by academia, with the most relevant contribution given by Jensen and Meckling (1976) and Fama and Jensen (1983), literature on the dynamics between LPs and GPs is less developed. Sahlman (1990) applied the same concepts of information asymmetry and moral hazard, developed in the framework of investing in private companies, to the LP-GP relationship, being one of the first authors to describe the agency framework within the PE landscape. The potential opportunistic behavior by the GP generates a conflict of interest because the goals of the general partner (agent) responsible for investment decisions and operations management may not match the interests of the limited partner (principal) who invest the capital. This misalignment can lead to significant tension, with the GP possibly prioritizing short-term gains rather than the long-term growth and success of the portfolio companies (Sahlman, 1990).

Differently from the standard agency theory, in investment funds the relationship is also characterized by a legal contract, namely Limited Partnership Agreement. The limited partnership has become the most common form in the private equity industry for its tax and legal implications. As noted by Sahlman (1990), the legal framework of limited partnerships is one of the elements defining and intensifying the agency problem. In order to maintain their limited liability profile, LPs are generally prohibited from participating in the active management of the fund. This means that LPs cannot make decisions or have direct involvement in the day-to-day operations of the partnership (Metrick and Yasuda, 2011). As a consequence, the Limited Partner tries to limit divergences from his interest by establishing appropriate incentives for the GP and by incurring monitoring costs, as in the agency theory described by Jensen and Meckling (1976). To mention an example of an incentive, LPAs typically include a carried interest, through which the GP can enjoy part of the upside of the profitable investments. On the other hand, as a monitoring strategy, GPs are required to periodically disclose the valuation of their investment, to update their LPs on the current state of the portfolio. Of note, such disclosure and the sometimes discretional valuation method used by GPs to compute the fair value of their portfolios are points of attention in the relationship which can lead to opportunistic behavior, as it will be analyzed in sub-section 5.1.

The agency theory framework is wide and includes a number of topics, among which we find moral hazard, information asymmetry, and adverse selection. In this paragraph, I will present some examples of these concepts applied to the Private Equity framework, in particular focusing on the LP-GP relationship.

Moral hazard occurs when a party is incentivized to take excessive risks or engage in harmful behavior due to the absence of full accountability for the consequences of their actions (Fama and Jensen, 1983). The concept of moral hazard, as described by Jensen and Meckling (1976), finds its roots in the insurance industry; initially, it referred to the tendency of individuals to act recklessly or negligently when protected by insurance coverage. For instance, comprehensive car insurance might lead individuals to exercise less caution while driving, knowing that any damages would be covered by the insurance company. We can consider the potential opportunistic behavior of GPs within the Limited Partnership as an example of moral hazard. Depending on the type of contract and incentives, GPs typically have option-type payoffs, meaning that they have downside protection and enjoy a relevant gain from upsides, which will lead to a risk-taking approach (Buchner and Wagner, 2015). Figure 1 represents the payoff for Limited and General partners. The GP payoff line recalls the return profile of a call option, with a worst-case scenario represented by the management fees only. Fund managers have "little skin in the game" and, as for the value of a call option, benefit from the high volatility of the underlying asset, which in practice translates into a preference towards riskier investments (Ljungqvist, 2022).

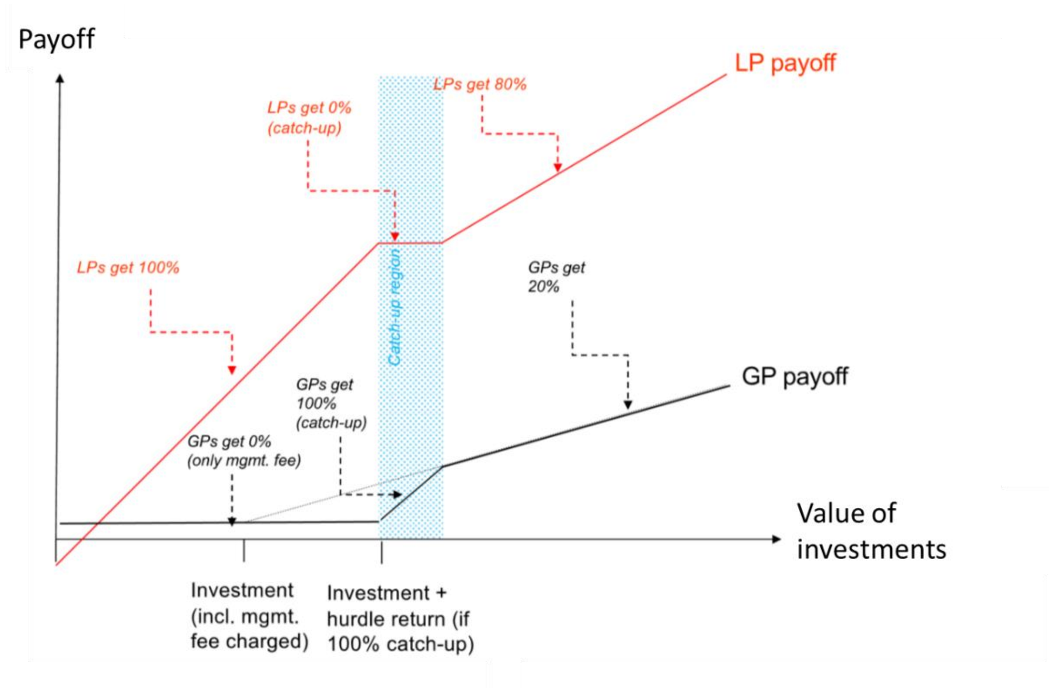

Figure 1: *LP and GP payoffs in the case of carried interest (20%), hurdle rate, and catch-up clause (Strömberg, 2022)*

One additional feature of the LP-GP relationship increasing the opportunity for moral hazard is that management fees are not flexible and are agreed upon at the start of the fund, meaning that even when investments are not performing the GP is incentivized in keeping the fund alive to maintain the stable cash flow coming from those fees, while LP would prefer to reduce the invested amount to limit the respective fees (Ljungqvist, 2022). Interestingly, especially from an agency perspective, Buchner and Wagner (2015) also investigate the risk-taking approach of GPs in a multi-fund framework, where the compensation to the fund manager is analyzed taking into account both the fees deriving from existing funds and the ones linked to potential future fundraising, whose success depends on the performance of the previous funds. Even in this multi-period case, however, GPs are generally incentivized in adopting risky strategies, creating a moral hazard issue with their investors.

Asymmetry of information and adverse selection are two intertwined topics dealing with different perspectives of the same issue. For this reason, in this paragraph, I will present them jointly. Information asymmetry refers to a situation where one party in an economic transaction possesses more information than the other party, granting an advantage in negotiations and decision-making (Jensen and Meckling, 1976). In this context, adverse selection arises when the party with superior information takes advantage of this disparity by selectively choosing to engage in transactions that benefit them while exposing the less-informed party to higher risks or lower quality (Fama and Jensen, 1983). An interesting example of the agency theory and the two aforementioned concepts applied to the LP-GP relationship is the hold-up problem. The base framework of this problem consists in a contractual relationship in which a counter-party gains bargaining power once the investment has been made, often because of adverse selection (Ljungqvist, 2022). Applied to the Venture Capital industry, this situation verifies when LPs already have a stake in a certain fund. The higher level of information of this investor with respect to the rest of the market generates information asymmetry, which then transforms into adverse selection when other LPs are interested in funds managed by the same GP. For example, if the first-fund LP does not re-up in the second round, this could suggest to other LPs that current investments are not performing well or other issues related to the GPs. However, this can also constitute a leverage for the first LPs to obtain favorable terms from the portfolio company (Ljungqvist, 2022).

Kaplan and Strömberg (2009) divide the PE investment process into four key stages: fundraising, deal sourcing, operational management, and exit. I will try to summarize the existing academic literature on the agency problem between LPs and GPs focusing on the first and the last stage of this process, during which the relation between Limited and General Partners is more relevant.

For what concerns fundraising, Axelson et al. (2009) emphasize the importance of financial structure in minimizing agency costs in private equity funds, discussing the adverse selection issue in various fundraising regimes within private equity funds. In particular, they suggest that ex-post financing may lead to adverse selection since limited partners commit capital without knowledge of specific investments, leading to poor overall performance. They propose ex-ante financing as a solution to the adverse selection problem, which involves the fundraising capital for specific investments before they are made, allowing investors to evaluate each opportunity independently and reducing the risk of adverse selection. The topic of fundraising is also important since it defines the bargaining power between LPs and GPs, a dynamic that is determined by the information asymmetry between inside and outside investors. Schoar and Lerner (2002) explore such a dynamic highlighting the importance of having strong relationships with inside investors and building a track record of successful investments to reduce information asymmetry, since existing LPs are able to reduce the manager's cost of capital by providing a certification mechanism when seeking new outside investors. According to Barber and Yasuda (2017), during fundraising LPs use interim performance as a signal of GP skill and use it to inform their investment decisions; however, some GPs may engage in "window-dressing" practices by selectively disclosing positive interim performance, which can create a misalignment of interests and information asymmetry between LPs and GPs. In this regard, Myers and Majluf (1984) noted how GPs are usually inclined to exaggerate the value of prospective investments when seeking funding from uninformed investors.

Another key moment in the life of a fund is the disinvestment decision (or exit) and even in this case a possible conflict between LP and GP arises. Figge et al. (2012) analyze how GPs may be incentivized to delay divestments due to the effect on their management fees and carried interest, causing conflicts with LPs who may prefer more rapid exits for liquidity and risk management purposes. The paper also highlights the importance of timing and valuation in the performance metrics of net asset value (NAV) and internal rate of return (IRR), which can impact divestment decisions and further exacerbate the GP-LP conflict.

Addressing these challenges is crucial for fostering trust, aligning interests, and ultimately enhancing the success and performance of Private Equity funds. In addition, understanding the dynamics involved in the different moments of the fund will help us in analyzing the conflicts deriving from the recent macroeconomic situation, which intensified the tension among all the parties involved in the Private Equity process.

2.3 Denominator Effect

The denominator effect arises when a significant decrease in one segment of a portfolio leads to a reduction in the overall portfolio's total value. Consequently, the remaining segments of the portfolio, which did not experience a decline, represent a greater proportion of the total value (Pitchbook, 2023). With reference to the private equity asset class, the impact of declining public market values in the past year determined an increase in private equity allocation, exceeding the desired target set by institutional investors.

Even though we do not find a direct reference to this effect in the literature, there are some authors who discussed the implications of decreasing public markets of the LPs' target allocation in private assets.

Metrick and Yasuda (2011) deal with the valuation of public market holdings influencing the relative weight of private equity investments in the overall portfolio and how the changes in public market values and investor sentiment can affect LPs' willingness to commit capital to private equity funds, potentially exacerbating the denominator effect. In addition, they argue that GPs can mitigate the denominator effect by developing strong relationships with LPs, fostering trust during periods of market uncertainty, and enhancing their chances of receiving LP investments in upcoming funds.

Hege and Nuti (2011) examine the private equity secondary market during the financial crisis, suggesting potential implications related to the denominator effect and the LPs' decision-making processes. During times of financial crisis, declining public market values may lead to a widening valuation gap between the reported net asset value of private equity funds and their true underlying values. This valuation gap affects LPs' perceptions of the performance and risk associated with their private equity investments. As LPs reassess their overall portfolio allocation, the denominator effect may come into play as the declining public market values prompt LPs to reduce their exposure to private equity and rebalance their portfolios.

In conclusion, the denominator effect is a significant phenomenon in the realm of investment portfolios, wherein a substantial decline in one segment results in an overall reduction in the portfolio's total value. This effect has been particularly pronounced in the private equity asset class, triggered by the impact of declining public market values over the past year. As a result, there has been an increase in private equity allocation, surpassing the target set by institutional investors. Despite its importance, the literature on the denominator effect remains limited, largely due to the fact that this effect has unfolded recently with such intensity. Nevertheless, certain authors already have explored the implications of decreasing public market values on LPs' target allocation in private assets. Given the ongoing changes in economic conditions and market dynamics, it is imperative to expand research and analysis on the denominator effect's impact on the private equity domain. Understanding and effectively managing this phenomenon is crucial for both Limited Partners and General Partners in navigating market uncertainties and optimizing portfolio allocations. Further investigation into this area will offer valuable insights, contributing to a more resilient and sustainable private equity industry. However, as the denominator effect continues to unfold with significant implications, researchers and practitioners must continue to closely monitor its effects and adapt their strategies to thrive in an ever-evolving investment landscape.

3. Industry Background

I believe that a proper analysis of the Private Equity and Venture Capital industry requires an understanding of the current state of the sector. This is due to the fact that the industry is highly procyclical (Axelson et al., 2009) and the focus of the literature on the topic in each period is contingent on the corresponding economic scenario. To elaborate on the industry background in this chapter I mainly refer to the key information contained in the Bain and McKinsey 2023 Private Equity market reports, which are considered by practitioners a reliable source of information.

Since the beginning of 2022, the sector has been hugely impacted by the state of the financing market. Figure 2 reports the rise in the Federal Funds Effective Rate, i.e. the volume-weighted median interest rate at which depository institutions trade federal funds (balances held at Federal Reserve Banks) with each other overnight (FRED, 2023). This indicator can be considered as a proxy of the risk-free rate and is impacted by the decisions of the Federal Reserve, which meets 8 times per year to determine the federal funds' target rate. In March 2022, the Federal Reserve implemented a 25 basis points increase in its federal funds' benchmark rate, raising it to a range of 0.25% to 0.50%, marking the first rate hike by the Fed since 2018. After another 25bps increase in May 2022, the Federal Reserve raised the rate by an additional 75 basis points in June to address the persistent rise in inflation, the largest single rate hike since 1994. From that moment, interest rates continued to increase reaching an effective fund rate of 5.1% in May 2023, which is the highest level registered since the summer of 2007. As shown in Figure 2, the European Central Bank (ECB) responded to the increasing inflationary environment with a significant lag with respect to the Federal Reserve, with the first rise in the key interest rate happening at the end of July. Since then, even European countries experienced a series of rate hikes, with the Marginal Lending Facility rate, i.e. the interest rate offered to banks in the Eurosystem for overnight credit, reaching 4% in May 2023 (FRED, 2023).

