



Master of Science in Corporate Finance

Chair of M&A and Investment Banking

Determinants of Purchase Premiums in Leverage  
Buyouts: an Empirical Analysis of Key Drivers Across  
Economic Cycles and Market Uncertainty

Prof. Leopoldo Maria Attolico

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SUPERVISOR

Prof. Leone Pattofatto

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CO-SUPERVISOR

Camilla De Giacomo  
Matr.785691

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CANDIDATE

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# Introduction

Mergers and acquisitions (M&A) have been recognized as some of the most important mechanisms of corporate restructuring and financial management because they model the boundaries of firms, lock in control rights, and transfer resources across industries. M&A activity has fascinated both scholars and practitioners for a long time, not just for the volume of transactions and the frequency of activity, but also due to the complex interdependencies of valuations, strategy, governance, and macroeconomic cycles. Within the large field of M&A activity, leveraged buyouts (LBOs) have become a particularly distinctive phenomenon. LBO transactions started to emerge in the United States in the 1980s, with landmark transactions like the acquisition of RJR Nabisco. Since that time, LBOs have grown into a far more mainstream financial practice by private equity sponsors all around the world. LBOs are characterized by high levels of financial leverage, concentrated ownership, and aligned performance incentives, all with the intent of providing significant equity returns, while changing the governance and strategic course of target companies. The attractiveness of the LBOs comes from the blend between financial engineering and governance changing, yet, there are still some controversies. Although resulting in greater efficiency and discipline, LBOs are criticized because they tend to increase corporate fragility due to their focus on relatively short-term performance.

One of the main factors to analyse when looking at an acquisition is the price, and especially the acquisition premium. The premium, defined as the excess paid over the target's unaffected share price or estimated intrinsic value, is more than a mechanical outcome of valuation techniques. It is a representation of strategic intent, terms of sale, and broader market circumstances. For sellers, it is compensation for giving away ownership and control, for acquirers, it is the cost of future possibilities, synergies, and benefits of control. In the case of LBOs, premiums clearly take on added significance since the whole financial viability of the transaction depends on the entry price. Indeed, the higher the premiums, the harder it is

to generate acceptable returns and deliver them to investors. The setting of premiums is therefore a key issue in both academic research and professional practice.

Many scholars have researched on this topic, so in the academic literature there are several different frameworks to explain why acquirers are willing to pay premiums. Agency theory is one influential explanation. Jensen (1986, 1989) argued that public corporations suffer from agency costs because ownership is separate from control, meaning managers may pursue strategies that are not aligned to shareholder value maximisation. LBOs fix this by consolidating ownership with private equity sponsors, and guaranteeing discipline using debt as an instrument. This agency theory perspective suggests that premiums are compensation to shareholders for giving up their claims to a new ownership structure that has more ability to extract value. Other studies have taken the view of synergies as the source of premiums. In particular, when strategic acquirers pay more than the value of the target, they typically explain their overpaying based on expectations of operational efficiencies, economies of scale, or revenue enhancements. Here, private equity sponsors will often emphasise financial synergies like the tax shield of debt or efficiency improvements from governance changes. A third literature stream emphasises information asymmetries and signalling. Travlos (1987) documented that the method of payment contains information about the acquirer's private assessment, with cash generally regarded as a strong signal for confidence and stock offers generally treated with scepticism. Roll (1986), in his prominent hubris hypothesis, provided a behavioural perspective, illustrating how managerial hubris or overconfidence can systematically bias decisions to overpay despite synergies. Lastly, the literature about the corporate ownership market (Schwert, 2000) places a firm's premium in the context of competition and negotiations. In the corporate ownership market auction and unsolicited hostile bid transactions tend to generate higher valuations than friendly negotiated auctions. Defensive devices like poison pills and staggered boards affect how to apportion the value created by the transfer of control in these transactions.

These empirical studies provide valuable information about how these factors operate. A firm's status, public versus private buyer, makes a significant difference in premiums paid by each. Bargeron, Schlingemann, Stulz, and Zutter (2008) demonstrated that public acquirers

pay premiums that were substantially higher than the premiums paid by private acquirers, including private equity sponsors. A contributing factor is the incentive misalignments in public firm ownership structures and managerial discretion. Managerial ownership also moderates premium differences. When firm managers own a large amount of the firm, premium payments tend to be significantly lower, because ownership incentives are better aligned.

The characteristics of the target also matter. Dimopoulos and Sacchetto (2014) reported that poorly performing firms with governance weaknesses receive higher premiums, because the firm represented a greater turnaround opportunity for new ownership. In contrast, highly profitable and efficient targets command more disciplined pricing and larger premiums. The level of leverage of targets is also complicated. Billett and Ryngaert (1997) suggest that leveraged firms do receive higher premiums because the debt may be serving as another takeover defence mechanism that forces the acquirer to pay more to control a company. The structure of the deal also has effect. Schwert (2000) confirmed that hostile bids and rival auctions tend to produce higher premiums, which is in line with the insights from the competition theory and winner's curse theories. Bellamy and Lewin (1992) and Simonyan (2014) showed that cash-financed acquisitions are associated with higher premiums than the stock-financed deals, because cash offers give shareholders liquidity and certainty.

In addition to certain firm- and deal-level variables, the broader macroeconomic conditions are increasingly being thought about as important determinants of premiums. M&A activity is typically cyclical, and tends to concentrate in waves that correspond to periods of economic expansion, availability of credit, and positive general market conditions. Kaplan and Stein (1993), studying the buyout boom of the 1980s, revealed that the availability of irresponsible levels of leveraged lending invited aggressive bidding, elevating valuations. Axelson et al. (2009) later further emphasised the importance of debt markets as bellwethers of buyout activity. They linked the prevalence of LBO waves to the state of credit markets. Christensen and Simonsen (2012) offered an interesting finding that premiums can rise during downturns as acquirers try to convince sceptical shareholders to sell. Jörgensen and Harbecke (2025) observed that premiums have often spiked post crises, when competition for limited good

quality assets is strongest. Together, these studies suggest that premiums should not be considered in vacuo from all the other aspects of the financial landscape, particularly drawdowns in the availability of credit, volatility in the market, and the fundraising of private equity sponsors. While there are significant amounts of literature, it is also true that there are notable gaps. The vast majority of empirical studies tend to focus on strategic acquirers and not financial sponsors. When private equity has been considered, the analysis usually glances toward earlier buyout waves (specifically, in the United States), which means there is relatively little analysis on how more recent developments have influenced premiums. There is an even more significant lack of understanding of the behaviour of premiums in European markets, or how premiums react to contemporary contexts such as long periods of historically low interest rates, the abrupt dislocations created by the Global Financial Crisis and COVID-19 pandemic, and more recently the return to monetary tightening. Each of these, especially the latter two events have led to unprecedented challenges that have caused uncertainty into the capital markets, and so further understanding how premiums have responded is imperative. Furthermore, although firm- and deal-level drivers are well established, relatively few studies integrate them systematically with macroeconomic drivers such as credit spreads, volatility indices, and the even record level of so-called *dry powder* that has amassed into the private equity markets in the last generation. These gaps demonstrate a need for a holistic empirical framework which considers both micro- and macro-drivers as it relates to premiums in the buyout space.

This thesis will address these gaps through a systematic empirical analysis of premiums associated with public-to-private leveraged buyouts in the period of 2000 to 2024. Public-to-private transactions are an ideal type of transaction for this investigation. As publicly traded companies, unaffected market prices provide the necessary market benchmarks for premiums, while P2Ps retain the distinguishing characteristics of LBOs: the participation of leverage, private equity sponsor involvement, and the shift from the regulatory and disclosure framework of public markets to the private governance structure of private ownership. With this framework, this research has the objective to answer the following question: What are

the key drivers of size in public-to-private transaction premiums and how have those influences evolved within the volatile economic context of the last 25 years?

The research is defined by four hypotheses, which connect theory with empirical investigation. The first hypothesis is that premiums and uncertainty relate in an inverted-U model: that low, moderate levels of volatility may increase premiums, as acquirers respond to uncertainty by increasing offers to obtain approval from shareholders, while high levels of uncertainty diminish intensity to bid. The second hypothesis questions how much capital private equity dry powder matters. High levels of available, undeployed capital may put pressure on sponsors to bid more aggressively and push premiums higher despite ordinary fundamentals. The third hypothesis discusses how risk management features of transactions, including size and exposure to volatility, moderates the uncertainty-premium relationship and creates heterogeneous outcomes across the outcomes and transactions overall. The fourth hypothesis regards the conditions for credit, with associations of tighter credit spreads and availability of capital as applicable for higher premiums and, conversely, the absence of credit availability as a limiting factor for larger bid offers.