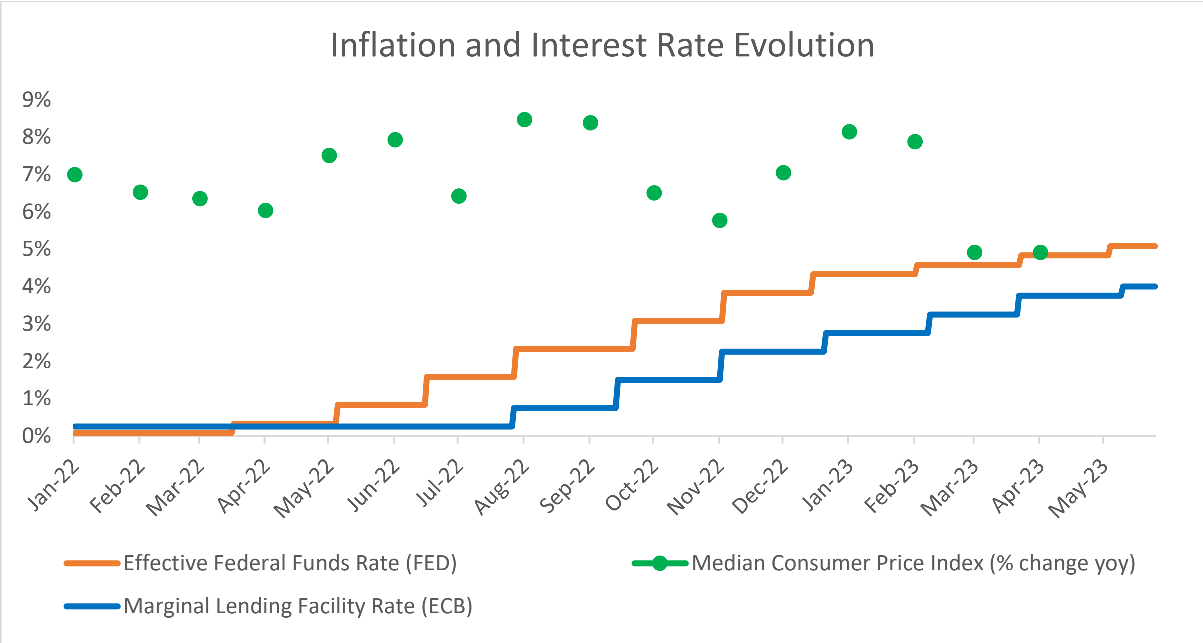

Figure 2 - Source: Federal Reserve Economic Data (FRED) and own representation

As evidenced in Section 2, a number of authors described the negative effect of high inflation and raising interest rates on the Private Equity industry (Kaplan and Schoar, 2005; Boyd et al., 1996). This prevented Private Equity funds to obtain cheap debt financing, eroding the potential returns on investments for them and their LPs. The progressive closing of the bank loan market during 2022 impacted the possibility for the funds to sustain their investment activity, with syndicated LBO loan issuances dropping by 50% in 2022 (Bain & Company, 2023). The increased borrowing rates combined with a financial market crisis (S&P500 lost about $8 trillion in market capitalization in 2022[1]) led to a number of consequences for the PE industry which are described in the Bain and McKinsey market reports. In particular, I have identified four sector trends that directly affect the LP-GP relationship and can exacerbate the agency problem: (i) reduction in most PE performance indicators, (ii) fundraising slowdown and record-high dry powder, (iii) opening to new categories of investors, and (iv) private versus public valuations.

3.1 Reduction in most PE performance indicators

In 2022 the Private Equity asset class posted a negative performance (-9% year-to-date IRR as of September 2022), the first time in the industry since 2008 (McKinsey,

[1] Source: Reuters (https://www.reuters.com/markets/us/futures-slip-last-trading-day-torrid-year-2022-12-30/).

2023). The comparison between 2021 and 2022 PE activity is dramatic, especially if we focus on the second half of the year, during which the consequences of the high-inflation and high-interest rates environment started to manifest their effect. Overall, global buyout deal value dropped by 35% (Bain & Company, 2023). The disappointing returns and the potential risks associated with certain investments have acted as a red flag for LPs, who now find it imperative to elevate the level of due diligence conducted on their prospective investments.

The current economic environment, dominated by uncertainty about the future evolution of macro factors, poses a challenging situation for GPs in managing their portfolio companies. On the other hand, LPs are expected to require a considerable amount of time to address any disparities in their investment portfolios caused by fluctuations in the market and a decrease in the cash flow from prior obligations. On top of this, uncertainty will determine an increase in agency costs between General and Limited Partners. In good times, GPs are focused on investing and managing their portfolio companies and Limited Partners are happy with their returns. In case of adverse macroeconomic scenarios and decreased returns, LPs will invest time and money to analyze the actions of the funds they invested in, requiring explanations of the GPs' actions and challenging the strategy of the fund. In addition, the current economic situation is characterized by a lack of clarity about what's happening, differentiating this period from the financial crisis or the Covid-19 crisis (Bain & Company, 2023). The combined PE and VC sector has seen a continuous increase in total Assets Under Management (AUM) over the years, even during times of uncertainty. However, in 2022 there was a decrease in the total AUM for the first time in 15 years, as reported by Pitchbook (2023). Nonetheless, the total AUM still remains substantial, amounting to around $5 trillion globally. The stagnant M&A market prevented funds from exiting their existing investments as well, due to the reduced number of buyers able to finance transactions and the difficulty in getting competitive valuations. As a result, the overall exit trend is quite negative with 699 exits during 2022, a -37% YoY reduction in the number of deals or -54% YoY contraction in terms of deal value (PricewaterhouseCoopers, 2023).

3.2 Fundraising slowdown and record-high dry-powder

The fundraising activity can be seen as a key indicator of LPs' satisfaction with the performance of their investments in Private Equity and, more in general, as a sanity check of the state of the sector.

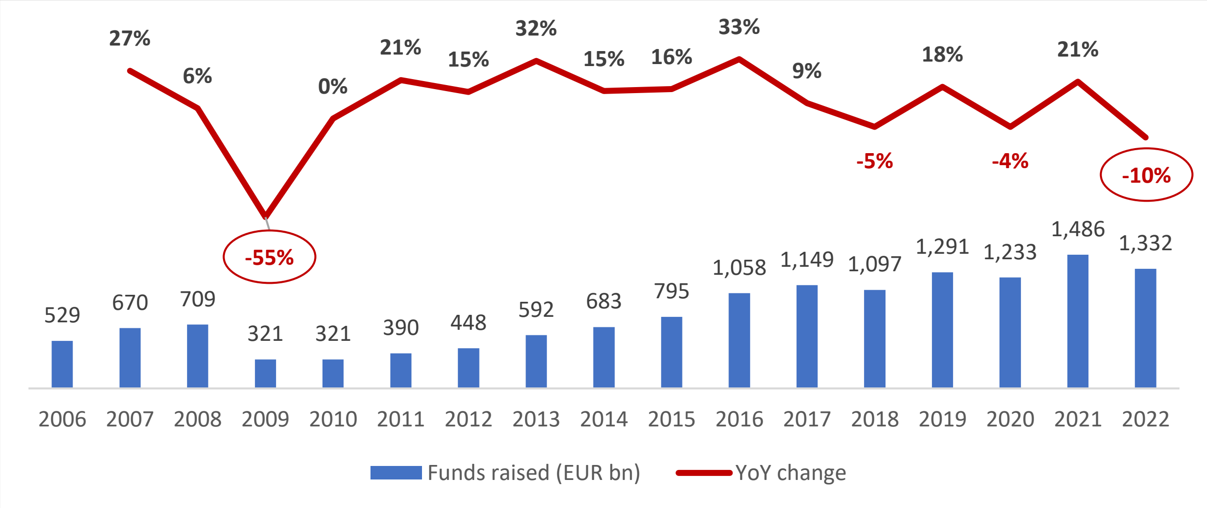

Figure 3: Global private markets fundraising from 2006 to 2022 (Source: Prequin)

According to Prequin (2023a), the total funds raised by the private sector in 2022 dropped by 10% compared to 2021, representing the largest drop since the financial crisis. Despite this strong contraction, last year's result still remains the second-highest fundraising ever (Bain & Company, 2023), considering that the level achieved in 2021 represented an all-time-high performance for private equity funds. One possible explanation for the fundraising slowdown can be identified in the denominator effect, where the decline in the value of institutional investors' public investments outpaced that of their private holdings (McKinsey, 2023). As a result, the proportion of private allocations within overall portfolios increased, and while some limited partners experienced a reduction in the allocation gap between their actual and target private market allocations, others faced over-allocations to private asset classes. Given the obligation of certain LPs to maintain private market allocations below the specified targets, these changes in allocation driven by valuation contributed to reducing new commitments and, in certain instances, the sale of private market holdings in the secondary market last year.

Another potential reason for the decline in fundraising can be attributed to the significant amount of uninvested capital, often referred to as "dry powder", within the private equity industry. According to Bain & Company (2023), the private equity sector ended 2022 with a record-breaking $3.7 trillion in dry powder. This substantial amount of unallocated capital raises concerns among limited partners who are eager to see their committed capital actively deployed to generate the desired returns. LPs invest in private equity with the expectation of capital appreciation and attractive risk-adjusted returns. However, the presence of a substantial amount of uninvested capital indicates that the industry has yet to find suitable investment opportunities or deploy capital effectively. This situation can make LPs more cautious and conservative towards committing additional private equity allocations, and they may hesitate to invest further capital in the asset class until the existing dry powder is effectively deployed and the investment environment becomes more favorable. Considering the combination of the denominator effect and the substantial amount of uninvested capital, LPs face increased scrutiny and caution when considering additional private equity allocations. They seek reassurance that their committed capital will be actively deployed and generate the desired returns within a reasonable timeframe. This cautious stance can be attributed to LPs' preference for avoiding overexposure to private asset classes and ensuring that their investment portfolios are effectively managed in light of the prevailing market conditions.

In addition to the significant contraction, during 2022 the fundraising landscape witnessed a distinct shift as investors navigated the challenging economic environment. This shift was particularly noticeable in the allocation of new commitments to different fund sizes. According to the McKinsey Private Equity Report (2023), larger funds with assets exceeding $5 billion experienced remarkable success, raising a record-breaking $445 billion (+51% increase compared to 2021). In contrast, smaller funds with assets below $1 billion faced a -31% decline. According to Pitchbook (2023), in 2022 the top 35 funds received 75% of all the capital raised during the year, as opposed to the 40% registered in 2021. Moreover, the first-time fund count saw a drastic decline, moving from 119 new funds in 2021 to only 42 raised in 2022 (Hamlin, 2023).

One plausible explanation for this trend can be derived from the prospect theory, as proposed by Kahneman and Tversky (1981). According to this theory, individuals tend to shift their preferences towards familiar options in times of uncertainty or difficulty. In the context of fundraising, limited partners faced with a more challenging fundraising environment sought solace in the familiarity and established track records of larger funds, which are typically represented by bigger and more experienced investment funds. This behavioral response can be understood as LPs gravitating towards known paths of success.

On the other hand, from an agency theory perspective, LPs' inclination towards more experienced funds can also be attributed to the lower agency costs associated with this kind of GPs. With limited capital to commit, LPs aimed to minimize potential agency conflicts and risks by selecting funds with a longer and more detailed track record. These established funds often offer a higher level of transparency, reduced information asymmetry, and a proven ability to deliver consistent returns. By opting for funds with a strong historical performance, LPs could mitigate the agency costs associated with the selection and monitoring of less experienced or untested funds.

In summary, the fundraising dynamics of 2022 suffered a strong contraction with respect to the previous year, which however represented an exceptional year. The slowdown of PE fundraising was not homogeneous, with a shift towards more established and experienced funds driven by the principles outlined in the prospect theory and the agency theory. The difficult economic environment led LPs to lean towards familiar investment paths, placing greater emphasis on funds with a lower agency cost. This inclination towards larger funds with a proven track record serves as a strategic response to uncertainties and highlights LPs' preference for investments with reduced risk and greater transparency.

3.3 Opening to new categories of investors

One of the key trends in Private Equity is the increasing importance of non-institutional capital. While institutional investors continue to be the dominant providers of capital, regulatory changes, and innovative investment structures are making private markets more accessible to high-net-worth individuals (HNWI) and retail investors. The relationship presents mutual benefits, as non-institutional investors can achieve higher returns, lower correlations with public equity markets, and access to otherwise inaccessible markets and strategies, while fund managers see non-institutional investors as a large global capital pool and an untapped source of funds (McKinsey, 2023). In fact, as institutional investors reach asset allocation maturity and slow their commitments to private markets, non-institutional capital is expected to be the next growth frontier for private equity firms. This trend is driven by the fact that individual investors hold approximately 50% of global assets under management but represent only 16% of alternative investment fund AUM (Bain & Company, 2023). To sustain double-digit growth as the industry matures private equity firms are increasingly targeting individual investors, as testified by explicit goals to increase individual investor AUM set by some of the largest funds in the world, including Blackstone, KKR, and Apollo Management. This shift is driven by the need for new capital sources and the recognition that traditional institutional investors may not be able to support the desired growth rates. While institutional capital allocated to alternatives is projected to grow 8% annually over the next decade, individual wealth invested in alternatives is expected to grow 12% annually (Bain & Company, 2023).

One of the key reasons why non-institutional investors are getting interested in private equity investments is that it offers a diversification opportunity with respect to public equity. In today's challenging investment landscape, achieving diversification solely through traditional public market investments has become increasingly difficult due to the fact that the number of public companies has declined, and the stock market is currently dominated by a handful of tech companies, which makes diversification harder to achieve even through stock indexes. In the last years, the NYSE and the Nasdaq, the two leading US stock exchanges by number of securities, experienced a reduction in the growth of listed companies. In 2021 and 2022 the growth has been respectively 0.4% and 0.3%, with a significant decrease in Q1 2023, when the cumulative number of listed companies on the two exchanges decreased to 6,014 (-3.4% compared to FY2022)[2].

The expectation for future years is that barriers for individual investors to access the private equity industry will gradually recede. Regulatory changes have expanded the definition of accredited investors and facilitated the creation of funds that comply with regulations while targeting individual investors. The industry is also witnessing the emergence of distribution partnerships and digital platforms that provide access to alternative investments. One outstanding example of the opening of the Private Equity industry is the recent affirmation of the digital investment platform Moonfare, which

[2] Source: Statista - NYSE and Nasdaq: listed companies comparison Q1 2023 | Statista (openathens.net).

enables retail investors to participate in private funds with a minimum tranche of €50,000 in Europe, £50,000 in the UK, and $75,000 in the US (Oliver, 2022). A similar platform can enable the democratization of the industry and allow even small retail investors to access the biggest private equity funds. The Company was founded in 2016 by two former KKR directors and in July 2022 reached €2 billion in assets under management (Oliver, 2022). The entrance of new actors in the Private Equity industry will drastically change the traditional relationship between LPs and GPs, which has always been based on direct contact among the parties involved. All the discussions regarding the agency problem will need to be assessed from a different perspective as individual investors increase their relevance in PE commitments. One key implication is the extent of the governance that a retail investor can have on the GPs, and on this topic, regulation will have to preserve the interests of individual investors.