To assess these hypotheses, the thesis applies a quantitative methodology based on an extensive dataset of P2P LBOs from Refinitiv and additional associated financial data. Premiums are the measure of value relative to unaffected stock price one week prior to deal announcement, which is consistent with conventional practice (Kaplan & Stein, 1993; Schwert, 2000). Independent variables include the use of corporate bond spreads as a proxy for credit conditions, the VIX index as an measure of market volatility, and levels of dry powder from Preqin and S&P Global in order to reflect the fundraising dynamic. Deal level controls include deal size and leverage. The econometric analysis includes the use of regression models, including robustness checks and subsample analysis. The dataset includes regimes that reflect macroeconomic conditions - pre- and post-Global Financial Crisis, post-pandemic recovery, monetary easing and tightening, and these capture the cyclical nature of premium determinations. This regime-based observation can enhance the study's estimations of an average effect, as well as identify the change in the relationship between premiums and their determinants across economic environments.

The contributions of this research are threefold. First, it presents one a comprehensive empirical investigations of LBOs premiums of the last several decades, and on a timeframe that includes episodes of extreme financial and economic volatility. Second, it contributes to literature that considers micro level deal and firm characteristics in conjunction with macro level financial conditions, therefore develops a holistic framework from which to understand premium determinations. Third, it advances the scholarship of private equity by testing new hypotheses on the non-linear implications of uncertainty, and concentrated implications of dry powder whilst providing evidence and analysis to either supplement or refute existing views. This adds value to the discourse for academics and practitioners. Furthermore, by linking corporate finance theory and empirical evidence in its own analysis, the thesis aims to shine a light on the conditions of misaligned financial sponsors, demonstrating how they diverge from disciplined bidding behaviour typically ascribed to them, and what the implications are for valuation, governance, and ultimately financial stability.

The structure of the thesis is the following: the first chapter introduces acquisition premiums, while conducting a review of the theory surrounding acquisition premiums, their empirical determinants, and accounting implications. The second chapter tracks the evolution of leveraged buyouts and illustrates that they exist within a framework of value creation, alternative views on governance, and efficiency. The third chapter develops the hypotheses in full detail while explicitly conveying the theoretical linkages to the relevant literature, and identifying gaps in research. The fourth chapter describes the dataset and methodology, including the process in the construction of each variable and econometric design. The fifth chapter details the empirical findings, including baseline findings, robustness checks and analysing the behaviour of premiums across economic cycles. The concluding chapter summarizes findings, discussions on implications for theory and practice, and suggestions for future research opportunities.

# 1. Acquisition Premium

## 1.1. Introduction to the acquisition premium

In any transaction involving the acquisition of one company by another, and especially with respect to the acquisition of a public company, the price paid is rarely equal to the market value or market price of the target at the time of purchase. The portion paid in excess of the market value or price is referred to as acquisition premium. This chapter provides a basic overview of the acquisition premium conceptually, and then builds a conceptual framework for analysing its determinants.

### 1.1.1. Definitions of premium: the excess over market or intrinsic value

At the most general level, an acquisition premium is defined as the difference between the price paid for the acquisition of the target company (“the target”) share capital, and a previously established benchmark for its value. The benchmark can be derived either from an observable market price when the target is publicly listed on the stock exchange, or from an intrinsic valuation exercise<sup>1</sup>, applicable for both public and private businesses. In practice, acquisition premiums are most typically defined as the percentage difference between the final offer price and an *unaffected* stock price at some defined moment prior to the announcement of the transaction.

$$P_i = \frac{PP_i - MP_i}{MP_i}$$

Where:  $P_i$  represents the premium paid,  $PP_i$  is the purchase price per share offered at announcement date;  $MP_i$  is the market price of the share. The common practice, as provided by financial data providers such as S&P Capital IQ, is to calculate the percentage difference

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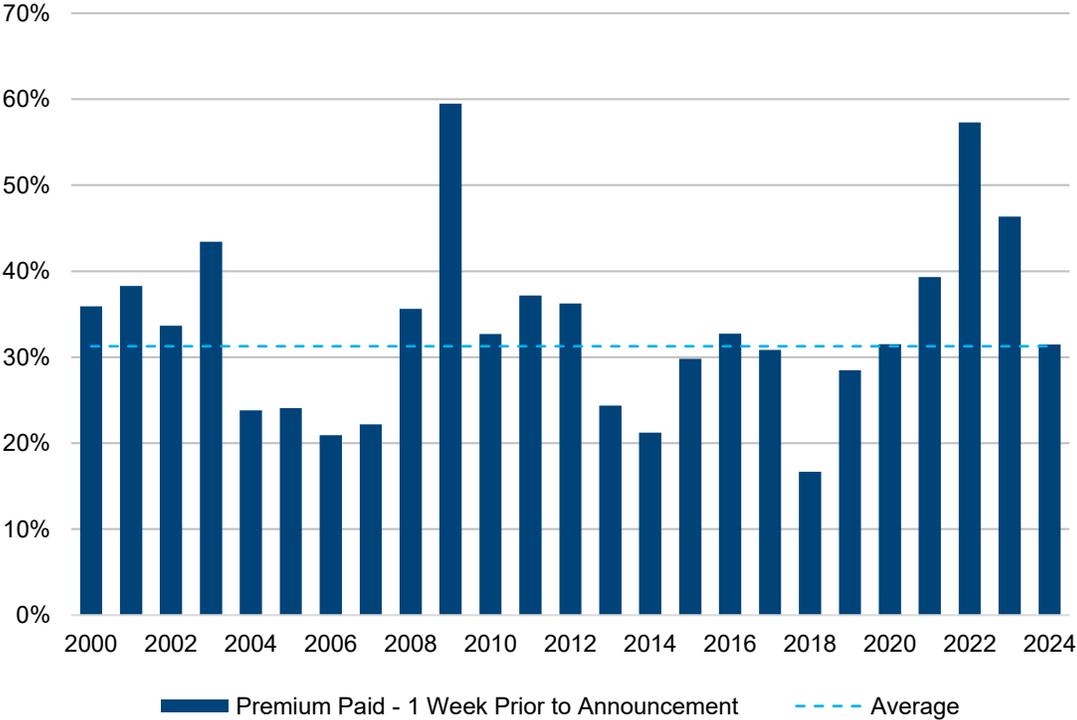
<sup>1</sup> Intrinsic value is the real value of an asset based on fundamental factors, as opposed to the price assigned by the market. The most common intrinsic valuation methodology is the Discounted Cash Flow (DCF).

in the trading prices one day, one week, or one month prior to the announcement of the transaction. The “Unaffected” stock price is important since it will exclude price effects due to trading activity related to market rumours of the deal, thus it will provide a cleaner average target value before acquisition specific information was impounded in the price.

Empirical evidence indicates that premiums in M&A deals typically fall between 30% and 50%, though they can occasionally exceed 100%. Our transactions dataset is in line with this range (see Chapter 4 for further details).

**Chart 1:**

*Average premium paid (1 week prior to announcement) in LBO P2P transactions, 2000-2024*



*Source: Our elaboration on Refinitiv data*

Since the acquisition premium is the difference between the acquisition price of the target and the target's estimated “real” or intrinsic value, we can infer that this approach acknowledges that the *market value* may not equal the *fundamental value* of the company's stock either due to informational asymmetries or market inefficiencies. Based on this

definition, intrinsic value is inherently subjective, relying on the acquirer's own assumptions for forecasts and discount rates. This subjectivity complicates empirical research, since what we observe as acquisition premiums may partly reflect differences in valuation methodologies rather than actual pure expected value creation. An acquirer may identify a target and perform independent due diligence and come to its own estimate of fair value of the target and that estimate is often different and usually larger than the current market price. In this manner, the premium is the amount that the acquirer was willing to pay over its own internal valuation for a deal, usually to deter competition or represent the expected value creation from the merger. This definition is the one driving private equity (PE) deals. We focus on a particular subset of PE-backed deals: public-to-private (P2P) transaction, meaning transactions in which a PE sponsor acquires the totality of the shares of a publicly-listed company (so called *delisting*<sup>2</sup>), in order to extract value at exit from current underperformance or poor management. This topic will be further analysed in Chapter 2.

### **1.1.2. The economic rationale: control and synergies**

Rational economic agents would not consistently pay more for an asset than its worth without a reason. The presence of acquisition premiums thus logically suppose that, for the acquirer, the value of the target firm under his guidance will be superior to its value on a standalone basis.

A first prominent rationale is the control premium, which imply that a controlling (typically over 50% of voting shares) ownership stake in a firm is inherently more valuable than a minority stake. Full control gives the acquirer powers which minority shareholders do not possess, such as ability to elect board of directors and (consequently) executives, set corporate strategy and long-term objectives, dictate cash flows and dividend policy, change the capital structure of the firm, and decide to execute acquisitions or divestments. Because

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<sup>2</sup> Usually, a delisting is carried out through a voluntary or mandatory takeover offer on the totality of the target listed outstanding shares.

control affords the acquirer the rights to make changes to the firm directed at maximizing all the firm's value, a bidder is willing to pay a premium to acquire those rights.

A second major rationale is pursuing synergies. If an acquirer believes that the value realized through the merger of two firms will be greater than the premium, then it will make economically sense to offer that premium. Synergies can be operational, i.e., cutting costs by eliminating duplicated functions, revenue synergies by cross-selling, or integrated efficiencies through optimizing distribution networks; or financial, such as an optimized capital structure or, particularly relevant in leveraged buyouts (LBOs), substantial tax benefits in the form of debt interest deductibility for acquisition debt. For example, if an LBO incurs €500 million of acquisition debt at a 6% interest rate, the annual interest expense is €30 million. With a corporate tax rate of 30%, the resulting €9 million in tax savings each year directly increases after-tax cash flow, which can be used to service debt or reinvest in the business. The academic literature notes that tax shields can be significant drivers of the premium, in particular, Mescall and Klassen (2018), Erickson and Wang (2007), and Ayers et al. (2003), found that potential tax gains were effectively paid to the target firm's shareholders through the acquisition premium.

### **1.1.3. Accounting for the premium: Goodwill**

The acquisition premium has a direct and substantial impact on an acquirer's financial statements in the form of goodwill. In accounting, goodwill is generated when an acquirer pays a consideration for a target that is higher than the net fair value of all identifiable assets and liabilities. In other words, goodwill is the intangible asset recorded on an acquirer's balance sheet, indicating the excess payment over the assets and liabilities net fair value. From another perspective, goodwill represents the economic value of unidentifiable intangible asset categories that a target has, such as customer loyalty, brand name, good relations with employees, proprietary technologies, or patents included in the purchase. In this context, goodwill can be seen as the accounting representation of the premium paid for the projected future earnings capability of the target firm and the strategic advantages of the combination. This asset is not amortized over the acquisition's life but is subject to annual

impairment testing. An impairment leads to a reduction in goodwill, which results in a loss on the acquirers income statement, and negative impact for reported earnings. This accounting treatment creates a lasting link between the price paid in the M&A transaction and the acquirer's future financial performance, making the initial premium determination a decision with long-term consequences. Conversely, if an acquirer purchases a target for less than its fair value, "negative goodwill" is recognized, which typically results in a one-time gain on the income statement.

## **1.2. The theoretical underpinnings of takeover premiums**

Before understanding the drivers of acquisition premiums, especially in P2P transactions, it is important, in an economic sense, to clarify why premiums exist and vary. These ideas provide the intellectual framework for interpreting the subsequent evidence and arguments. The academic literature points towards three main, but often intertwined, theories: agency cost theory, which provides the fundamental rationale; information asymmetries, which deal with valuation and negotiation difficulties; and the market for corporate control, which emphasizes the role of power in negotiations and law.

### **1.2.1. The agency cost framework and the LBO solution**

Jensen (1986) agency theory provides the underlying theoretical framework for P2P transactions. In many public corporations, ownership (shareholders) does not correspond to control (managers). The separation of ownership and control creates a principal-agent problem in which the manager's (agent) best interests do not necessarily align with the best interests of shareholders (principals). This misalignment of interests can be related to significant agency costs, including managers' "empire building" practice of acquiring firms that make the firm large but do not increase shareholder value and inefficiently utilizing corporate resources, especially free cash flows.

It is in this context that Michael Jensen, in his Harvard Business Review article in 1989 titled "Eclipse of the Public Corporation," predicted the decline of the publicly held corporation as

a dominant organizational form. Jensen believed that more efficient forms of ownership of organize businesses will replace the public corporation, and the leveraged buy-out is an example of a structure that holds great promise to solve the agency problem/issue. The LBO model, which is the means of P2P transactions, has two key channels through which it addresses agency costs. First, the need to incur large amounts of debt to finance the buyout forces managers to generate and maintain enough cash flows levels to repay debt service and avoid insolvency. Second, as ownership of the company is effectively transferred to the private equity (PE) sponsor, great concentration of ownership in the PE sponsor results in active monitoring of management and aligns incentives through greater equity stakes in the business.

Kaplan (1989) provided important empirical evidence. In his study of Management Buyouts (MBOs), Kaplan found that from the time of the buyout, MBO firms improved their operating income and net cash flow while reducing capital expenditures. This evidence powerfully led to the suggestion that the LBO structure was capable of improving operational efficiency and unlocking value that had been suppressed under the public corporation construct.

The implications for acquisition premiums under this framework are significant. The value created from reducing agency costs and improving efficiencies unlocks value and resources that did not exist when the firm was public. The acquisition premium offered to shareholders of the target firm is the main vehicle for sharing this anticipated value creation. This theory postulates that firms with the most severe agency problems, for example poor managements, large free cash flow, or inefficient operations, were the most desirable LBO candidates and could often achieve significant premiums based on their potential for improvement. Although hostile takeovers<sup>3</sup> were once conceived as the primary market-based corrective for managerial inefficiency, the modern P2P transaction, often structured in the form of a friendly deal, negotiated with the board, has now largely replaced the hostile takeover as the disciplinary mechanism. The premium in a P2P deal is, thus, not simply a transaction price,

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<sup>3</sup>A hostile takeover is a corporate acquisition where the target company's board of directors does not approve of the acquisition, and the acquiring company attempts to gain control by going directly to the target company's shareholders.

but rather a compensation for acquiring the right to install a fundamentally better governance and ownership structure.

### **1.2.2. Information asymmetry: signalling and the winner's curse**

M&A transactions also suffer from information asymmetry problems where one party has more, or more accurate, information than the other. This introduces significant challenges for valuation and negotiation and raises two important theoretical concepts: signalling, and winner's curse. Signalling theory, as outlined by Travlos (1987), argues that in the realm of information asymmetry, the acquirer's actions can signal, or convey, private information about its own valuation. The means of payment is one of the most robust signals. Travlos finds that a cash offer generally is viewed as a positive signal. In particular, it indicates that the acquirer is confident of the deal's prospects and, importantly, it does not believe its own stock is overvalued. On the other hand, using an acquirer's own stock for currency is often viewed as a negative signal to the market.

The winner's curse theory, originally described by Capen et al. (1971) and interpreted later in the context of corporate takeovers by Roll (1986), is the phenomenon that occurs in competitive bidding situations, such as an auction for a target firm, where the value is uncertain. In an auction, each bidder is making a judgment about the value of the target. Bidders who are the most optimistic (or make the worst estimates) will win the auction. Roll suggests that if, at an auction, bidders fail to allow for this statistic in their bidding (i.e., bidders "shade" their bids downward to reflect the knowledge that winning means they were optimistic) or if the bidders are unaware of the statistic, then the winner is systematically overpaying for that asset. This theory asserts that acquisition premiums will almost always be much higher when competing in an auction, and that winning bidders in auctions will be at very high risk for poor performance post-acquisition because they would likely have overpaid.

### **1.2.3. The market for corporate control: bargaining power and shareholder rights**

Ultimately, the acquisition premium is a negotiated quantity, with the size of the premium determined by the relative bargaining power of both the acquirer and the target. The bargaining setting does not happen in a vacuum; its characteristics are influenced by a variety of corporate and securities laws that structure entitlement and power between managers, boards, and shareholders. Takeover regulation and defences are important contributors to the bargaining setting. Legal mechanisms that reinforce shareholder rights tend, overall, to mean that the value of control is shared with all shareholders and is not just achieved by the party in control. For example, European mandatory bid rules that require a bidder who acquires a specified percentage of a target's share capital<sup>4</sup> to make a tender offer for the remaining shares at the same price help protect minority interest shareholders. In the context of U.S. law, appraisal rights provide a different but related protection style. Appraisal rights afford the dissenting shareholder the opportunity to petition a court to determine the "fair value" of their shares in the event of a merger. The potential of substantial appraisal litigation costs, especially where the premium received and offered by the acquirer is perceived low, can deter acquirers and establish a basic bargaining floor thus impacting the premium. On the other hand there are anti-takeover provisions (ATPs), or takeover defences. These include the "poison pill" (a shareholder rights plan) or staggered board adopted by the target company in order to increase the expense, difficulty, or time of a hostile acquisition. By increasing a target board's ability to reject a highly hostile offer, an ATP actually increases a target's bargaining power. For example, in some scenarios, increasing the offer price to the target or creating a competitive auction with multiple bidders, subsequently increasing the premium accepted by the target at close. However, ATPs, like many defensive measures, can be used by entrenched managers to block value-enhancing mergers and acquisitions that might threaten their positions as directors. This is the same tension between the "bargaining power" vs. "management entrenchment" viewpoints about the role of ATPs in acquisitions. The combination of these opposing views provides a compelling framework for thinking about

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<sup>4</sup> In Italy, the Mandatory Tender Offer (MTO) threshold is set at 25% of the share capital. In other European countries, like Germany, France, Spain, and the UK, it is 30%. On the contrary, United States federal law does not provide any MTO thresholds.

premiums. The agency issues identified by Jensen create space for value to be captured in a P2P transaction.