3.4 Private versus public valuations

Private equity performance has demonstrated greater resilience compared to public markets during 2022, as evidenced by both a market valuation and an internal rate of return (IRR) analysis. According to Bain & Company (2023), the S&P500 and the MSCI World Index recorded a significant decline (respectively -19% and -17% in 2022), while private equity firms showed more resilient results. This could indicate that private equity investments enjoy a higher level of stability and performance during turbulent market conditions. The report also highlights a notable difference in the Internal Rate of Return (IRR) between public and private assets. The comparison is made possible by a Public Market Equivalent (PME) analysis, a benchmarking methodology introduced by Kaplan and Schoar (2005). The PME consists in computing the potential returns of investing the cash-out of a private equity fund in the S&P500 (or another suitable market index) and expressing the results as a ratio between the fund and the equivalent public return, also considering the fees to the general partner. If the PME is above 1, then the Limited Partner was better off investing in the fund rather than in a public index. As of Q3 2022, buyout funds outperformed the respective PME in the US (S&P500), Western Europe (MSCI Europe), and Asia-Pacific (MSCI Asia-Pacific) for investing horizons of 1, 5, 10, and 20 years (Bain & Company, 2023).

The over-performance of private equity funds could potentially be attributed to the fact that private equity firms do not mark down their assets as rapidly as the public markets. This discrepancy in marking down valuations may have contributed to the relatively higher returns observed in the private equity sector. In this regard, an interesting dynamic from an agency standpoint is that most asset mark-downs are commonly observed in the fourth quarter of the year due to the fact that an audited appraisal is mandatory for the GP once a year (Bain & Company, 2023). There exists a certain degree of discretion in the portfolio company's valuations, and fund managers can leverage on that to avoid asset mark-down at least for some months, generating a lag between private and public asset value declines. In addition, it is worth highlighting that such discrepancy between public and private assets valuation can result in a key driver of the denominator effect, creating allocation issues for Limited Partners. However, it is essential to exercise caution and consider the potential implications of this trend, as it could indicate a risk of a private equity bubble or mispriced assets that require careful assessment and prudent investment decision-making.

Some of the characteristics described for the Private Equity industry in the last six months of 2022 remind a classic market bubble that is about to burst, as happened to the dot-com bubble in 2000. The theory of economic bubbles suggests that speculative markets can go through periods of rapid and unsustainable price increases, followed by a sharp decline or collapse driven by factors such as investor sentiment, herd behavior, and the belief in significant future returns (Shiller, 2002). Market bubbles can manifest in various asset classes like stocks, real estate, or commodities, and are characterized by prices that greatly surpass the assets' intrinsic value. A crucial aspect of economic bubbles is the presence of a widely accepted theory or narrative that justifies inflated asset prices and is often based on concrete facts or trends but incorporates speculative elements or outright guesses. The theory usually offers a seemingly plausible explanation for the ongoing price increases and gains credibility through endorsements from authoritative figures (Shiller, 2002).

Regarding a potential connection with a bubble in private equity, it is important to remember that private equity investments are not traded on public markets and tend to be illiquid. This distinct nature makes direct comparisons with traditional asset classes prone to bubbles more challenging. However, following the rapid growth and increasing popularity of the private equity industry, concerns regarding a possible bubble in private equity have been raised due to several factors. Firstly, increased competition among private equity firms to deploy capital has led to rising valuations and potentially inflated prices for target companies, a trend that may be influenced by the cheap debt availability which characterized the financing market after 2008. Average EBITDA purchase price multiples for leveraged buyout transactions have increased steadily since the early 2000s both in Europe and the US, with a relaxation in the post-financial crisis (Bain & Company, 2023). During 2022, when private equity firms experienced an increased cost for financing transactions, average multiples started to show signs of decline; the median buyout entry multiple decreased from the record-high 13.2x in 2021 to 12.9x (corresponding to a -2.3% contraction), which is not even comparable to the decline in public market valuations in the same period, with the MSCI World EV/EBITDA declining by -21.7% (McKinsey, 2023).

A second possible indicator of a bubble in private equity is excessive leverage. Leverage is procyclical in the sense that it can amplify returns during economic growth but can also magnify losses during downturns (Axelson et al., 2009). Difficulties in highly leveraged private equity investments or changes in economic conditions could result in financial instability and a potential bubble burst.

Finally, the heightened demand for private equity investments has led to the creation of new funds and an influx of capital into the industry. This surge in capital may lead to an oversupply of funds chasing limited investment opportunities, potentially driving up prices and reducing the potential for high returns. In 2007, at the dawn of the financial crisis, the co-founder of Oaktree Capital Howard Marks described the state of the private equity industry as "too much money chasing too few deals". I find this consideration more relevant than ever, taking into account that the industry has now a record high dry powder and the difficult macroeconomic environment is negatively affecting the operating performance of most companies worldwide.

It is important to emphasize that identifying a bubble in any asset class, including private equity, is a complex undertaking. Bubbles are often recognized in hindsight, influenced by a combination of economic, financial, and psychological factors. While concerns exist regarding certain aspects of the private equity industry, thorough analysis and consideration of multiple indicators are essential before drawing conclusions about the existence of a bubble. An additional consideration relies on the findings described in section 3.3 with respect to the entrance of new individual investors in the Private Equity industry. If we start from the consideration of Shiller (2002), according to which economics bubbles are usually driven by dynamics such as investor sentiment and herd behavior, the opening of the industry to less sophisticated retail investors could imply an increased risk of a private equity bubble.

In the next section, I will discuss how the interaction among some of the private equity key trends presented in this section could escalate and damage the industry, potentially disrupting the relationship between fund managers and investors.

4. The Private Equity Deadly Spiral

In 2007, the Federal Reserve coined the term "downward spiral" to describe the intricate situation that led to the collapse of the subprime lending and mortgage-backed securities market, marking the onset of the devastating financial crisis (Bernarke, 2007). Now, as we delve into an examination of the present state of the Private Equity industry through the lens of the LP-GP relationship framework, it becomes evident that not only is this relationship witnessing the emergence of new and potentially transformative trends, but the entire industry is grappling with a host of adverse factors. With the risk of being bold, I define the combination of these factors as a "deadly spiral," with the potential to fundamentally reshape the private equity landscape and profoundly impact the dynamics between investors and fund managers. This analysis centers on the underlying tension arising from three interrelated factors: the mounting dry powder phenomenon, the stagnation of M&A activity, and the slowdown in capital distribution to LPs, all of which collectively depress the prospects for fundraising. The surge in dry powder, an estimated $3.7 trillion as of 2022 according to Bain (2023), represents capital commitments by investors that are yet to be deployed. LPs expect their committed capital to be actively invested during the fund's life to generate returns. However, the mounting challenges in securing financing for leveraged deals have hampered PE activity in the latter half of 2022. As a result, General Partners face a predicament in deploying the abundant capital at their disposal, resulting in increased difficulties in generating favorable returns on deals. Despite resourceful attempts by dealmakers to explore alternative financing avenues through private credit and augmented equity investments for smaller transactions, the overall reduction in new deals and exits is projected to persist, causing a ripple effect on fundraising endeavors. The repercussions of this "deadly spiral" reverberate throughout the industry, putting pressure on the traditional PE model. To stay competitive and navigate the challenging terrain, fund managers must strategically adapt to this shifting landscape. It becomes imperative for GPs to explore innovative investment strategies, diversify their portfolios, and focus on sectors that display resilience and growth potential in a rapidly evolving economic landscape. In parallel, LPs must be discerning in their allocation decisions, seeking out fund managers with a proven ability to deliver consistent performance amidst these trying circumstances. Diversification across a range of funds and strategies could be a prudent approach for LPs seeking to mitigate risks associated with the industry's present challenges. In conclusion, as the PE industry grapples with the convergence of unfavorable factors, the term "deadly spiral" encapsulates the potential ramifications that extend beyond individual challenges. By acknowledging and understanding these complexities, industry participants can navigate the current landscape with foresight and innovation, paving the way for a more resilient and sustainable private equity future.

4.1 Fundraising: recent evolution and outlook

In order to unveil the spiral that is affecting the PE industry, I will start with an analysis of current and future fundraising levels. Fundraising is an important indicator of the investors' sentiment and a monitor of the state of the relationship between LPs and GPs. In fact, if limited partners are not happy with the current performance of their investments or with the way they are being treated by fund managers, the stronger option they have is not to participate in the following funds raised by the PE firm.
An interesting finding comes from the analysis of the quarterly level of fundraising since 2020. As shown in Figure 4, there exists a different behavior in fundraising activity between buy-out funds and the rest of the industry. Focusing on the last year, characterized by the macroeconomic environment described in section 2, the overall decrease in fundraising was almost entirely attributable to funds other than buy-outs[3], which instead remained resilient to the impact of negative economic factors. Since the increase in interest rates at the end of Q1 2022, buy-outs funds registered a quarterly increase of 4%, while other types of funds experienced a much stronger decrease (-14% on a quarterly basis).

[3] Funds "Other than buy-outs" include Balanced Stage, Core, Energy, Early Stage, Fund of Funds, Later Stage, Mezzanine Stage, Opportunistic, Other PE/Special Situations, Generalist, Seed Stage, Secondary Funds, Turnaround/Distressed Debt, Value-Add, Non-PE Fund Investor, according to Refinitiv.

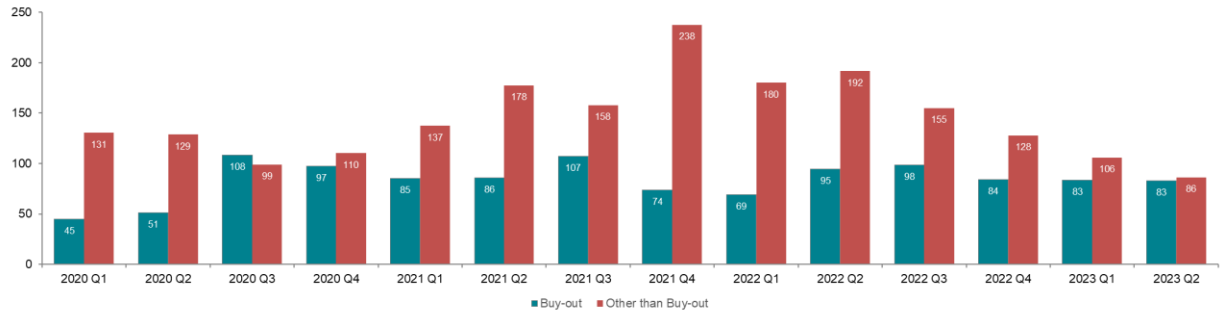

Figure 4: Comparison in Fundraising by type of funds – $bn (Source: Refinitiv)

One explanation for the resilience of buy-out can be found in the size of such funds. As already mentioned in subsection 3.2, the decrease in fundraising levels in the past year has also been characterized by a concentration of capital towards bigger and more affirmed PE firms, with funds above $5 billion increasing fundraising by +51% in 2022 year-over-year, while fundraising for funds below $1 billion declined by -31% (McKinsey, 2023).

The pressure on LPs in committing new capital in a similar environment is even higher in light of the substantial inflow of capital to PE in the last years; in addition to the amount committed, the velocity to which such capital was provided is also relevant, with an average period between successive funds going from 5.5 years in 2014 to 3.2 in 2022 (Bain & Company, 2023). Initially, this was acceptable as long as GPs could recycle a constant amount of capital by maintaining high Distributions to Paid-in-Capital (DPI) levels. However, as exits slowed down considerably in 2022, GPs had to decrease distributions, which created new liquidity problems for already stretched LPs. Consequently, they were unable to make further commitments until cash flows improved. In a similar downturn scenario, LPs will probably witness buyout funds holding onto numerous companies for additional years. However, given the uncertain nature of the situation, it is challenging to determine the extent of this impact.

Finally, the denominator effect (analyzed in sub-sections 2.3 and 5.2) plays a significant role in this situation, where drops in public equity valuations cause private equity allocations in LP portfolios to appear disproportionate.

Given all these factors, the pace of fundraising is unlikely to improve anytime soon.

4.2 M&A market as the key driver of the spiral

This subsection focuses on M&A activity, in particular with reference to sponsored buy-outs deals. Maintaining a strong momentum of M&A transactions is vital for the sustained success of private equity activities, encompassing various stages from financing to exits. This is primarily because a thriving M&A environment serves two crucial purposes for fund managers. Firstly, it allows them to demonstrate their ability to effectively deploy the committed capital, assuring their limited partners of the fund's competence. Secondly, it fosters increased competition for portfolio companies, leading to potentially higher exit multiples and subsequently increasing the capital returned to LPs. Furthermore, from a relational standpoint, a dynamic M&A activity enables general partners to sustain valuations at levels that justify the valuations of the other portfolio companies to their LPs. However, when transactions become scarce or valuations decline, fund managers encounter difficulties in explaining why assets in their portfolios are not being marked down. This predicament arises from the conflicting dynamics of desiring higher valuations for exits while seeking to acquire assets at lower multiples.

Figure 5 shows the effect of the already mentioned contraction of the private equity market on the quarterly buy-out deal volume and count. As for the other PE indicators presented in the thesis (i.e. fundraising levels, exits, returns), the second half of 2022 was characterized by a sharp decline in both the number and the volume of transactions. In particular, buy-out deal volume decreased by about 76% between Q2 and Q3 2022, and even further in the last three months of the year (reaching $17bn in Q4 2022 - the lowest level recorded since Q2 2020).

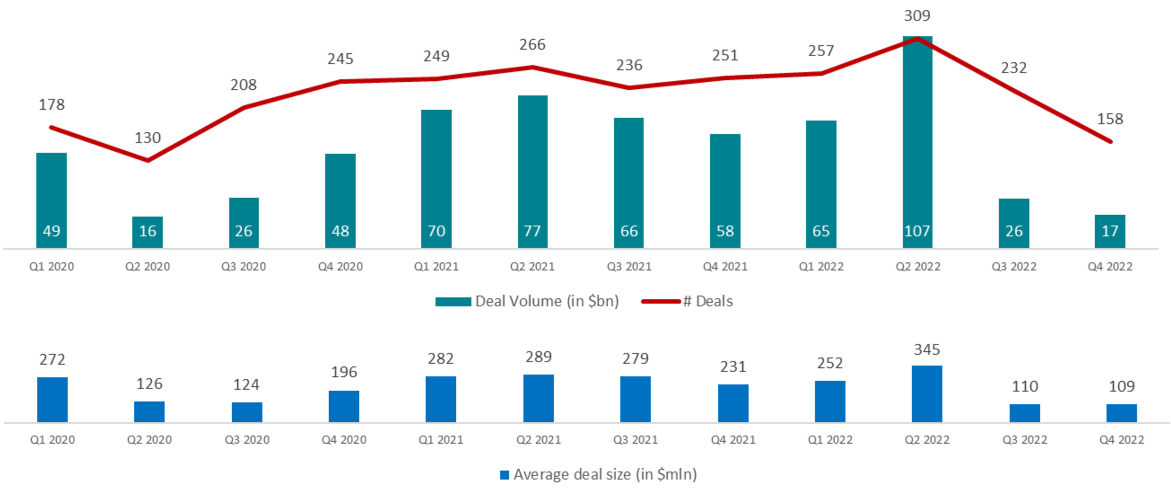

Figure 5: Financial Sponsor Buy-out activity 2020-2022 (Source: Dealogic)

In the current landscape of the industry, with the state of the financing market that does not allow for sizeable M&A transactions, fund managers are focusing primarily on bolt-on acquisitions. These acquisitions involve acquiring smaller companies that complement existing portfolio companies in order to enhance financial performance and position them strategically for future exits when macroeconomic conditions become more favorable. In the second chart of Figure 5, we can appreciate numerically the effect of an increased number of bolt-on acquisitions which drastically reduced the average deal size in the second half of 2022. As reported by Bain & Company (2023), in 2022 add-ons made up for 72% of all North American buyout transactions, an increase of 7 percentage points with respect to the 2017-21 average.

For what concerns valuations, EBITDA multiples show a different behavior based on the geographies analyzed. In the US the average multiple for leveraged buy-outs transactions showed an increase in 2022 (reaching 11.9x), while European transactions started experiencing signs of declining valuation, with the EBITDA multiple decreasing from the peak touched in 2020 to 10.7x in 2022 (Bain & Company, 2023).

On a positive note, the expectations for the following months are positive despite the activity slowdown experienced since the second half of 2022. In a survey conducted by Norton Rose Fulbright (2023), 58% of respondents in the US and Canada affirmed to see the abundance of private equity dry powder as one of the leading factors driving M&A activity, indicating that private equity is prepared to utilize its available resources. In addition, another survey performed by Baker Tilly (2023) evidences how attractive valuations will be the key driver of investment decisions in the next 12 to 24 months, with 86% of the professionals interviewed mentioning it as a relevant factor for the near future.

4.3 The reaction of the market: listed PE funds' valuations

The detrimental effect of the factors described in the previous sections on Private Equity firms can be appreciated by analyzing the performance of PE-listed stock since the beginning of 2022. Figure 6 represents the price per share of the four main listed PE firms and the S&P500, used as a reference. Prices are normalized at $100 per share on 1 January 2022, so that the effect of the monetary policy in the second half of the year on the different stocks is more evident. The potential spiral which is affecting the industry is captured by market expectations; as a result, we see that since the beginning of 2022, all the firms analyzed have decreased their market value. In particular, Blackstone, KKR, and Carlyle traded below the reference public index throughout 2023, losing respectively 30%, 31%, and 47% of their value since the beginning of 2022. These data seem to contrast with the findings reported in subsection 3.4, according to which private markets experienced more resilient results than public equities in the second half of 2022. However, this was true considering both listed and unlisted, justified by the fact that private equity valuations are slower to adjust to market conditions, decreasing later during downturns. If we move the focus to listed PE, the market price is affected by the expectations of investors on the future dynamics of fundraising and M&A opportunities rather than the fair value of the current investments, since these factors are able to affect the PE firms in the long run.

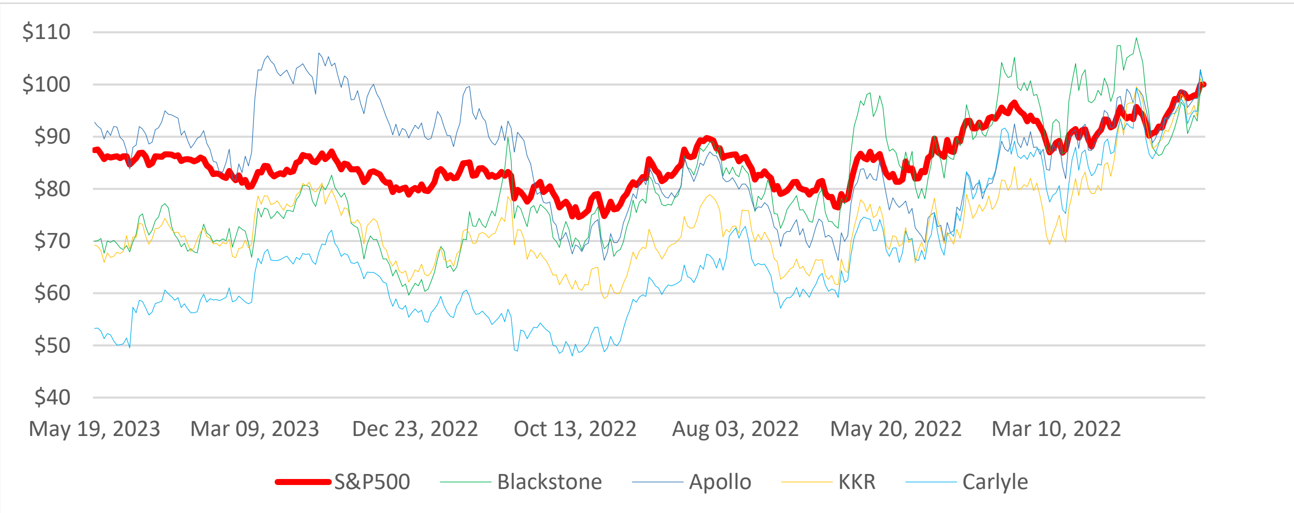

Figure 6: Normalized Market Prices of main Listed PE firms vs. S&P (Source: Yahoo Finance)

The key reason behind the drop in the value of private equity firms registered on the market is linked to the expectations on management fees. The two most relevant components of private equity revenues are management fees and carried interest. While the second is linked to the performance of the fund managers' investments and their ability to exit the portfolio companies, which depends on a number of factors, management fees are less volatile. In fact, management fees primarily depend on the Asset under Management (AuM) of the PE firm and constitute therefore a more stable source of revenue for the funds, a feature which is highly appreciated by the market. As can be noted in Figure 7, management fees represent the key source of income for the funds especially in periods of market downturns, when the carried interest component tends to decrease. In 2022, despite the relatively weak performance of investments with respect to the previous year, with carried interest decreased by 62% on average among the 4 listed PE firms analyzed, management fees experienced a +7% increase, becoming the primary source of revenue on average. The increase is attributable to the fact that PE funds were able to increase their overall asset under management, even though at a lower growth rate with respect to the historical average. However, the slowdown in fundraising combined with the dynamics of the PE spiral endangers this solid and recurrent income for private equity. If the M&A activity continues to be limited, funds will not be able to return the capital to their investors. As a consequence, LPs will stop committing new capital to those funds, therefore reducing assets under management over time. The impact on stock prices is immediate, as expectations for future collections of management fees also decrease the expected cash flows in the future years decline, causing an inevitable contraction of market valuations.

Management Fees	2021	2022	Change
Blackstone (Private Equity)	1,521	1,787	17%
KKR (Asset Management)	967	1,188	23%
Carlyle	1,668	2,030	22%
Apollo (Asset Management)	1,921	1,503	-22%
Average	*1,519*	*1,627*	*7%*

Carried Interest	2021	2022	Change
Blackstone (Private Equity)	2,263	1,191	-47%
KKR (Asset Management)	1,639	1,870	14%
Carlyle	6,085	1,328	-78%
Apollo (Asset Management)	3,699	796	-78%
Average	*3,422*	*1,296*	*-62%*

Figure 7: Management Fees and Carried Interest of listed PE firms in $ million (Source: Annual Reports)

4.4 The GP-LP relationship risks following the spiral

The Private Equity industry is based on the mutual trust between the fund managers and their investors. During positive times for the industry, when the fund managers are generating good returns for their LPs, the agency relationship works smoothly, with the GP managing the operational aspects as agent while the LP focuses on general strategy or soft monitoring activity. However, the current spiral of the private equity industry poses several risks to this relationship, which can potentially undermine mutual trust and the operational dynamic.

There are a number of topics that the declining performance of the PE industry can alter with respect to the normal development of private equity activity. One key area affected is the pressure faced by fund managers to generate favorable returns and identify attractive investment prospects. This pressure is heightened by the current state of the financing and M&A market, which presents challenges in finding lucrative opportunities for the funds. Consequently, general partners may resort to pursuing riskier investments or inflating valuation multiples in order to sustain performance levels. Unfortunately, this approach can lead to subpar returns or even losses for limited partners. The GP's return structure, resembling that of an option, further encourages such risky behavior, especially when opportunities are scarce. Ultimately, this underperformance strains the relationship between GPs and LPs, eroding the trust that is vital in this partnership.

Another aspect of the relationship that declining PE performance can affect, creating friction between GPs and LPs, is the fee structure. While the customary management fees are usually fixed at approximately 2% of the total committed capital, intended to cover the fund's operational expenses, certain LPs have expressed skepticism regarding the substantial magnitude of these fees. They question whether they truly align with the actual costs incurred and the value delivered by GPs. The growing size of private equity funds has further heightened concerns surrounding fee levels, especially when GPs require charges on capital that remains uninvested. As long as the level of exits remains low and capital will not be returned to investors, it will be difficult for GPs to justify the same rate of management fees computed on such a huge amount of uninvested capital.

Historically, the private equity industry has been characterized by a lack of transparency and limited sharing of information. However, there is now a growing emphasis from limited partners on the importance of transparency, leading to increased demands for more detailed reporting. LPs are seeking comprehensive information to effectively evaluate the performance of their investments and understand the associated risks, especially in the face of a challenging market environment where PE performance is on the decline. General partners who fail to provide timely and thorough updates may encounter heightened scrutiny and a sense of mistrust from LPs. This lack of transparency poses a significant challenge for LPs in accurately assessing the performance of GPs. As LPs actively pursue clarity and open communication, the declining PE market further emphasizes the pressing need for improved transparency practices within the industry.

I briefly mention the issue of fundraising in the current environment in addition to what has already been presented in sub-section 4.1. With a decrease in available capital for private equity funds, LPs adopt a more discerning approach, leading to challenges for fund managers in raising funds. This becomes particularly evident when GPs have a history of underperformance or when there are new joiners of the industry with no or limited track record. LPs meticulously examine investment strategies and the alignment of interests before committing their capital and, in a difficult environment as the one the industry is experiencing and is expected in the near future, they will be inclined to go with the more experienced managers and firms. In such a strained fundraising environment, GPs are subject to heightened pressure, which can potentially strain their relationship with LPs.

Finally, there are regulatory and compliance risks associated with the private equity industry, as it operates within an ever-changing regulatory landscape that faces increased scrutiny from regulatory bodies worldwide. Adhering to regulations, such as reporting obligations, anti-money laundering laws, and considerations for ESG factors, has become increasingly vital. Failing to meet these obligations can lead to reputational harm and legal consequences, which in turn can negatively impact the relationship between general and limited partners. One example of such risks is the growing presence of the secondary market, driven by the rise in GP-led transactions. This trend creates potential opportunities for opportunistic behavior by fund managers. In GP-led secondary sales, a continuation fund is established and managed by the same GP, granting him significant discretion over the selection of assets to transfer and their valuation (Mason and Utke, 2023). Consequently, there can be a disparity in the treatment of LPs who choose to invest in the continuation fund compared to those who opt for liquidity. Exiting LPs may receive lower returns compared to standard exits or investing in the continuation fund, given that assets are often sold at a discount. In light of this, transparent communication between the fund manager and each limited partner becomes crucial to align the interests of all parties involved. Recognizing the need for transparency and the increasing prevalence of GP-led secondary transactions, the Securities and Exchange Commission has raised the level of disclosure required in such transactions, for instance requiring a fairness opinion from an independent provider (Securities and Exchange Commission, 2022).

4.5 A sector resilient to the spiral: sustainable investing

In the previous sections, I have already described how the downturn of the Private Equity industry is characterized by some exceptions. For example, the largest private equity firms were able to increase the capital committed to their funds in a declining fundraising environment (subsection 3.2), and the fact that buy-out funds proved to be more resilient compared to all the other fund types in the last year in terms of fundraising amounts (subsection 4.1).

Amidst the challenging landscape described in this thesis, one notable exception that stands out is the ESG and sustainable investment sector. Despite the complexities, this sector managed to thrive in recent years. Notably, impact funds have gained prominence, leveraging Environmental, Social, and Governance considerations to craft strategies that drive positive change, surpassing mere compliance with ESG regulations and practices. Unlike traditional ESG investments, impact investing is sector-agnostic, focusing on creating positive impacts across all industries it ventures into. This approach seeks transformative change, going beyond the status quo to address pressing global challenges. The remarkable success of sustainable and impact investments is further buoyed by the shift in political stances towards green policies. Both the US and EU have adopted measures to support financing initiatives in sustainable and clean energy domains, providing a conducive environment for the growth of these ventures. The most relevant effort was made by the European Commission (2020), which in its "Sustainable Europe Investment Plan" dedicated at least €1 trillion in investments over the 2021-2030 period, mainly coming from the EU Budget (€503bn), Private and Public investment guaranteed by the Invest EU Fund (€279bn), the Just Transition Mechanism (€143bn), national co-financing (€114bn), and the Innovation and Modernization funds (€25bn). On the other hand, the US government has recently redacted the Inflation Reduction Act, which aims at supporting jobs in the clean energy industry. In particular, the US Department of the Treasury (2022) will invest $369 billion to build a clean energy economy, resulting in the most significant legislation to incentive climate change in the history of the United States. As a result, in 2022 ESG fundraising in private equity reached a record level, with funds that include ESG investment policies increasing total committed capital by 66 percent with respect to the prior year (McKinsey, 2023). This outstanding achievement was driven also by the creation of funds that are exclusively dedicated to impact investments, in line with the 2050 agenda. In particular, we find many large PE firms which decided to raise funds specifically dedicated to climate change investments. The largest was TPG Rise Climate, which closed in April 2022 having collected total commitments of $7.3 billion, while other recently closed funds in this sector are the General Atlantic's Beyond NetZero $3.5bn fund, and the KKR Global Impact $1.9bn fund (Hamlin, 2023b).

As reported by McKinsey (2023), the ESG-focused Assets Under Management surpassed $100 billion for the first time in 2022, exhibiting a remarkable year-over-year growth of 35% over the past decade. Moreover, ESG-driven private markets fundraising in 2022 proved to be exceptionally robust, reaching a staggering threefold increase compared to the capital raised in 2020, as highlighted by Prequin (2023b).

This upward trajectory in ESG-oriented investments extends to dealmaking trends as well. While the overall M&A activity in the Private Equity industry witnessed a substantial decline of -26% year-on-year in 2022, a contrasting picture emerges when focusing solely on climate tech deals. These investments experienced a positive surge, climbing from $183 billion in 2021 to $196 billion in 2022, indicating a significant 7% rise in climate tech deal volume (McKinsey, 2023).

After this comprehensive review of the LP-GP relationship topic affected by the current PE environment, in the next section I will analyze two specific circumstances related to the agency problem arising from the downturn of the economy and the financial markets.