### **1.3. Empirical determinants of the premium: acquirer and target characteristics**

This section takes a step from theory to empirical evidence and considers the large body of empirical research that identifies the specific firm characteristics of both the acquiring firm and the target firm that systematically lead to the variance in the size of the acquisition premium. The empirical evidence presented in this research strongly supports the previous theoretical discussion, especially the critical role that agency conflict plays in M&A pricing and outcomes. The evidence tells a clear and compelling story: the governance structures and incentives of the parties involved in an acquisition are the first-order determinants of the acquisition premium that is paid.

#### **1.3.1. The acquirer's identity: public vs. private and strategic vs. financial buyers**

A robust empirical finding in the M&A literature on premiums is the difference in acquisition premium paid for public vs. private acquirers. Empirical studies consistently find that public acquirers pay significantly higher acquisition premiums than private acquirers (which are largely private equity funds that are doing P2P transactions). Barger, Schlingemann, Stulz, and Zutter's (2008) landmark study calculated that “public target shareholders received a 63% higher premium when the acquirer is a public firm rather than a private equity firm”. Moreover, the study shows that this premium differential is not a function of private firms systematically acquiring different or "cheaper" types of target firms, in fact the status of private bidder is a statistically significant predictor of a lower premium even when controlling for a range of observable target and deal characteristics (such as, size).

Another similar classification that is related, that also needs to be specified is the classification of strategic versus financial buyers. In theory, we might expect strategic buyers (operating companies within the same or adjacent industry) will pay generally higher premiums, since they may be able to achieve unique operational synergies (e.g., economies

of scale, access to new markets) that neither a financial buyer, such as a PE firm, nor the hedge fund participants will realize. In contrast, financial buyers are only concerned with creating value through financial engineering, operational and governance improvements. The empirical literature on this point is mixed. For example, Gorbenko (2014), using a sample of 349 takeover auctions of public US companies in which the acquirer paid in cash, shows no statistically significant differences between strategic and financial buyers, once controlling for other factors. The conclusion seems to be that the simple category of "strategic" or "financial," in fact, is often not sufficient to predict premiums. Instead, the actual terms of the deal, the characteristics of the target, and overall market conditions appear to be more important than the broad buyer classification.

The primary rationale provided for the public-private premium or discount gap is the managerial discretion hypothesis, a straightforward application of agency theory. As originally articulated, this hypothesis suggests that the managers of public companies, and particularly those with diffuse ownership and weak personal equity stakes, will tend to overpay for acquisitions. They may be doing so not to maximize shareholder value but to pursue benefits such as reputation, additional compensation, and job security that typically arise from managing a larger corporation ("empire building"). Private equity firms, which concentrate ownership and are able to align the interests of managers (General Partners) and owners (Limited Partners), face these agency problems to a much lesser degree.

The empirical evidence supports this view powerfully. The premium differential between public and private acquirers is not static, it is systematically lower as the managerial ownership of public acquirer increases. As a significant result, Barger et al. (2008) show that for public firms with managerial ownership exceeding 20%, the difference in the premiums that public firms pay on average compared to private acquirers becomes statistically insignificant. At this level, the incentives for public company managers become aligned sufficiently with those of the shareholder, thereby forcing the commitments in a manner similar to private ownership, and leading to more prudent acquisition prices.

### **1.3.2. Target firm characteristics: performance, leverage, and size**

Moving to the target characteristics, research shows that certain metrics of the target firm largely impact on acquisition premiums. A successful P2P transaction implies that the target asset has room for some kind of improvement, and its financial and operational status defines how much potential upside exists. Target performance and growth expectations are the foundation of an acquisition thesis. "Undermanaged" or in general poor performing companies are often deemed to be the best candidates for takeover, as they provide the largest opportunity for operational recovery and value creation under new ownership. As a result, these targets will generally have higher premiums. Target firms that already have strong profitability, however, will not command as high of a premium as an acquirer is limited in their ability to add value (Dimopoulos and Sacchetto, 2014).

The role of a target firm's leverage in determining the acquisition premium paid to its shareholders is a subject of considerable academic debate, with compelling theories supporting both positive and negative relationships. On one hand, leverage can function as a takeover defence mechanism: by concentrating managerial ownership and increasing the cost of acquiring control, it can force bidders to offer a higher price to ensure a deal's success (Stulz, 1988). On the other hand, high leverage can serve as a powerful disciplinary tool, reducing agency costs by compelling managers to utilize free cash flow as debt service, thereby making the firm more operationally efficient and attractive to a potential acquirer.

Empirical studies have largely affirmed a positive link between a target's debt levels and the premium it commands. For instance, In a foundational empirical study, Billett and Ryngaert (1997) investigated the determinants of takeover premiums by analysing 145 cash tender offers from 1980 to 1989. Their model revealed that abnormal returns for target shareholders were positively correlated with the target's leverage (debt-to-equity ratio) and negatively correlated with its holdings of financial assets relative to equity.

Lastly, the size of an M&A deal is an important factor in determining both the premium paid and ultimately, the success of the M&A deal. In empirical evidence, smaller targets command a larger premium relative to their size than larger firms. Although acquiring a large firm

requires a greater amount of capital, the risk and complexity of acquiring a larger target often drives greater pricing discipline, resulting in a smaller relative premium. However, research conducted by Alexandridis et al. (2017) shows a counterintuitive result: large acquirers destroy shareholder value more than small acquirers, even with lower relative premiums. Value destruction is often due to the challenges posed by integrating large firms and accurately estimating its synergies, which is complicated further by regulatory issues.

#### **1.4. Empirical determinants of the premium: deal structure and market environment**

In addition to the inherent characteristics of the parties on both sides of the transaction, the mechanics of the transaction, and the overall economic situation in which the transaction is occurring, are potent influences on the acquisition premium. The nature of the transaction (i.e., friendly versus hostile, negotiated sale versus competitive auction) and conditions in the financial markets significantly influence bargaining dynamics, bidder behaviour, and eventually what price is paid. This section will consider the empirical studies of structural and environmental factors, to make a clearer picture of how these factors affect transaction premium.

##### **1.4.1. The influence of deal mechanics: hostility, auctions, and method of payment**

The way a transaction is initiated and negotiated can directly and significantly alter the premium. A key takeaway is that increased competition and aggressiveness on the part of bidders leads to higher prices. Deal hostility is a critical component. A hostile takeover is commonly defined as an unsolicited bid, it precludes a friendly negotiated transaction and is almost always priced higher than a negotiated offer. For a hostile bidder to be successful, the bid price must be attractive enough to persuade the shareholders to ignore management's recommendation not to tender their shares. Inherently, the price must be higher because a hostile buyer cannot rely on management's support and has to start with a less interested shareholder base. Schwert (2000) found that transactions that are formally classified as hostile demonstrate slightly higher average premiums. This evidence is consistent with the

theory that such hostility is often the result of intense and aggressive bargaining tactics employed by the target's management, rather than initial aggression from the bidder. In fact, competition is demonstrated to be another key factor. When many bidders pursue the same target, the process becomes an auction. Competitive pressures drives acquisition premiums, in fact, one of the roles of investment banks advising sellers on an M&A process is to ensure optimal competitive tension, capable to maximize purchase prices, and therefore, the interest of their clients. According to the Houlihan Lokey "2023 Going Private Transaction Study," the M&A market saw a significant shift toward more competitive, widespread auctions, which correlated with higher premiums. The study highlights two key, related findings: i) increase in widespread auctions, accounting for 69% of auctioned deals in 2023, (up from 38% in 2022); ii) higher premiums in widespread auctions, yielding a median one-week acquisition premium of 46.3%, which was significantly higher than the premiums observed in more limited auction processes.

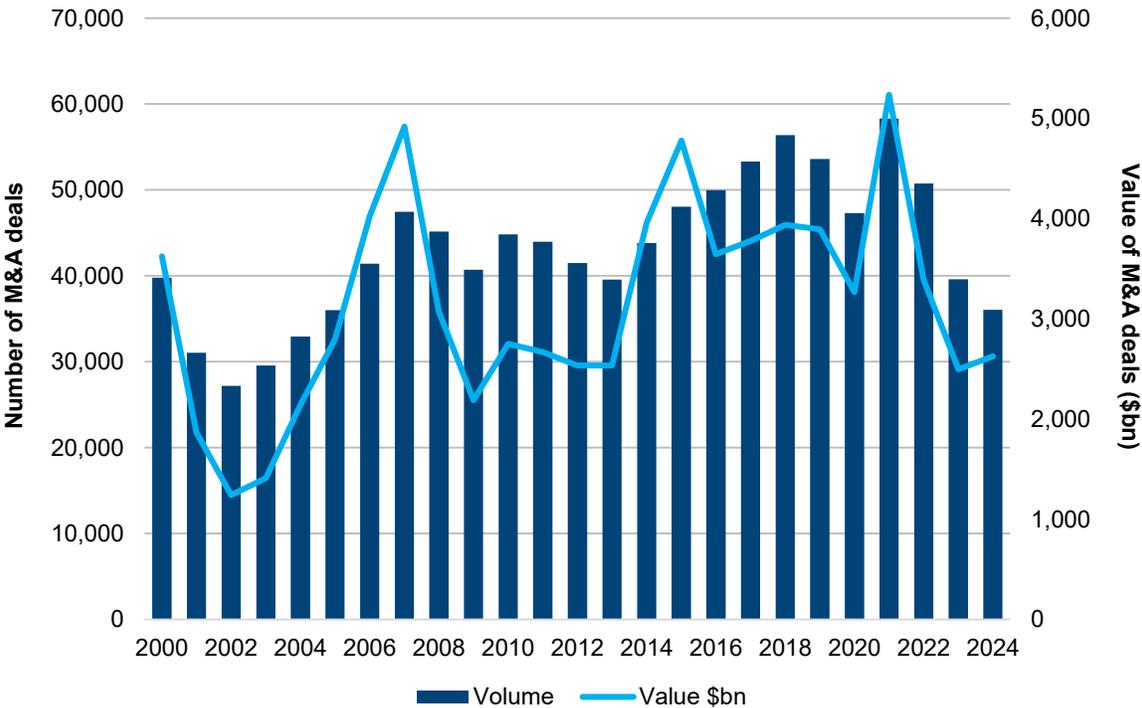
The way a transaction is paid for matters as well, since it can serve as a signal and a driver of premium. Simonyan (2014), and Bellamy and Levin (1992), found that cash-financed takeovers are always associated with a higher premium than stock-financed takeovers. In a cash offer, the target's shareholders receive a total certainty of value and liquidity, therefore no risks of the post-merger entity. Payments with cash signify the bidder's view of its valuation of the target and ability to pay for the expected future value increase, and often will be used pre-emptively to avert others from bidding against them. The ability to pay with cash is also directly correlated with the acquirer's financial situation, and, most importantly, credit market conditions. If liquidity is abundant on the market, financing with cash will be common, and therefore we will expect higher premiums.

#### **1.4.2. The macroeconomic context: credit cycles, market conditions, and M&A waves**

M&A activity is not evenly distributed over time, but is cyclical and occurs through distinct waves. These waves often occur during periods of economic expansion and bull equity markets. The principal factor driving the cyclical nature of M&A, particularly the amount of P2P deal activity, is the macroeconomic environment, especially the state of credit markets.

In general, the conditions of credit markets are important drivers of LBO waves. Low interest rates and narrow corporate bond spreads (the difference in yield between corporate bonds and risk-free government bonds) create abundant amounts of cheap, available debt financing. For example, the emergence of the "junk bond" market in the 1980's provided the volumes of cash needed to finance the first wave of large-scale LBOs. The dynamic still exists today; readily available, and cheap credit market liquidity directly contributes to PE firms and other acquirers' ability to consummate highly leveraged transactions.

**Chart 2:**  
Global M&A deals by volume and value (\$bn, 2000-2024)



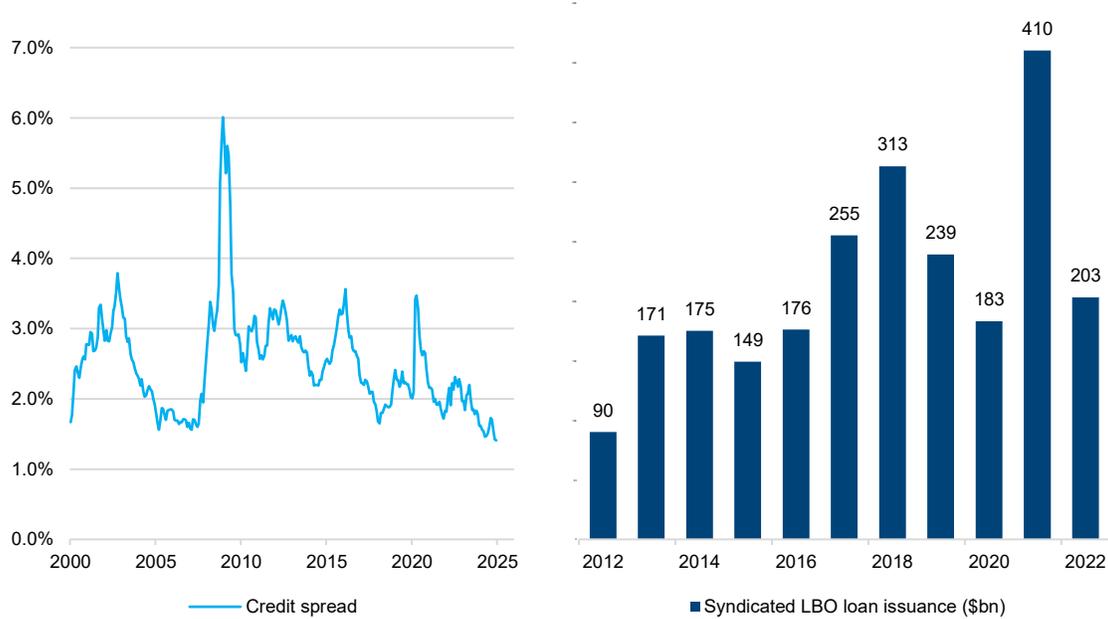
Source: Our elaboration on Statista data

This available capacity can increase competition among potential acquirers for the same target firm, which could increase asset valuations and previously negotiated acquisition premiums. Research has shown that financial buyers like PE firms, are particularly sensitive

to external timing factors. Financial buyers' willingness to pay high negotiated premiums is influenced by timing events more than strategic buyers' premiums are influenced.

**Chart 3 (left) & 4 (right):**

*Credit spread (%), 2012-2022) and Syndicated LBO loan issuance (\$bn, 2000-2024)*



Source: Our elaboration on FRED and LCD data

The relationship between acquisition premiums and macroeconomic conditions is nuanced and somewhat counter-intuitive. From the existing literature and studies on the drivers of deal premiums, there are few studies examining the impact of macroeconomic factors on deal premiums. For example, Madura et al (2012), using a sample of 1,418 takeovers of a privately owned companies by publicly listed firms, finds a positive correlation between premiums paid and the general level of stress in the economy.

On the contrary, Christensen and Simonsen (2012) conducted an empirical study on 255 U.S. acquisitions from 2003 to 2009 and found that acquisition premiums are negatively associated with strong macroeconomic conditions, particularly for targets in the Services sector. They argue that during economic downturns or periods of uncertainty, bidders tend to offer larger premiums to convince target shareholders and lenders to proceed despite

heightened risk aversion, thus refuting the common belief in a “good time frenzy” of overpayment during booms. This effect is explained by the fact that in boom periods, while M&A volume rises, the average quality of deals may be lower, diluting average premiums. Conversely, during downturns, only the most compelling, synergy-rich acquisitions are pursued, often requiring a high premium to overcome greater financing constraints and investor caution (Christensen & Simonsen, 2012).

Additional research supports the view that macroeconomic disruptions can elevate premiums post-crisis, although the effect is not uniform across all periods or deal types. For example, Jørgensen and Harbecke (2024) found that while macroeconomic crises do not systematically increase premiums, premium levels tend to spike in specific post-crisis years, reflecting market dynamics and strategic competition for high-value targets.

## **1.5. A holistic model of premium determination**

The previous sections have examined multiple determinants of acquisition premiums from theoretical, empirical and contextual perspectives. The conclusion of our literature review is that premiums in public-to-private transactions do not stem from one variable, but rather are an equilibrium result of complex interactions between both acquirer's and target's characteristics, the deal structure and the transaction environment. In this section, we will integrate our findings into a multidimensional model. Each layer presents different forces that create opportunities for value-creating activity and dictate pricing in P2P transactions.

### *Layer 1: The Macroeconomic and Market Environment*

The most encompassing layer is the macroeconomic context, which establishes the conditions for M&A activity. The cost of and access to financing, determined largely through interest rates and credit spreads, establish the upper limits of volumes of P2P transactions reliant on debt financing. Bull markets and market liquidity can drive acquisition waves by increasing the number of bidders and increasing the competition for acquisition targets. Bull markets also establish the generalized conditions for high acquisition premiums.