5. Agency Problem during Downturns: Asset Markdown and Denominator Effect

The private equity industry faces significant risks arising from the macroeconomic environment and the state of the financing market, particularly impacting the delicate balance between limited and general partners. In this context, the latter half of 2022 introduced an intriguing dynamic between these two parties, warranting further analysis. The current economic scenario has magnified the importance of two critical phenomena that define the relationship between fund managers and investors, providing a fresh perspective on agency dynamics.

Section 5.1 delves into the first phenomenon, elucidating the valuation techniques employed by fund managers to evaluate portfolio companies. Consequently, as fair values fluctuate, the need to markdown these assets become pronounced. This aspect sheds light on the complexities and challenges fund managers face in accurately assessing and managing the value of their investments, influencing the overall performance of the fund, and shaping the LP-GP relationship.

Section 5.2 explores the Denominator Effect, triggered by the declining valuations in public markets. This phenomenon profoundly impacts the allocation strategy and behavior of Limited Partners towards their fund managers. As public market valuations diminish, LPs may find their portfolios disproportionately weighted towards private equity, prompting strategic adjustments to rebalance their investment allocations and mitigate potential risks.

Understanding and analyzing these phenomena within the LP-GP relationship is of utmost importance in navigating the current economic landscape. Fund managers must strike a delicate balance between maximizing returns for their investors and prudently managing the fair value fluctuations of their portfolio assets. Meanwhile, Limited Partners must carefully reassess their investment strategies and risk tolerances to ensure alignment with their financial goals in the context of the evolving market conditions. As the private equity industry continues to adapt to the dynamic macroeconomic environment, the exploration of these phenomena offers valuable insights for investors, practitioners, and stakeholders. By comprehending the intricacies of the LP-GP relationship and its responses to changing economic dynamics, the industry can navigate uncertainties and capitalize on opportunities to foster sustainable growth and long-term success.

5.1 Fair value and asset markdown in private equity

An aspect of private equity that is often disregarded is the management and the valuation of the portfolio companies within a PE fund. After having closed the deal, there is a substantial amount of work required to develop the investments of the fund, and a part of this work is linked to the reporting to the limited partners on the performance of such companies. In this context, a key topic consists in the fair valuation of the assets held in the portfolio, which enables LPs to monitor their investments and have an idea of the potential return of the illiquid assets they hold through the fund.

The practice of PE portfolio companies' valuations follows the guidelines issued by the International Private Equity and Venture Capital (IPEV) and the Institutional Limited Partners Association (ILPA). The IPEV is an entity specifically dedicated to providing guidance on the best practices to adopt in the context of private equity valuations. On the other hand, the ILPA is an association with more than 515 members including the world's largest pension funds, endowments, foundations, and insurance companies representing over $2 trillion USD of private equity assets under management (ILPA, 2019). ILPA periodically releases its principles to foster transparency, governance, and alignment of interests between general and limited partners and, within such principles, we find the best practices to determine the fair value of illiquid PE assets.

The IPEV (2022) describes in detail the topic related to the fair valuation of private equity portfolio companies. In particular, I mention the aspect of these valuation guidelines that I believe to be more relevant with respect to the potential moral hazard of the fund manager. In fact, the guidelines allow for a number of different market approaches to perform the valuation. The methodologies which are mentioned are numerous, namely Multiples Approach, Industry Valuation Benchmarks, Available Market Prices, Income Approach, Discounted Cash Flows, Replacement Cost Approach, and Net Assets (IPEV, 2022). Each of these methodologies has its own peculiarities that, combined with different underlying assumptions, can lead to a wide range of valuation outcomes. In addition, even within the same methodology, different assumptions can impact the result of the fair valuation. I report below the IPEV guideline relative to the application of the multiples approach to exemplify the degree of discretion embedded in the valuation.

> *"When using the comparable company multiple approach, the Valuer must identify an appropriate set of publicly traded comparable companies to the Investee Company. The best comparable company available may be a direct competitor, in the same industry, or have similar performance metrics"*
>
> *International Private Equity and Venture Capital (2022)*

The fact that the comparables companies should be identified among competitors or in the same industry as the Investee Company allows experienced fund managers to select the comps that better serve the valuation. In this regard, the guidelines introduce the topic of Calibration, which can act as a mitigant to the discretionary power of GPs on valuation assumptions. This practice validates the valuation technique used by ensuring that the fair value at each measurement date is assessed with the same assumptions and updated market data the original investment was based on (IPEV, 2022). Applied to the multiples approach, calibration ensures that the same comparables chosen in the context of the acquisition are used for the fair valuation in each measurement date, in the absence of changes that should be motivated by the GP.

On the other hand, the Institutional Limited Partners Association defines more general rules of good behavior oriented to maintain a transparent relationship between GPs and LPs, which include the reporting of valuation methodologies to the auditors and the partnership and the periodic disclosure of portfolio companies' information in accordance with the ILPA Portfolio Company Metrics Reporting Template (ILPA, 2019).

As can be understood from the guidelines reported above, the valuation of private equity assets is a practice that requires a high degree of discretion, even more than the usual valuation techniques used for public equities. The extent of the GP's judgment derives from the different choices and assumptions the valuation is based on, including the set of comparables used and the assumption of long-term growth, which can drive most of the value.

Jenkinson and Stucke (2013) have identified such discretional power of GPs in two different circumstances; firstly, the authors explain that the biggest impairments to fair valuation of PE portfolio companies by fund managers happen during the fourth quarter of the year, which is the time when funds are audited. This situation testifies to how GPs try to stretch the valuation guidelines during the year to avoid communicating to the LPs a reduced value of their investments until they are obliged to do so. Secondly, there exists a significant correlation between the inflation of portfolio companies' valuations by GPs and the fundraising period (Jenkinson and Stucke, 2013), signaling the possibility for PE managers to voluntarily inflate performance that is not yet finalized with an exit. This last aspect analyzed collocates within the "window-dressing" practices described in section 2.2 which GP can adopt during fundraising, constituting an opportunistic behavior with respect to their principal (the LPs) who have an information asymmetry compared to the fund managers. A mitigant to the potential opportunistic behavior by the GPs is represented by the fact that historically fund managers have been extremely conservative in their portfolio companies' valuations with respect to the effective exit value. In fact, in the past ten years, exit values exceeded the last quarterly valuation by almost 70% of the time (Bain & Company, 2023 - analysis of Burgiss data).

The link with the current private equity downturn is the fact that, when the market declines and capital is not returned to the LPs, they start focusing on the valuation techniques used by fund managers, increasing the level of scrutiny to safeguard their investments. Limited Partners can then start challenging the hypothesis employed by fund managers to understand whether their investments are performing as disclosed by the fund.

5.2 Denominator effect and LPs' allocation strategies

Sub-section 5.2 deals with the origin of the already mentioned denominator effect and the impact it has on Limited Partners, describing the options they have to solve the allocation issue which arises.

Figure 8 shows how the denominator effect has become increasingly relevant during 2022, focusing in particular on the second half of the year due to the interest rate environment which negatively affected public markets. Given the limited availability of data in the PE industry, the extent of the effect also captures the reference index used for the private market; in this case, figure 8 reports the comparison between the Prequin Private Equity index and a reference public index, specifically the S&P 500.

The PE index reflects the average returns achieved by investors in their private capital portfolios, taking into account the actual capital invested in the funds (Prequin, 2023a). Specifically, starting from a fixed point (e.g. normalization at 100 in March 2021, as in Figure 8), it computes the quarterly change by dividing the NAV at the end of the quarter plus the distributions during the period for the initial NAV plus the capital called in the quarter.

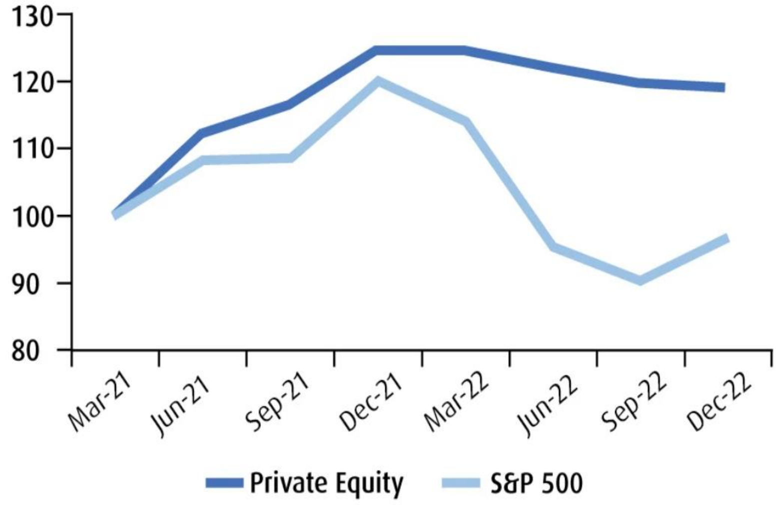

Figure 8: Prequin Private Equity Index versus S&P 500 comparison (Shell, 2023)

The lag between public and private valuations can be linked to the higher control of fund managers on their portfolio companies' valuations compared to the public equity valuations, which are completely dependent on market sentiment and are therefore more volatile. In fact, the Net Asset Value is derived from the quarterly disclosure of PE funds to their LPs and, as a consequence, is more resilient than S&P 500 or other public indexes due to the willingness of GPs to avoid mark-downs as long as they can, leveraging on the flexibility offered by the valuation guidelines. According to this view, is the opportunistic behavior of fund managers, in particular during economic downturns, the reason behind the denominator effect. This is a key issue for the agency relationship because the actions of the GPs boost the Denominator Effect and generate an allocation issue for LPs, who then need to implement countermeasures. Faced with the problem of an increased allocation towards the private equity asset class, limited partners can either reduce their allocation or accept to have an exposure to PE higher than their target.

Pitchbook (2022) describes the different strategies LPs can adopt in relation to private equity allocation; in particular, it simulates the actual PE allocation based on historical data of three different investment strategies: fixed allocation, tactical allocation, and forecasting allocation. The strategies differ by the way commitments to private equity are made: fixed means that the commitment schedule is determined a priori regardless of the PE allocation relative to the target, while the tactical and forecasting scenarios imply an adjustment. In particular, the tactical scenario modifies the commitment schedule based on the gap with the allocation target at the end of the year whereas the forecasting one use the expected cash flows in future years and calibrates commitments to the forecasted allocation (Pitchbook, 2022). The study shows that, as to be expected, the fixed strategy is the one that performs worse in terms of average deviation from the target PE allocation in the simulations run on historical data from 2000 to 2022 (Pitchbook, 2022). On the other hand, the forecasting strategy is the one that allows to reach the desired target allocation quickly while ensuring a deviation from the target which is comparable to the tactical strategy.

The Limited Partners who decide to decrease their allocation to private markets have two options. The first is to stop committing new capital to private equity funds, so that over time, when distributions to investors are made, the investment in PE gradually reduces, going back to the target level. However, this mechanism requires time, especially considering that a depressed public market decreases valuations, making it more difficult for GPs to exit companies at satisfactory IRRs and therefore reducing the amount of capital returned to LPs. This first practice results slower, in particular as a response to the denominator effect which verifies specifically during market downturns.

The second option for LPs is to use the secondary market for private equity commitments to sell partially the investments in private equity. The categorization of secondary transactions can be based on whether the LP or the GP takes the lead. In an LP-driven transaction, an LP transfers its obligations in a fund or a group of funds to a secondary purchaser. The secondary buyer assumes the departing LP's remaining capital commitments, along with their share of the fund's current investments and future returns (Morgan Stanley, 2022; Mason and Utke, 2023). On the other hand, in a GP-led transaction, an asset or portfolio company is transferred to another entity known as a continuation fund. This transfer enables access to additional capital and extends the timeframe for implementing value-creation strategies (Morgan Stanley, 2022; Mason and Utke, 2023). In the case of a secondary sale that arises from the Denominator Effect and the need for the Limited Partner to rebalance the allocation, the transaction will be LP-led. The interplay between supply and demand of PE commitments, primarily driven by the Denominator Effect, determined a strong decrease in prices in 2022 due to an abundance of motivated sellers coupled with a limited number of buyers available to absorb the inventory (Shell, 2023). As can be noted in Figure 9, 2022 has been characterized by a significant drop in the purchase price for secondary transactions compared to the respective Net Asset Value. In particular, both buy-out and venture secondary transactions experienced a drop of about 10% in this ratio, reaching their lowest level in the last 6 years (respectively 87% and 68%).

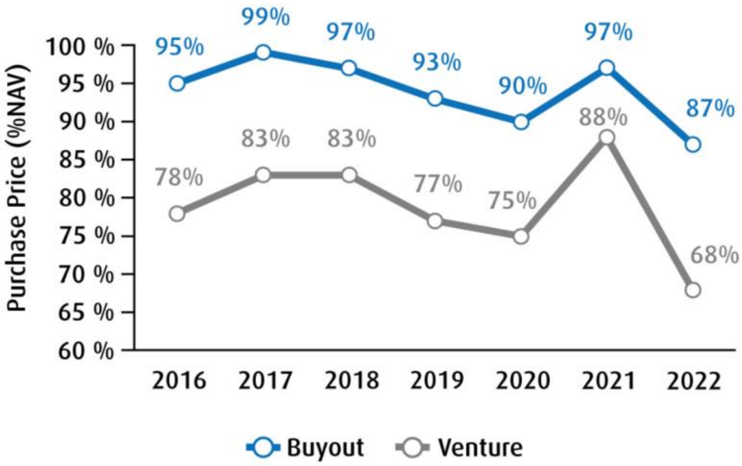

Figure 9: Secondary Prices relative to Net Asset Value (Shell, 2023)

Based on the provided data, the following two key conclusions can be drawn. Firstly, the decline in the purchase price to net asset value ratio during 2022 compared to recent historical levels serves as additional evidence supporting the notion that fair valuations have become less reliable following the economic downturn. Despite the conservatism in GPs' valuations of portfolio companies registered in the past years (Bain & Company, 2023), testified also by the high percentages of buy-out secondary transactions from 2016 to 2021, the decrease in secondary prices suggests that fund managers have recently started adopting an opportunistic behavior with respect to their LPs to maintain fair valuations high. This finding aligns with the perspective presented by Shell (2023), where it is noted that certain observers have inferred the presence of inflationary tendencies in valuations for private assets.

A second noteworthy conclusion can be drawn, emphasizing the role of secondary markets in bridging the gap between public and private markets and potentially, alleviating the denominator effect. When public markets experience a decline, limited partners tend to seek ways to rebalance their portfolios by reducing the allocation to private markets. This increased demand for secondary transactions creates a closer correlation between the two markets and enhances the reliability of private equity fair valuations to some extent. It is important to ensure that secondary transactions occur at levels consistent with the net asset value declared by fund managers, as any significant deviations warrant heightened scrutiny from limited partners. Notably, this mechanism also functions as a monitoring tool for assessing the behavior of general partners.