### *Layer 2: The Governance and Agency Game*

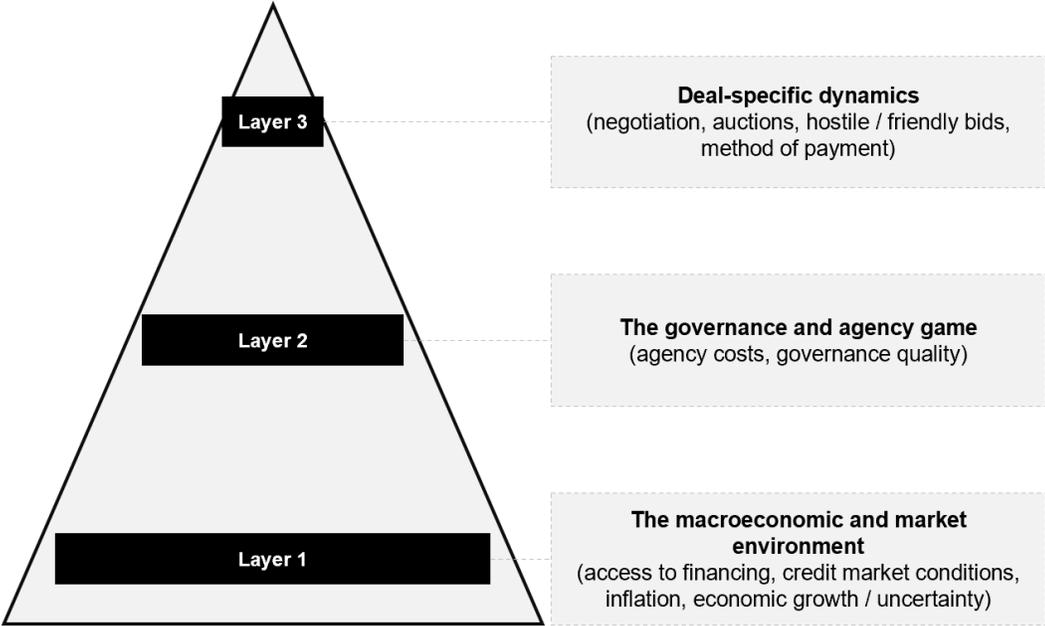
In this market environment, the governance structures and agency costs of both the potential acquirer and target firms define opportunity for value creation and establish the initial bargaining landscape. Target firms with high agency costs (e.g. poor management; inefficient capital allocation etc.) can represent potential value that can be realized by a disciplined acquirer as predicted by agency theory. The acquirers own governance quality will determine whether the acquirer is willing to overpay. A public acquirer with dispersed shareholders and where managers have low ownership stakes, could have a tendency to engage in "managerial discretion", resulting in higher bids. Conversely, if the acquirer is a PE firm, the acquirer acts as a more disciplined principal given they have a concentrated ownership position and strong incentives. At the same time, the target's governance, and in particular an independent board, acts as a strong bargaining agent for target shareholders by encouraging a higher price. This layer represents a "governance tug-of-war" to establish the fundamental parameters of any specific deal as the basis for valuation and negotiation.

### *Layer 3: Deal-Specific Dynamics*

The last layer is formed by the mechanics of the transaction process itself. This is where the potential value defined in Layer 2 is actually divided. A competitive auction is obviously the strongest mechanism for realizing a premium, and typically results in most of the expected synergies accruing to target shareholders while exposing the winning firm to the risk of over paying for the target. Hostile bids also force acquirers to pay higher in the face of management resistance. The method of payment is also significant as all cash offers command higher premiums as they represent certainty and confidence to sellers. Taken together, this integrated model shows that the premium is a dynamic by-product of the market environment, driven by the motivation to address agency costs, and completed during a competitive, situational, negotiation process.

**Figure 1:**

*Summary of the three layers for premium determination*



*Source: Our elaboration*

## **2. Leveraged Buyouts**

### **2.1. Introduction to Leveraged Buyouts**

Leveraged Buyouts (LBOs) transactions represent one of the most significant innovations in corporate finance over the past half-century. These transactions are characterized by the acquisition of a company using substantial amount of debt in the financing mix, along with a minority portion of equity contribution from the financial sponsor carrying on the transaction. This chapter provides a comprehensive introduction of the LBO phenomenon, its rationale, and the explanation of the levers through these kind of operations create value for investors. The core of the chapter is a critical analysis of the primary levers of value creation: i) deleveraging, ii) operational improvements, and iii) multiple expansion, weighing the competing theories and the often-contradictory empirical evidence. The objective is to present an evidence-based understanding of the LBO not merely as a financing technique, but as a distinct and adaptive organizational form with profound implications for the theory and practice of corporate control.

#### **2.1.1. Formal definition and core characteristics**

A Leveraged Buyout (LBO) is formally defined as the acquisition of a company, division, or assets, financed with a high proportion of debt, where the cash flows and assets of the acquisition target itself serve as the collateral for the loans and the source for their repayment. In a typical LBO, the acquiring entity, most often an investment firm such as a Private Equity (PE) firm, uses a relatively small portion of its own capital (equity) and funds the remainder of the purchase price with borrowed money. This high degree of financial leverage is the transaction's defining feature and distinguishes it from a standard corporate or strategic acquisition, which is typically financed with a much larger equity component and is often motivated by the pursuit of operational synergies.

LBO transactions both concern public and private business. In a private-to-private transaction, an PE fund would engage in a traditional (bilateral or auction) M&A process to acquire a certain stake of the private business. In the case that the target business is a listed entity, the PE fund will delist the company (so called “take-private” transaction) from the stock exchange through a tender offer. In that circumstance, the fund shall offer a premium to the current share price of the company to incentivize shareholders to sell and exit from their investment. The PE firm, along with any co-investing partners such as the target's incumbent management, becomes the new owner. This shift from public to private ownership is key to the LBO's strategic purpose, as it removes the company from the quarterly reporting pressures and regulatory scrutiny associated with public markets, theoretically allowing for a greater focus on long-term value creation.

The debt incurred in an LBO, typically ranging from 60% to 80% of the total purchase price, is comprised of a mix of secured “senior” debt (bank loans backed by collateral and with first or second lien claim) and unsecured “subordinated” debt (i.e., non-investment-grade quality, commonly referred to as "high-yield" or "junk" bonds). Each tranche of debt is usually priced at a base interbank rate (i.e., Euribor 6M) plus a certain margin. Term loans and revolving credit facilities (RCF) are ranked high in the capital structure, are usually secured with fixed assets or working capital as collateral, and are therefore priced at a lower interest rate (in other terms, are cheaper debt). Lower-ranked debt in the capital structure, such as an high-yield bond or mezzanine finance, require higher interest rates to compensate for the higher risk, and are usually unsecured and subordinated to the repayment of senior debt. Additionally, senior debt and subordinated debt differ in term of the covenants that the lending banks could require.

## **2.2. The theoretical foundation: solving agency cost paradigm**

Michael C. Jensen framed the theoretical underpinning of the LBO, as a value-creating vehicle, in a powerful series of papers. Jensen created a substantive academic framework that legitimized the market practice that was often not well liked, describing LBOs as a

capitalism-informed solution to a structural solution to an agency cost in large, publicly held companies. The separation of ownership (the shareholders) from control (the managers), in the modern public company context creates a classic agency problem. Managers as agents may have their own objectives that are not aligned with the objective of maximizing shareholder value. A key expression of this conflict, described in Jensen's (1986) paper, is the waste of corporate resources. Jensen provides a description of "free cash flow" as cash flow which is greater than that needed to fund a company's projects that have positive net present values. A mature company with relatively few higher-growth investment options might have managers reluctant to send free cash flow back to shareholders. Rather, the managers would be incentivized to spend above and beyond, and create wasteful, value-destroying acquisitions to build an "empire", or waste on large corporate perks, like a fleet of corporate jets.

From this perspective, the LBO emerges as a powerful organizational solution. The substantial amount of debt loaded in the target's balance sheet imposes a strict disciplinary mechanism on management. The contractual obligation to make large, regular interest and principal payments on the acquisition debt effectively forces managers to pay out future cash flows, preventing them from undertaking suboptimal projects. The threat of bankruptcy in the event of covenant-breach and insolvency serves as a motivator for efficiency, compelling management to cut costs, streamline operations, and focus intensely on cash flow generation.

### **2.3. Historical context and cyclicity**

The volume and the success of LBO transactions has been cyclical, with waves corresponding closely to the availability and cost of debt capital. The phenomenon first emerged in the 1980s, a period that can be considered the first LBO "boom". This wave was fuelled by financial innovations, most notably the development of a robust market for high-yield "junk bonds" championed by firms such as Drexel Burnham Lambert. These instruments allowed acquirers to raise vast sums of subordinated debt to finance acquisitions of unprecedented scale, culminating in the iconic \$25bn takeover of RJR Nabisco by KKR

in 1988. Deals from this period were characterized by extremely high leverage ratios, with debt often constituting 80% to 90% of the total financing structure.