In this context, the expansion of secondary markets has the potential to increase liquidity within the private equity industry, addressing the historical issue of illiquidity that has been associated with this asset class. Moreover, enhanced liquidity brings forth greater transparency in valuations, reducing information asymmetry and diminishing the disproportionate power held by GPs.

6. Conclusions

6.1 General Conclusions

The dissertation aims to provide an extensive exploration and comprehensive analysis of the complex and intricate dynamics that exist within the relationship between fund managers and their investors. This multifaceted relationship encompasses a wide array of factors, incorporating both financial elements, such as remuneration and returns, and more nuanced aspects that revolve around human interactions and relational dynamics. It is within the context of the agency framework that these human elements gain significant prominence and capture the interest of researchers and industry professionals alike. The primary objective of this thesis is to offer a detailed description and assessment of how the current state of the private equity industry is affecting this crucial relationship. Consequently, a substantial portion of the research and analysis conducted is predicated on an understanding of the potential future evolution of the market in the foreseeable future.

The outlook for private equity is inextricably intertwined with the broader trajectory and development of the financing market, with a specific emphasis on the leveraged loans market. Consequently, any future advancements, progressions, or transformations within the industry are inherently contingent upon the evolution of key macroeconomic variables. Factors such as inflation and interest rates play a pivotal role in shaping the future landscape and growth potential of the private equity market. Therefore, it becomes imperative to exercise vigilant control and careful monitoring of the spiraling effect that is currently exerting its influence on the private equity industry. Failure to mitigate the potential disruptive impact of this spiraling effect could have far-reaching consequences for the industry as a whole, particularly in the face of these challenging market conditions.

In an environment marked by high inflation rates and elevated interest rates, private equity funds are compelled to explore potential countermeasures and strategies that can help them navigate and withstand turbulent conditions. A possible avenue of exploration lies in identifying sectors that have proven to be remarkably resilient consequences of the aforementioned spiraling effect, effectively avoiding a uniform impact across all participants in the private equity industry. Among these exceptions, the largest funds and buy-out funds demonstrated a remarkable ability to maintain or even augment their fundraising levels despite the formidable obstacles presented by the challenging environment. Moreover, investments focused on addressing the pressing issue of climate change, which have been gaining traction and momentum in recent years, displayed a remarkable capacity to withstand the negative consequences of the spiraling effect. This observation holds significant implications, as it underscores the notion that although the challenging environment affects all funds, there exist certain players and strategies that possess the capability to outperform the overall market. These findings provide valuable insights and potential strategies that can be adopted by the rest of the market to enhance their performance and resilience.

Finally, in an environment characterized by relevant challenges, the issue of asset valuation assumes paramount importance within the relationship between general partners and limited partners. The meticulous process of asset valuation, with its inherent intricacies and complexities, becomes a critical point of contention and debate. Specifically, the deliberate and strategic delay in updating valuations by GPs, driven by a desire to defer markdowns for as long as possible, creates a notable disparity between public and private valuations. This disparity, in turn, engenders what is commonly referred to as the denominator effect. The repercussions of this opportunistic behavior are far-reaching, extending beyond the mere financial realm and permeating the very fabric of the relationship between general partners and limited partners. Consequently, this relational issue prompts limited partners to adopt a more rigorous and intensive monitoring approach, aimed at safeguarding against potentially deleterious behaviors that could undermine the integrity and stability of the partnership.

6.2 Future Research

Over the course of this thesis, we have examined several key areas within the private equity industry that have the potential to reshape its landscape in the coming years. By exploring these topics, we can gain a deeper understanding of the challenges and opportunities that lie ahead and identify potential avenues for future research.

during previous industry downturns. Notably, these sectors managed to evade the adverse

The first topic is the valuation techniques used by fund managers, which have been a focal point of this thesis. In public equities markets, equity research is readily available, and different viewpoints help offset biases, resulting in relatively fair valuations. However, the private markets operate with a lower level of transparency, requiring a higher level of attention and study. Achieving a balance between the inherent flexibility of valuation practices and the need for limited partners to receive reliable information from their fund managers is crucial. Further research should focus on refining valuation methods specific to private markets, ensuring transparency and accurate information for LPs. By enhancing reporting standards and exploring innovative valuation approaches and market practices, we can promote greater trust and confidence in private equity valuations.

Another area with significant potential to reshape the industry is the opening of the limited partners' pool to new types of investors. Traditional fundraising models face limitations, considering the substantial amounts of capital already committed by LPs but remaining uninvested due to limited market activity. In response, opening the industry to new investors, including high-net-worth individuals and retail investors, could provide fund managers with an alternative source of financing. This shift has two main consequences that warrant further exploration.

Firstly, the potential democratization of private equity is a pivotal outcome of this shift. Historically, the industry has been dominated by a select few players operating on both the LP and GP sides. However, the emergence of crowdfunding platforms, such as Moonfare, has democratized access to private equity investments, offering retail investors an alternative to public markets. Investigating the impact of these platforms on the industry and their influence on the day-to-day operations of funds would be a fascinating avenue for future research. Additionally, this increase in the universe of limited partners will radically transform the relationship between fund managers and investors. While these new platforms will also serve as intermediaries between retail investors and funds, the communication and disclosure processes will still be revolutionized with respect to traditional LP-GP relationships. Understanding the implications of this evolving dynamic and its effects on investor-manager interactions is vital for navigating the changing landscape of private equity.

Lastly, the role of secondary markets in the private equity industry merits further analysis. Traditionally, private equity has been associated with illiquidity, with private and illiquidity becoming inseparable characteristics. However, the expansion of secondary markets offers opportunities to increase liquidity within the industry. This practice allows for the trading of private equity assets, enabling LPs to manage their portfolios and address the denominator effect during market downturns. Additionally, the increased number of secondary transactions has the potential to enhance transparency. As ownership changes become more frequent, the information asymmetry among investors and managers decreases, potentially improving market efficiency. Investigating the impact of secondary markets on liquidity, transparency, and overall market dynamics would provide valuable insights into the transformative potential of this practice.

In conclusion, the private equity industry is undergoing significant changes, necessitating ongoing research and analysis to inform future developments. The change that the industry will have to accept in order to face the current challenges will require changes in the structure of the industry itself. By delving deeper into these areas, we can better comprehend the complexities of private equity, address existing challenges, and pave the way for a more robust and inclusive industry.

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8. Introduction

This thesis collocates within the larger topic of the agency problem in the Private Equity industry I have presented in my Bocconi Master's thesis. Specifically, the key idea of the Bocconi thesis is to analyze, using the Agency Theory[4] as a framework, how the difficult macroeconomic environment has damaged the relationship between investors (the Limited Partners) and fund managers (the General Partners). In the past, the agency problem in Private Equity was represented by opportunistic behaviors of the GP determined by the misalignment of interest, and the context of high inflation and high interest rates has worsened this situation[5].

I propose the practice of co-investments, wherein LPs directly invest alongside GPs in specific deals (Braun et al., 2020) as a possible solution to the problem presented in the Bocconi thesis, particularly in the troubled macroeconomic scenario which characterized the past two years. Co-investments have opened new avenues for LPs to actively engage in investment decision-making, align their interests with GPs, and potentially achieve superior risk-adjusted returns (Braun et al., 2020). Among the other advantages, this instrument presents a potential solution to the tension arising from increasing management fees charged by GPs, an issue that is relevant in the context of decreasing PE returns and mega funds raised just before the beginning of the industry crisis[6]. Due to this industry trend, Limited Partners found themselves paying increased management fees on an asset class that stopped performing as it did in the past. By participating directly in individual deals, co-investments allow LPs to reduce relative management fees while maintaining exposure to the asset class. This approach can alleviate concerns about the rising cost of investing in private equity funds and foster a more equitable relationship between LPs and GPs. This thesis aims to explore the role of co-investments in such relationship by examining the benefits, challenges,

[4] The Agency Theory was defined by Jensen and Meckling (1976) and is typically used in academia to describe the agent-principal relationship. The most common application of the theory is the potential conflict arising between the top management and the shareholders of a company and it aims at defining an alignment of interest between these two parties.

[5] Some examples of agency problems in the PE industry are the risk-taking approach of the GP (Buchner and Wagner, 2015), the window dressing practice (Barber and Yasuda, 2017), and the hold-up problem (Ljungqvist, 2022) - more detail on this topic are provided in Section 9.

[6] In 2022 the Private Equity asset class posted the first negative performance for the industry since 2008, while in 2021 PE registered the largest amount of fundraising ever (McKinsey, 2023).

and potential solutions associated with co-investments. The research seeks to provide valuable insights into the dynamics and implications of this investment strategy, also highlighting the upside they have in increasing the collaboration and trust between LPs and GPs within the agency framework. Furthermore, it highlights potential concerns regarding the fairness of the current co-investment practice as co-investments increase in number and size. This underscores the imperative to promote transparency and ensure the equitable distribution of investment opportunities, a fundamental principle that the Private Equity market must uphold.

The thesis is structured as follows: in Section 9, a comprehensive review of the relevant literature is presented, focusing on papers that for the first time in dealt with the Agency Problem within the private equity framework; this section then transitions to the literature on co-investments and their potential impact on the dynamics between LPs and GPs. Section 10 delves into the practical aspects of co-investments, offering an in-depth analysis of how this practice functions and providing insights into the specific features that characterize Limited Partners who engage in co-investments. Section 11 presents an evaluation of the advantages and disadvantages associated with co-investments for both the GPs and the LPs with a general approach, while in Section 12 the focus shifts to a critical analysis of co-investments in the context of the Agency Problem in Private Equity. In Sections from 10 to 12, a parallel analysis is conducted for secondary transactions, providing a holistic view of their role in mitigating agency-related challenges. The synthesis of these analyses culminates in Section 13, the concluding segment of the study.

9. Review of Relevant Literature

Within the realm of Private Equity, this thesis delves into the framework of the agency problem between LPs and GPs, a concept initially developed by Sahlman (1990) to explore information asymmetry and moral hazard in the context of the principal-agent problem within company management. Sahlman's groundbreaking extension of these ideas laid the foundation for the examination of the Limited-General Partner relationship, representing one of the early efforts to define an agency framework within the private equity landscape. In this dynamic, one topic that has been analyzed in literature is that GPs typically experience option-type payoffs, providing them with downside protection and the potential for substantial gains from market upswings, thereby fostering a risk-taking approach (Buchner and Wagner, 2015). Another illustration of the agency theory and its application to the LP-GP relationship is evident in the hold-up problem. This phenomenon emerges within contractual relationships, where a counter-party gains increased bargaining power post-investment, often due to adverse selection (Ljungqvist, 2022). This exploration sets the stage for an in-depth examination of the agency dynamics inherent in the Private Equity sector.

Moving to co-investments, Greenberger (2007) is the first academic source dealing with this instrument; his paper defines the co-investment structure, the categories of co-investments[7] and the terms of the agreement. A key feature of this instrument is that co-investments are usually provided to LPs without fees or carried interest, thus eliminating the "gross-to-net" yield erosion associated with fund investments and increasing the return of the Limited Partner (Greenberger, 2007).

The goal of this thesis is to delve deeper into the impact that co-investments have on the relationship between Limited and General Partners. In this regard, one interesting analysis that has been performed on co-investments tries to answer the question of whether they hide a problem of adverse selection caused by the information asymmetry between GPs, who complete a detailed analysis of the deal during their operational activity, and LPs. I report two contrasting academic views on this topic, one elaborated by Fang et al. (2015) and the other by Braun et al. (2020). The first

[7] Greenberger (2007) identified 3 categories of co-investments: passive co-investment, active co-investment, and club investments.

paper verified that co-investments underperform the corresponding funds with which they co-invest, therefore suggesting that there exists a component of adverse selection in the co-investing activity (Fang et al., 2015). The authors also suggest that one of the mitigants for the agency issues in co-investments is the existing LP-GP relationship and the market practice of the industry, which is based on repeated interactions for what concerns both the co-investment and the fundraising activity. As a result, opportunistic behaviors could be reduced for the sake of profitable future investments in the new deals or rounds. Fang et al. (2015) also highlight how in LPs' direct investing the ability of the specific investor is a key element for the overall performance of the deal, and in general, LPs need to be aware of the risks and limitations of solo-investing. This final consideration is relevant in light of the topic of which kind of Limited Partner can effectively co-invest and even more in direct investing, and it will become more evident in Section 10.2 which focuses on the categories of investors participating in co-investment processes.

An opposite view is offered by Braun et al. (2020), who performed the same analysis concluding that there is no evidence of adverse selection in the co-investing practice. Based on a heterogeneous sample of deals, they found that gross returns from co-investments and other investments from the same funds are very similar across different types of investors, therefore implying that co-investments are a cheaper way to invest for LPs considering the lower level of fees associated with such instrument (Braun et al., 2020). In addition, Braun et al. (2020) also focus on the relational effects of co-investing, mentioning the possibility for investors who are not already LPs in a private equity fund to participate in this kind of investments and better understanding the due diligence and deal structuring process of the GPs, potentially reducing information asymmetry in case of a future investment in the fund.

Despite the ambiguity on the effective over-performance of co-investments, which I believe will need a bigger sample of historical data and an expansion of the co-investment practice to be investigated further, there is no doubt that co-investments offer an additional perspective to explore the relationship between Limited and General partners and the underlying agency dynamics. This thesis inserts the existing literature by contextualizing the practice of co-investments within the new Private Equity market scenario, characterized by high interest, high inflation, and reduced returns for the

LPs. As a result, co-investments assume an increased relevance for LPs which need to keep deploying capital while decreasing the relative fees to their fund managers. Given this need and the affirmation of the instrument in the PE and VC market, I also present the necessity for GPs, LPs, and regulators to start considering co-investing as a market practice, therefore regulating it within the clauses of the funds in a transparent way for all investors.

10. The Co-investment Mechanism

In this section I introduce the practice of co-investments, describing first how the mechanism works and the evolution of this market in past years (subsection 10.1), and then focusing on the types of LPs doing co-investments (subsection 10.2). Finally, in subsection 10.3 I present the concept of secondary transactions.

10.1 The Co-investing Process

In the Private Equity industry, there is a growing interest among investors to pursue direct investments in portfolio companies, separate from the traditional fund structure[8]; this approach, known as co-investments, allows investors to participate in direct investments alongside the fund structure (Braun et al., 2020).

Co-investments consist of a Limited Partner investing alongside a private equity sponsor directly in a company being acquired by that sponsor (Greenberger, 2007). Figure 10 describes the basic structure of such an arrangement, with the investor entering the equity of a company (Portfolio Company B) both indirectly through the private equity fund and directly with the co-investment.