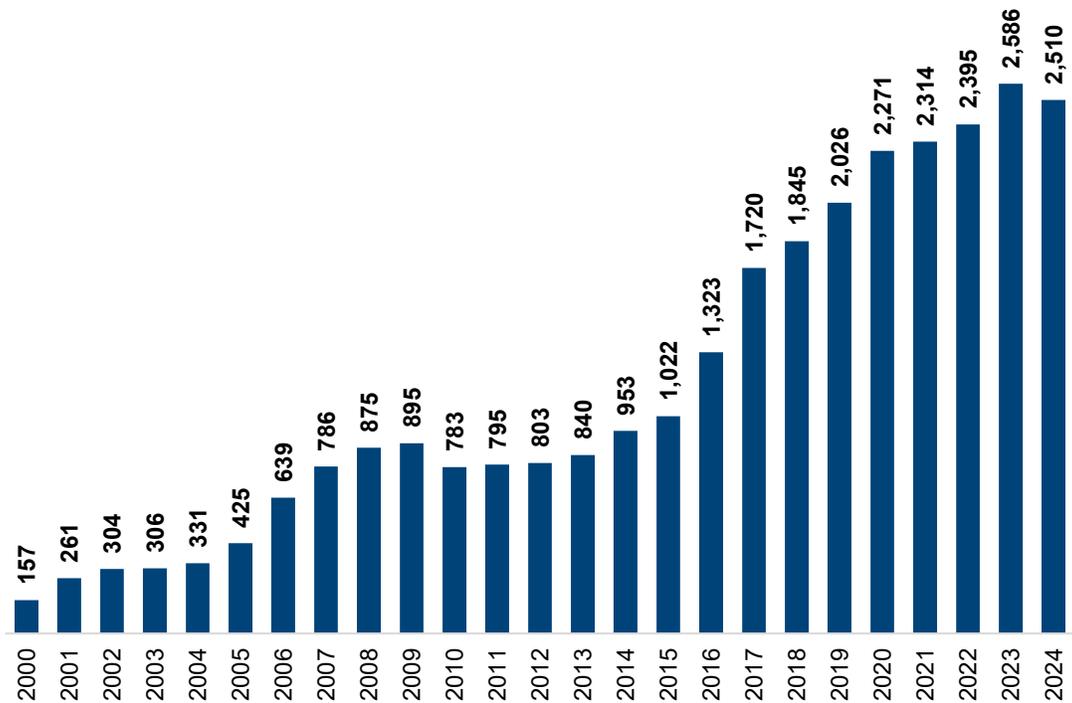
This initial boom ended abruptly at the end of the 1980s and beginning of the 1990s, due to the collapse of the junk bond market and general recessionary economic conditions which greatly reduced the volume of LBOs. The market continued to be rather subdued until the mid-2000s, which kicked off another, and even greater, LBO boom. The subsequent boom was global, included markets outside the United States, such as the U.K. and Continental Europe, and was facilitated by the vast availability of cheap debt that was coming from the new market in Collateralized Debt Obligations (CDOs).

The boom and bust historical pattern, described by Axelson et al. (2009), occurs as a function of macro-economic conditions, e.g. prior investment returns and prevailing interest rate levels. These booms and bust have implications. Specifically, cheap and easy credit can alter the nature of LBO value creation. In "hot" credit markets the rigor and structural discipline required for a LBO can be lost, as "too much money chases too few deals" which can lead to poorly priced deals and excessive reliance on financial engineering and market appreciation as the primary drivers of returns. In "cold" markets with scarce credit, alternatively, the PE firm has to rely more heavily on real operational improvements and strategic repositioning of the company to generate the required returns. This potentially cyclic relationship, as described by Kaplan and Stein (1993) in their analysis of the overheated market of the late 1980s, with their analysis of default rates, serves to foreshadow the subsequent academic debate on what LBO value is really produced.

The condition of the Leveraged Buyout (LBO) market today reflects a cautious but opportunity-rich market. Since the sharp interest rate increases and pullback in bank lending began in mid-2022, many large buyouts involving high debt loads have largely been absent from the market. In response, dealmakers have embarked on a range of small transactions that are structures as primarily private equity or heavily involve private debt. The volume of large transactions may have fallen, but amounts of dry powder have reached a record high of \$3.7 trillion (with \$1.1 trillion assigned for buyouts) in 2022. This amounts to pressure on private equity firms to deploy capital, however, the continued uncertainty around

macroeconomic conditions remains a hindrance to deal activity and exits. Nonetheless, certain types of high-quality assets still attract intense competition and high valuations. It appears the market is stabilizing, as GPs develop risk-adjusted approaches to losing deals by creating private-for-profit structures and maintaining their interest in add-ons and buy-and-build approaches.

**Chart 5:**  
*Global private equity dry powder (\$bn, 2000-2024)*



Source: S&P, Preqin

**2.4. The Anatomy of a Leveraged Buyout Transaction**

Gaining an understanding of an LBO requires us to take apart its components: the parties involved, the typical capital structure, and the transaction's lifecycle. This section breaks down the process to show how parties and capital work together to acquire and ultimately change the target company.

### **2.4.1. The LBO ecosystem: parties and responsibilities**

Successfully executing an LBO is a complicated process, requiring the use of several different parties that each have their own responsibilities and incentives.

#### *The Private Equity Firm (General Partner - GP)*

The PE Firm (KKR, Blackstone, The Carlyle Group, etc.) is the designer and sponsor of the transaction. As the General Partner of a fund, the PE Firm has responsibility for the entire investment process, including (i) raising capital from limited partners, (ii) identifying potential target companies and performing due diligence, (iii) negotiating and structuring the acquisition, (iv) overseeing and managing sufficient aspect of the acquisition during the hold period, and (v) managing the exit or sale of the company to return a profit. The GP is compensated in two ways to incentivize him. First, the GP receives an annual fee to manage the fund, typically representing 1% or 2% of the capital committed to the fund. This fee is the GP's only source of salary and covers all operational costs. The GP also receives "carried interest," a percentage of the profits of the fund, typically 20%, earned only after the limited partners receive their invested capital back. By structuring this compensation, the GP has a strong incentive to perform in the fund's best interests.

#### *Investors (Limited Partners - LPs)*

LPs are the institutional and high-net-worth investors who provide the vast majority of the capital for a PE fund. This includes public and private pension funds, university endowments, sovereign wealth funds, and insurance companies. LPs commit capital to a fund for a specified period, usually between 10 and 13 years, and delegate the trust of investing their capital to a GP. The name Limited Partner likely implies their limited liability for the only capital committed to the fund, and they are passive in the fund's day-to-day operations.

#### *Target Company Management*

The existing management team from the target company is frequently a key component of the buyout. Many times, the PE firm will consider specific TCM with an established track record who would provide value-add for the investment due to their knowledge of the

business and industry. There are transactions that refer to these scenarios as Management Buyouts (MBOs). In the case of an MBO, the managers may participate in the acquisition by "rolling over" their existing equity into the new private entity (in effect investing in the new entity with the original equity commitment), or investing their own capital with the PE firm that creates significant equity ownership in the newly private company, shifts them from salaried employees to equity owners, and aligns the incentives of the investment team to that of the GP.

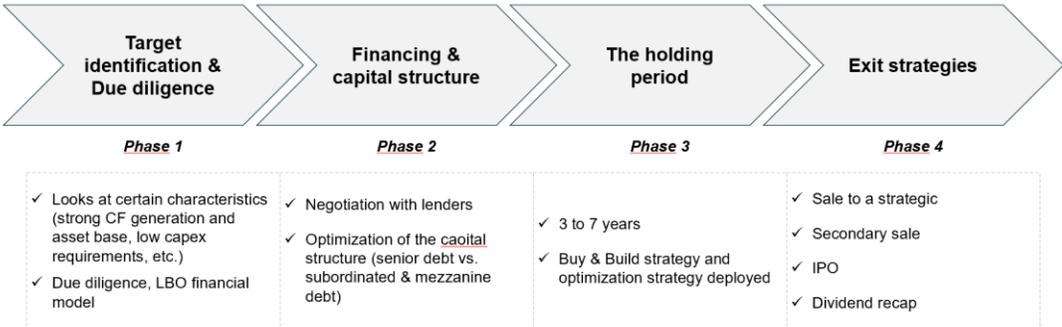
*Lenders*

Lenders are the financial institutions that provide the debt financing that is necessary to carry out an LBO. Because of the total dollar amount requisitioned for the LBO, it usually interfaces with a syndicate of lenders, including commercial banks, investment banks and institutional debt investors such as insurance companies and other specialty credit funds. They supply various layers, or "tranches," of debt with varying levels of risk, seniority, and cost.

**2.4.2. The transaction lifecycle**

The LBO process is broken down into four phases, from first identifying an opportunity, to realizing the value of the opportunity.