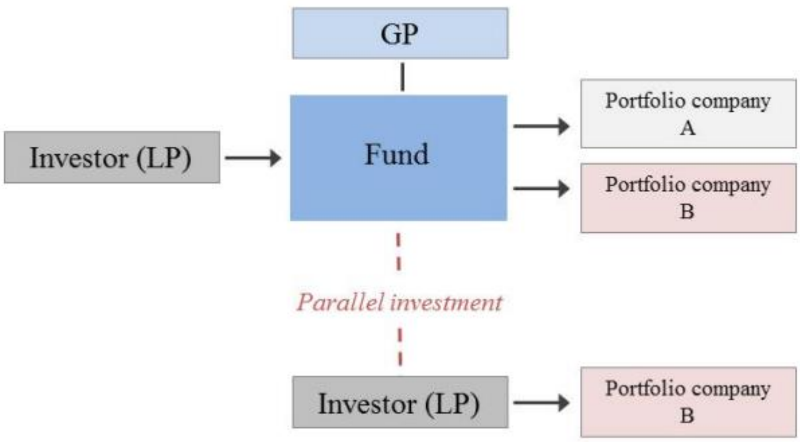

Figure 10: The Co-investment structure (Fang et al, 2015)

[8] Private equity investments involve various forms, with most of the capital historically invested through funds managed by private equity managers. These funds are typically structured as closed-end limited partnerships that have a predetermined lifespan. They function as pools of capital where investors, acting as limited partners, contribute funds but rely on the private equity manager, serving as the general partner, to make investment decisions (Braun et al., 2020).

These co-investments are usually passive, with the sponsor taking charge of managing the investment on behalf of the co-investors. In recent years, co-investments have gained significant popularity, especially among institutional investors aiming to increase their allocations to private equity; however, their focus is often directed toward specific favored sponsors (Beaton et al., 2021). According to research conducted by the law firm Troutman Pepper (2022), the amount of funds raised specifically for co-investment-focused investments has increased fourfold over the past decade; Figure 11 shows in detail the historical evolution of the co-investment practice globally. As can be seen from the chart, co-investments saw a significant increase between 2010 and 2021, with capital raised growing at a CAGR of ca. 13% in the period, while experiencing a significant slowdown in 2022. However, the 2022 data also shows an increase in the size of the co-investments per fund[9]. Considering the exceptionally low fundraising volume during 2022, we can expect that the trend of bigger co-investments will support the capital raised in the next years. In this regard, a survey performed by Moonfare (2022) among Limited Partners found that 35% of the interviewed investors are targeting co-investments in the future, in contrast with the 27% allocating to them now.

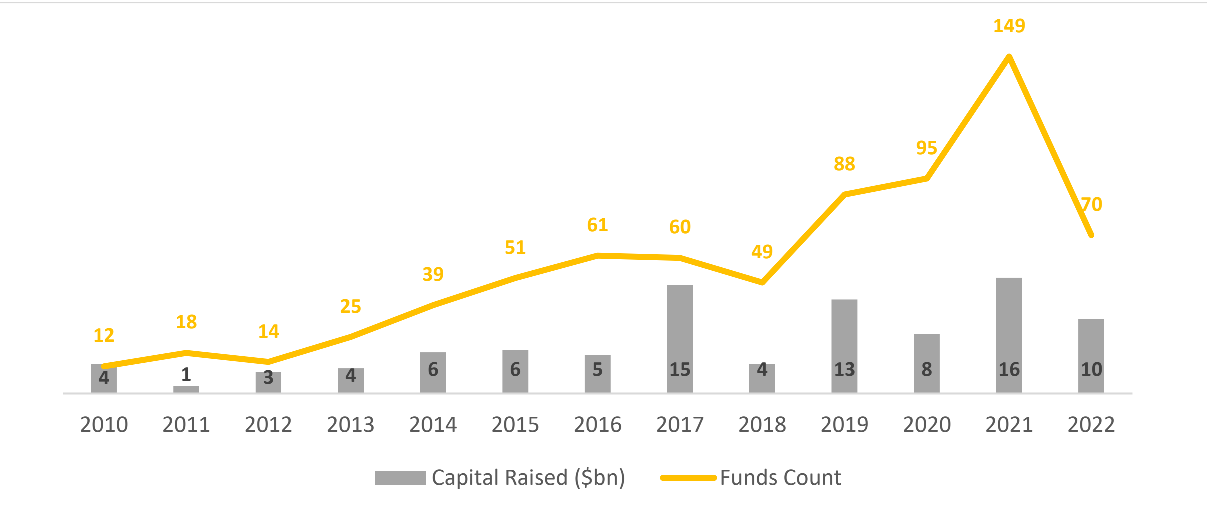

Figure 11: Global co-investment fund activity since 2010 (Source: PitchBook data, 2023)

To better understand how the private equity industry perceives the co-investment practice I report on the view of two fund managers in highly respected private equity firms. According to Alexandre Motte, managing director and head of co-investments at

[9] Average capital raised per fund increased by 37% in 2022 compared to 2021 (Troutman Pepper, 2022).

Ardian: "*as fundraising becomes more challenging, [PE] firms may want to offer increased co-investment, both due to smaller fund sizes and to please their limited partners*" (Moonfare, 2023). As a result, with the closure of the leverage loan market started in the second half of 2022 - which is continuing, at least partially - the demand for co-investments is expected to rise even further. An additional contribution comes from Andrew Bernstein, head of private equity at Capital Dynamics, who links the continued increase in co-investment demand with the fact that *"GPs didn't have full confidence that they would get to their target fund size, but they didn't want to compromise the size of the companies that they were buying, so in order to fill the equity gap, they went to the co-investment market"* (Hamlin and Shi, 2023).

10.2 Co-investment Approach based on LPs' type

The universe of limited partners is wide, and the structural characteristics of each institution determine different approaches to the co-investing framework. Figure 12 presents the main categories of investors participating in co-investments[10]. The general tendency in the industry, whatever the type of investor, is to participate in the co-investment activity to reduce the level of fees paid for the private equity allocation. In fact, in 2023, among a differentiated pool of LPs, 64% affirmed to have the plan to participate in a co-investment opportunity in the next 12 months, a percentage which is unchanged from 2022 (Private Equity International, 2023).

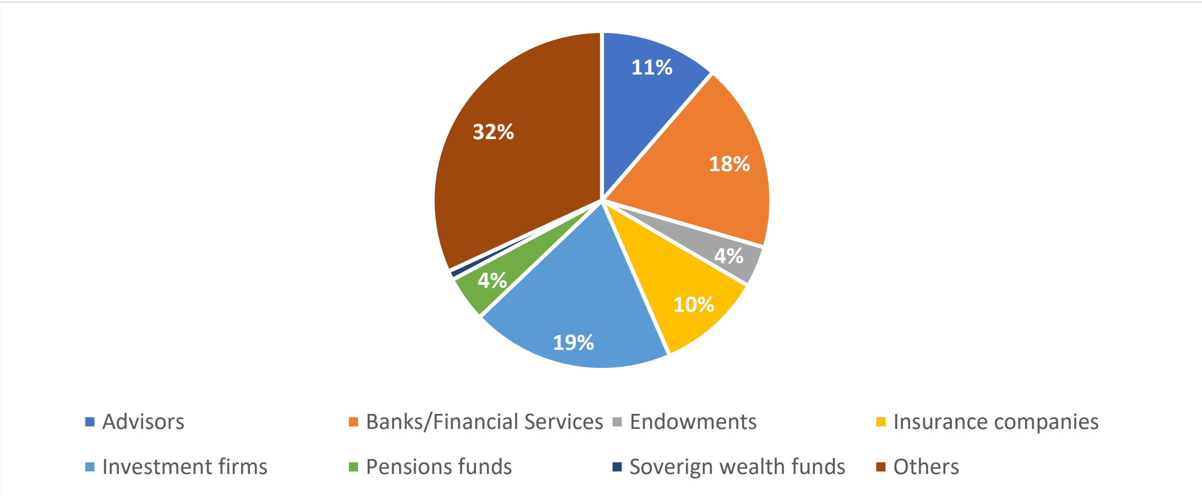

Figure 12: Universe of LPs doing co-investments by Category (Private Equity International, 2023)

[10] The category "Others" in Figure 2 includes funds of funds, high-net-worth-individuals, foundations, and corporates.

Despite the evident advantage from the point of view of the fees, which incentivize every kind of LP to pursue a co-investment strategy on the side of the private equity allocation, there is a particular feature of co-investment that needs to be addressed in depth by these investors. As mentioned in the previous paragraph, the co-investment process is typically not formalized and is managed by each fund manager on a case-by-case basis. In addition, GPs usually involve LPs at a later stage of the deal, allowing the investor a short window, which can arrive even to a few days, to evaluate the deal proposed by GPs and conduct the due diligence process (Fang et al., 2015). This feature determines a significant distinction between LPs which can perform all the required steps to confidently participate in the deal and the ones, typically of smaller size, which do not have the required resources to do that.

In this regard, it is interesting to note that the California State Teachers' Retirement System[11] has strongly developed its co-investment program, increasing the allocation from 5% to 20-25% of annual private equity commitments in the past 5 years and with the expectation to reach 30-35% in the next two to three years (Markets Group, 2022). We can appreciate how co-investments are seen as crucial for long-term strategies in an institution such as CalSTRS, which thanks to the over $300bn of assets under management has the appropriate resources to manage and develop a proper co-investing program.

10.3 An Alternative Solution: Secondaries

One key feature that characterizes private equity markets is illiquidity; differently from public holdings, participation in private equity funds cannot be freely exchanged on the capital markets. This constraint of private equity holdings can create liquidity issues for investors, who commit capital for the lifetime of the funds, usually 10 years. The secondary market for private equity investments offers a solution to the LPs to modify the liquidity profile and needs of their investments. Through secondaries, LPs can buy and sell their private equity commitments and increase the liquidity of their holdings. As shown in Figure 13, a key difference concerning public markets is that the transaction is subject to the approval of the GP which manages the private equity fund. Secondaries transactions are then classified into two groups depending on whether

[11] The California State Teachers' Retirement System (CalSTRS) is the second largest pension fund in the US.

the transaction is led by the Limited Partner or, on the other hand, the General Partner. In an LP-driven deal, a limited partner transfers its obligation in a fund or a collection of funds to a secondary purchaser, who subsequently takes on all the outstanding capital commitments of the departing LP; additionally, the secondary buyer obtains the departing LP's portion of the fund's current investments and forthcoming returns. (Morgan Stanley, 2022; Mason and Utke, 2023).

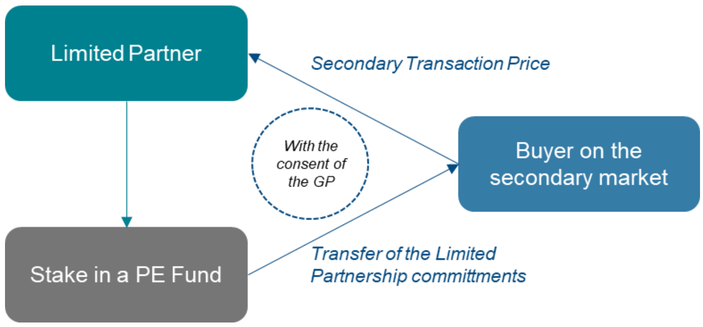

Figure 13: The Secondary Transfer Structure – LP-led style

Conversely, within a GP-led transaction, an asset or portfolio company undergoes a transfer from one entity to another (known as a continuation fund), as represented in Figure 14. This transition provides an opportunity to access supplementary capital and extend the timeframe for implementing a value-creation strategy (Morgan Stanley, 2022; Mason and Utke, 2023). The general partner strategically sells or transfers assets from the initial private equity fund to a continuation fund, typically at a slight discount, effectively securing the unrealized gains for the original fund's limited partners (Mason and Utke, 2023). As a result, existing LPs are presented with the opportunity to exit the old fund; however, they often possess the choice to participate in the continuation fund as well. Should liquidity be their priority, these LPs have the option to exit the fund and solidify their gains, bypassing involvement in the continuation fund. Conversely, other LPs have the option to remain invested in the continuation fund, alongside the potential for new LPs to join, all with the shared aspiration of achieving amplified returns. In essence, a GP-led secondary transaction acts as a compelled liquidity event for LPs, offering them the freedom to either seize the liquidity available or reinvest accordingly (Mason and Utke, 2023).

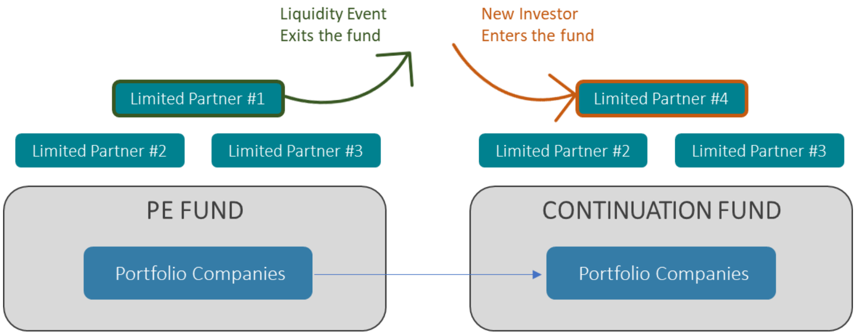

Figure 14: The Secondary Transfer Structure – GP-led style

Secondary private equity transactions enable LPs an exposure to private equity which is not necessarily linked to the standard features of the PE fund. For example, through a secondary transaction, the investor can achieve shorter holding periods and different cash flow profiles (Schroders, 2021).

The PE industry showed an increase in secondary fundraising from 2010 to 2020 (from $13.7bn to $85.2bn), despite experiencing a slowdown in the past two years with fundraising levels decreasing to $46.9bn in 2021 and $31bn in 2022 (Prequin, 2022). The recent expansion of the secondary market has been largely driven by the increase in GP-led transactions, which accounted for almost half of all transactions in 2022 (Schroders, 2021; McKinsey, 2023). In addition, with respect to the dawn of secondaries, the market for such transactions developed not just in size, as already mentioned, but also in terms of complexity and the nature of transactions (Schroders, 2021).

11. Pros and Cons of Co-investments

The affirmation in the past years of this new form of collaboration between limited partners and fund managers derives from the numerous advantages co-investments offer to investors who can take advantage of such investment opportunities. In this section, I present the advantages and the disadvantages of co-investments as a financial instrument in general, while Section 12 analyzes co-investments with a focus on their relevance within the agency framework.

11.1 Advantages of Co-investments

The most attractive feature for LPs of the co-investment practice is the profitability of such an instrument. A 2015 survey of fund managers and investors found that at the time 80% of limited partners saw their co-investments outperforming private equity funds, with 46% seeing their co-investments outperform by a margin of over 5% (Prequin, 2015). In addition, co-investments often have a lower dispersion from the median compared to that of other private equity investments, resulting in an increased resiliency (Beaton et al, 2021). The key driver of profitability is the absence of management fees and carried interest on the co-investment deal, with the LPs benefiting from the active ownership of the PE funds at no or limited cost. In recent times, the returns of private and public equity have been moving closer together, leading to increased scrutiny of private equity fee structures. Multiple authors have highlighted the significant impact of management fees and carried interest payments on net returns (Metrick and Yasuda, 2010). Co-investments offer an appealing feature by either eliminating fees altogether or significantly reducing them. By doing so, co-investments effectively lower the average cost of investing in private equity and have the potential to enhance net returns (Braun, 2020).

Co-investments can be used by limited partners to calibrate their allocation to Private Equity, increasing the flexibility of the investment (Greenberger, 2007). Specifically, this option opens a twofold discussion of the hedging power of this instrument. Firstly, this practice enables limited partners to focus more on certain industries of interest, even exceeding the fund's limitations by going beyond the proportional interest they hold through their fund investment. This can be done by LPs to tilt their portfolio towards specific sectors that are not easily accessible through public markets. Secondly, co-investments allow the introduction of targeted exposures that are not correlated to existing allocations (Morgan Stanley, 2023). In addition, if the fund's tickets are too low, co-investments allow increasing the LPs' allocation towards private markets or a single PE fund. For instance, conducting thorough research and analysis on a relatively illiquid 10-year blind-pool fund during the initial phase can demand a substantial allocation of resources; however, in a co-investment arrangement, an investor has the opportunity to allocate additional capital alongside their primary fund commitment, trusting a manager who has already undergone scrutiny (Moonfare, 2022). From an LP perspective, co-investing enables investors to keep investing in the asset class while retaining the flexibility to adjust the speed of deployment according to their risk tolerance.

On the GP side, co-investments allow for longer holding periods than the standard life of the fund. As described by Rishi Chhabria, partner at advisory firm Campbell Lutyens: *"some fund managers are looking for limited partner to co-invest with in order to extend their investment period by having less concentration within their assets"* (Hamlin and Shi, 2023). Co-investments can be more GP-friendly than direct investing as they imply a higher level of collaboration, and the owner of the fund maintains control over the fund's allocation.

To sum up, co-investments grant investors more control concerning the investment in the PE fund, which is particularly relevant in a moment where there is an increasing focus on high-quality assets; however, they need to possess the necessary skills and expertise to assess and select the transactions in which they participate.

11.2 Disadvantages of Co-investments

On the other side of the coin, co-investments present some potential issues for both LPs and GPs. As reported by a recent survey among limited partners, the top 3 reasons why LPs could avoid a co-investment opportunity are (i) the speed required to conclude the transaction, (ii) the ticket size required, and (iii) the fact that the LP is not staffed up for the task (Private Equity International, 2023). All three issues relate to significant disadvantages of the co-investment practice. Starting from the first reason, the co-investment mechanism could put at risk the usual development of a deal process, potentially slowing down the closing phase, which is also the most critical step; this is why fund managers require LPs to be fast in assessing the investments opportunities they are offered. However, from the results of the survey, it is also evident that another key issue is the lack of resources some LPs have, which can be a structural feature of their core business. Limited partners usually do not have the same resources and structure as GPs and could require additional time to commit their capital. The extent of the time required by the LPs to analyze the deal is determined by the size and the resources of such an investor, together with its habit of doing direct investments and co-investments. As a result, not every LP is suitable for participating in co-investments (Braun et al., 2020).

Finally, as already discussed throughout the paper, co-investments are relevant within the relationship between GPs and LPs and can potentially have a negative impact. In particular, Khavul and Deeds (2016) mention how social status and experience are key elements of co-investment and at the same time could constitute limitations for the deals; experience can potentially generate biased decisions in the search for co-investment opportunities whereas the social status of LPs influences the way GPs interact with their investors, creating issues of unfair treatments within the investors' universe.

12. Co-investments within the Agency Framework

Co-investments have become increasingly relevant in the relationship between general partners and limited partners in the private equity industry, particularly in addressing the agency problem that arises between these two parties. As Adam Bragar, head of US private equity at Willis Towers Watson, pointed out: *"the conversation between LPs and GPs is undergoing a transformation due to the growing significance of co-investments in LPs' portfolios, reflecting a changing dynamic where LPs are actively seeking opportunities to directly participate in investments alongside the traditional fund structure"* (Hamlin and Shi, 2023). With only approximately 15% of buyout transactions being offered for co-investment (Beaton et al., 2021), the rising prominence of co-investments could serve to align the interests of GPs and LPs, mitigating the agency problem and fostering a closer partnership in the private equity space. However, such a revolution in the way GPs and LPs relate to each other can potentially endanger this relationship, and therefore they need to carefully manage the co-investment instrument, being aware also of the new risks they introduce in the PE market.

In subsections 12.1 and 12.2 I explore further the role of co-investments within the agency relationship between GPs and LPs in Private Equity, while in subsection 12.3 the same analysis is applied to secondaries.

12.1 Co-investment aligning interests between GPs and LPs

In recent years, management fees have become a primary source of profit for GPs in the private equity industry, driving most of the valuation of PE firms and generating tensions with their investors. This is evidenced by a 2022 survey presenting that about 60% of investors declare to have declined to participate in a fund due to proposed fund terms and conditions (Prequin, 2022). However, LPs still find difficulties in negotiating the level of funds fees, since the "2/20" format[12] is a well-established feature of the industry. The tension on management fees is driven by the increasing

[12] The "2/20 format" describes the most common fee structure for the GP in the Private Equity industry, which is characterized by an annual 2% management fee computed on the committed amount and 20% carried interest on the fund's extra-returns.

amount of assets under management in the Private Equity industry (Global AUM going from $3.5T in 2012 to $12.8T in Q2 2022) with PE returns which sharply dropped in the last year, turning negative for the first time since the financing crisis (-9% return as of September 2022)[13].

In this context, co-investments reduce the amount of fees for the overall allocation of LPs in the Private Equity asset class. Prequin (2022) highlighted that the average management fees decreased from the standard 2% to ca. 1.9%, remaining a significant expense for the investors and generating friction considering the declining PE returns. As mentioned in subsection 10.1, co-investments allow one to participate with the PE fund in specific deals without having to pay additional management fees or carried interest. This solution enables the fund to maintain the fees in line with the market standard on paper, while at the same time accommodating the LPs' requests to lower the level of fees.

To clarify this concept, assume that an LP has a ticket in a PE fund of $100m[14], with a management fee rate in line with the market standard of 2%. In addition, based on Troutman Pepper (2022), we know that the median PE co-investment deal amounts to about $75m. Reasoning on an annual basis, the LP would pay $2m for the management of its assets in the absence of the co-investment opportunity. However, if we include the co-invested amount the total invested capital increases to $175m, with the same level of fees. As a result, the implied yearly fee rate decreases to 1.1%. This level is even lower than the average management fees paid to hedge funds, which in the past years experienced a reduction from the standard 2% model and reached an average of 1.38% in 2021[15]. From this quick example, it is evident that clearly stating the fund's policy on the topic of co-investment in the shareholder agreement of the funds is key to ensuring a fair treatment of all investors as much as the information about management fees or carried interest.

Additionally, by participating in a co-investment, LPs can be an active part of the deal and the operational management of the investment, reducing the barriers between investors and GPs determined by the agency problem. This practice could offer a possibility for the LPs which are not structured to deploy a direct investing activity in

[13] Source: McKinsey (2023).

[14] Computed based on the average fund size of $1bn (Source: Pitchbook, 2022) and an indicative number of 10 Limited Partners involved in the fund.

[15] Source: EurekaHedge.

PE to increase their competencies in the field and have better monitoring over the activity of their fund managers (Braun et al., 2020).

12.2 The risk for the agency problem and a need for transparency

Although co-investments provide a chance to align interests, as discussed in sub-section 12.1, improper use of co-investments can pose risks to the relationship between Limited Partners and General Partners. If co-investments are employed sporadically with specific investors, it may create an imbalance in the relationships between the GP and various LPs. Consequently, this could diminish the trust that the general partner has built with the investors.

The process of co-investing starts the moment a fund is raised, as co-investments are one of the topics mentioned in the discussions with investors during fundraising. Is key to remember that the LP-GP relationship is based on trust and repeated interactions, and the negotiation on co-investments can characterize the relationship between the parties. To maintain a robust pipeline of deals, LPs need to cultivate numerous relationships with PE managers and establish strong connections to attain a privileged position of being the first choice for investment opportunities; this status enables efficient decision-making and grants access to limited opportunities (GCM Grosvenor, 2022). Co-investments were born as an informal agreement between the GP and the LP, with some specific investors being promised to be involved in some of the deals over the life of the fund. Such agreements were purely relational and hid a significant level of discretion for the fund managers regarding both which LPs include in the deals and which deals offer as co-investment opportunities. These last two aspects are relevant in the LP-GP agency relationship as they can affect the overall return for the LPs. As already mentioned in the previous subsection, co-investments typically exclude management fees and carried interest and GPs can impact the returns of different LPs by discretionally offering co-investments. With the co-investment market growing at high rates in the past decade (see subsection 10.1), the topic of the transparency of co-investments is becoming increasingly important. In 2015, only 30% of fund managers included co-investment rights in 81-100% of limited partnership agreements in their most recent fund (Prequin, 2015). There is a need to formalize the co-investing process to make it more transparent for LPs, therefore reducing the agency problem associated with it. The tendency is improving as, according to Ontra[16] (2022), co-investment rights were the third most common clause included in the LPA's side letters between GPs and LPs in 2022, behind the agreements on fees and expenses and ESG standards. Over time, several co-investment mechanisms have emerged, including broad opportunities based on pro-rata contributions to the main fund and individual co-investment rights outlined in side letters (Ontra, 2022).

As of today, the private fund's landscape is trying to assess this transparency issue, with PE funds managing co-investment programs that align with negotiated terms and avoid favoring certain LPs. Regardless of the specific approach, General Partners must implement a comprehensive system to administer their co-investment program and use the instrument to improve the relationship with their investors.

12.3 The Role of Secondaries

In parallel to what has been presented above, subsection 12.3 explores the role of the secondary PE market in the agency framework. Following the same line of thought, I introduce firstly the potential risks that secondaries can have on the LP-GP relationship, and then the advantages these transactions can have if performed properly.

The key agency issue related to secondaries is linked to GP-led transactions. As presented in subsection 10.3, when the general partner is leading the secondary sale, the process involves the creation of a continuation fund managed by the same GP. When an LP decides to move its commitment from the existing fund to a new continuation fund it does not have visibility on the new investments the GP will make (Mason and Utke, 2023). In addition, the general partner has a wide degree of discretion regarding which assets to transfer and at which valuation. One fundamental consequence is the potential disparity in the treatment of LPs who decide to invest in the continuation fund and the ones that collect their liquidity. Considering that assets are usually sold at a discount from the old to the new fund (Mason and Utke, 2023), exiting LPs will achieve a lower payoff than they would have obtained with a standard exit or by investing in the continuation fund. In this context, transparency between the fund manager and each Limited Partner becomes of primary importance to align the

[16] a tech company specializing in contract automation and intelligence for asset managers.

interests of all the parties involved. Given the need for higher transparency and the increase in GP-led secondary transactions, the Security and Exchange Commission increased the required level of disclosure to LPs in this kind of transaction; for example, a fairness opinion from an independent provider is required to complete the transaction (Securities and Exchange Commission, 2022).

On the other hand, secondary transactions can be used to align interests between LPs and GPs from both an economic and a relational point of view. The economic interest can be aligned if the GP commits part of the carried amount into the new funds, signaling its commitment to the LPs that are following in the continuation fund (Schroders, 2021). From a relational standpoint, secondaries offer Limited Partners the opportunity to intensify the dialogue with the fund managers when selecting the companies from the existing funds they want to continue investing in. In addition, a key advantage of secondaries is that they knock down the barrier of information asymmetry between LPs and GPs, given the existing knowledge of both the portfolio companies and the GP investment style (Mason and Utke, 2023).

Finally, secondaries also assume a key role in relation to the so-called "Denominator Effect", which consists in a reduction of the overall LP portfolio's total value driven by a significant decrease of one asset; consequently, the remaining segments of the portfolio, which did not experience a decline, represent a greater proportion of the total value (Pitchbook, 2023). In the second half of 2022 Limited Partners faced such allocation problem due to the strong drop in public equity values, with the S&P500 and the MSCI World Index declining respectively -19% and -17% in 2022 (Bain & Company, 2023). The risk of the denominator effect for the Private Equity industry is that when public markets decline the PE asset class becomes over-allocated in investors' portfolios, generating tensions with their fund managers. In this context, secondary LP-led transactions offer investors an additional opportunity to manage their private assets and liquidity; as a result, they can approach investments in private equity more easily (Mason and Utke, 2023).

13. Conclusions

Co-investments have emerged as a valuable tool within the private equity industry, providing a unique opportunity for limited partners to actively engage in specific deals alongside their GPs. Throughout this thesis, we have examined the role of co-investments in the relationship between LPs and GPs, considering both the challenges they present and the potential solutions they offer. Undoubtedly, co-investments have the potential to strengthen the LP-GP relationship by fostering a shared interest and aligning the objectives of both parties. One of the primary challenges associated with co-investments is the issue of adverse selection. This raises concerns about fairness and equitable distribution of opportunities. To address this challenge, LPs and GPs should establish clear guidelines and mechanisms to ensure proper deal flow allocation, allowing LPs to access a diversified set of high-quality investment opportunities. Furthermore, co-investments offer a solution to the increasing concerns surrounding management fees in the private equity industry, mitigating the financial burden for LPs and promoting a more equitable distribution of costs between LPs and GPs.

In light of these findings, LPs and GPs must approach co-investment opportunities with diligence, transparency, and a long-term perspective. Building a strong foundation of trust, open communication, and mutual understanding is vital for the successful implementation of co-investments. LPs should conduct thorough due diligence on potential co-investment opportunities, considering the track record, expertise, and alignment of interests with the GP partner. Similarly, GPs should establish robust governance structures and processes to address conflicts of interest and maintain fairness throughout the co-investment process. Moreover, the increasing relevance of co-investments calls for a more formalized approach from a contractual standpoint. Clear guidelines and formal agreements should be put in place to govern the terms, rights, and obligations associated with co-investments. This formalization helps mitigate potential conflicts, ensures proper deal flow allocation, and defines parameters for cost sharing, risk management, and decision-making. By establishing a well-structured framework, LPs and GPs can navigate co-investments more effectively, enhancing the overall stability and sustainability of their partnerships.

Additionally, it is important to consider the role of secondaries as an alternative to co-investments. Secondaries provide an additional liquidity opportunity for investors by allowing them to buy and sell existing private equity positions in the secondary market. This liquidity option becomes particularly valuable in market downturns or economic uncertainties, as it enables investors to manage their private equity allocations more easily and efficiently. By incorporating a secondary market component, LPs can achieve greater liquidity and adaptability, while GPs can provide exit options for LPs, enhancing the overall attractiveness and viability of co-investment opportunities.

In summary, co-investments have the potential to reshape the LP-GP relationship in private equity by enhancing collaboration, reducing costs, and aligning the interests of both parties.

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