**Figure 2:**  
Transaction lifecycle summary



Source: Our elaboration

## Phase 1: Target identification & Due diligence

PE firms do not just randomly target companies. They target companies that share a specific set of criteria that would make a business an excellent candidate for a highly leveraged capital structure and private ownership. Elements of a profile for an ideal LBO candidate would be:

- i) **Stable and predictable cash flows:** cash flow stability is perhaps the most important characteristic as post-acquisition, these cash flows become the primary sources of servicing the large debt load assumed by the buyer.
- ii) **Defensible market position:** having a leading or market share or strong brand creates a competitive moat that supports stable, future cash flows.
- iii) **Low existing leverage:** a "clean" balance sheet with low or no existing debt provides the ability to take on more debt.
- iv) **Minimal ongoing capital requirements:** companies that have low CapEx or working capital needs and generate more free cash flow are better suited to servicing the debt level.
- v) **Strong management team:** an experienced and capable management team is essential for executing the value creation plan post-buyout. This is especially true with MBOs and in the cases where the fund wants to invest in a minority stake and / or when even when a majority stake is purchased, the fund does not have interest in running the business and lets incumbent management do their job (so called "hands-off" approach).
- vi) **Potential operational improvements:** if there are some function inefficiencies, such as high corporate overhead or non-core assets that can be divested, there are multiple points of potential value added.
- vii) **Heavy asset base:** tangible assets can be used as collateral for secured loans and so can make obtaining funding cheaper and easier through debt financing.

Once suitable target has been identified, the PE Firm will conduct careful due diligence and develop a detailed LBO financial model. The model projects the targets' future performance and cash flows, and identifies the maximum purchase price that can be paid in similarity with the firm's minimum required Internal Rate of Return (IRR), which could be within a 20% to

30% range. In this way, the LBO model sets the "floor valuation" of the target, from the financial sponsors' perspective, as it determines the greatest amount that a PE Firm can afford to pay. More specifically, in attempting to pursue mature, stable to low-growth companies, already low-growth situations poses a compelling tension in generating exceptionally high returns. This paradox can only be satisfied by measure performance of value creation levers, through aggressive moves of leverage, operational change, and multiple expansion. Thus, the ideal candidate characteristics precisely maximizes the opportunity properties of the value addition levers: stable cash flows for debt services, a clean balance sheet permitting new debts, and gaps in operational efficiencies provide the basic building blocks for improvement.

## **Phase 2: Financing & capital structure**

To fund the acquisition, a company leverages a bespoke capital structure that layers debt and equity to fund the acquisition. For instance, a dealer financing structure depends on high leverage and a near-equal equity share that consists of between 20% to 40% of the purchase price being contributed by PE sponsor equity and the remaining 60%-80% of financing made up of debt financing. The debt is placed in cut-layers with the proportions of debt diluted to their respective lender hierarchies:

### *Senior debt*

Constituted as the largest proportion (generally 30–60% of the total capital structure) of the debt making up the investment capital package, and is typically funded by PE Firm with commercial banks. Senior debt is considered "senior" as it first claim over the company's assets and cash flows in a bankruptcy situation. Senior debt is practically secured by the company's assets as well as inventory, receivables, and property, plant and equipment. Commonly, senior debt carries a revolving credit facility (to obtain continued access to working capital financing) and term loan facilities with amortization schedules (primarily Term Loan A, with Term Loan B most often negotiated with a bullet repayment at an assigned maturity date).

### *Subordinated (or junior) debt*

Is at its respective repayment hierarchy subordinate to senior debt and is therefore representative of greater risk to lenders, and subsequently higher yielding interest rates than senior debt. This incubator tier debt can take several forms, including high-yield bonds (also known as junk bonds) sold in the public market, or issued mezzanine financing from specialized funds. Mezzanine finance often has hybrid characteristics as it is generally a mix of debt (interest paid quarterly/semi-annually, etc.) and equity (generally warrants; options to own equity in the company).

### **Phase 3: The holding period**

After acquisition, the LBO enters the holding period, which lasts from three to seven years. This is not a passive investment; the PE firm will engage the company in a governance and management role to execute its value creation plan. Active ownership is primarily through the board of directors. The board of directors is reconstituted, after the buyout, in order to have representatives of the PE firm in addition to the company but of the previous board members in sitting on the board. The new board of directors, post-buyout, provides intensive monitoring and strategic oversight to the management team. During the holding period, the company is focused on generating cash to service and repay the company's debt while the GP and management team work on improving operations, removing costs, and pursuing the strategic initiatives. Many times, the PE fund engages in a "buy-and-build" strategy that is small and many add-on acquisitions to increase the company's size and recognize synergies through economies of scale.

### **Phase 4: Exit strategies**

The GP's ultimate objective with every investment is to "exit" or sell their ownership interest, and realize a profit for itself and its LPs. PE firms utilize several primary exit strategies:

- a) **Strategic sale:** this is a corporate sale or corporate acquisition, which often involves a strategic buyer including another competitor or a corporate entity in a reasonable space. Strategic buyers are often the preferred exit because they might pay a premium for the target's synergies.

- b) **Secondary buyout:** this would be selling the company to another private equity firm. Increased secondary buyouts have elongated the timeliness for companies to remain in private equity firm and muddied the original narrative about LBO 'temporary' ownership for fixing companies to re-enter public equity. If the LBO continues to have secondary sales raises significant questions about whether each sale creates value or each sale represents a “pass the parcel” game dependent on financial engineering and favourable market conditions.
- c) **Initial Public Offering (IPO):** the PE firm can also take the company public (again) once successful through a stock exchange. An IPO allows the sponsor to offload portions of its tendency into the public sphere, and is often an attractive exit in bullish equity markets. This is less preferable than a strategic sale because the PE will only partially monetize its investment and therefore will require a follow-on capital raise to fully exit from the investment.
- d) **Dividend recapitalization:** a dividend recapitalization consist in issuing new debt to fund a large, one-time dividend to the PE sponsor. This allows the firm to retrieve some or all of its initial equity investment while still retaining ownership and control of the company, waiting for a future exit opportunity.

## 2.5. The levers of value creation in leveraged buyouts

The capacity of LBOs to generate returns depends from the application of three primary levers of value creation: financial engineering (i.e., deleveraging & tax shield), operational improvements (EBITDA growth), and multiple expansion (i.e., arbitrage on valuation). While often discussed separately, these levers are strictly interconnected with one often amplifying the effect of another. This section provides a critical evaluation of each lever, supported by a quantitative attribution framework and a review of the extensive and often conflicting academic evidence. A quantitative attribution analysis, which decomposes the total equity return into its core components, provides a crucial empirical anchor for understanding how value is created. While the precise contribution of each lever varies

significantly by deal, industry, and economic cycle, a general framework can be synthesized from academic studies and practitioner models.

**Table 1:**

*Summary of LBO value creation levers*

Value driver	Key observations
<b>Financial Engineering</b> (Deleveraging & Tax Shield)	Often the largest and most reliable contributor to equity returns. Its importance is a direct function of the initial leverage level and the company's ability to generate cash flow for debt repayment. Practitioner models often show debt paydown as the single largest driver. Academic studies confirm that the leverage effect is a substantial component of total returns.
<b>Operational Improvements</b> (EBITDA Growth)	Represents the creation of "real" economic value through enhanced efficiency and growth. Its contribution is highly variable, depending on the PE firm's operational expertise and the target's potential for improvement. Studies show this lever can contribute significantly, often accounting for over a third of value creation.
<b>Multiple Expansion</b> (Market Timing / Arbitrage)	Refers to selling the company at a higher valuation multiple (e.g., EV/EBITDA) than the purchase multiple. It is highly cyclical and often considered the least controllable driver, as it depends heavily on macroeconomic conditions and market sentiment. Its contribution can be significant, particularly for deals executed during economic downturns when entry multiples are low.

This quantitative framework immediately highlights the multifaceted nature of the LBO model. The significant contribution from deleveraging provides strong support for the "financial engineering" school of thought, while the substantial impact of EBITDA growth validates the "operational improvement" narrative. The framework thus frames the discussion not as an "either/or" debate, but as a more nuanced inquiry into the relative importance of each lever under different circumstances.

### **2.5.1. Financial engineering: the value of the capital structure**

Financial engineering is the first component of an LBO, whereby an equity sponsor productively uses the capital structure to generate overall value. It does so in three ways:

#### *The Leverage Effect*

The fundamental principle is that debt magnifies returns to equity. The PE sponsor actually pays a small fraction of the purchase price, in this case, the company's total credit facility. The debtholders receive a fixed return (interest & principal), and the equity holder (the sponsor) gets everything else – the upside in company value beyond this fixed return. This asymmetrical payoff ensures that the sponsor can achieve outsized returns from even minimal increases in the company's overall value.

#### *The Interest Tax Shield*

One direct and measurable benefit of high leverage is the tax deduction of any interest expense - the amount of interest costs can be machined down to a 0% after-tax value. Corporate income taxes are applied to profit generated after taking out interest expense. Hence, a highly leveraged company pays less total corporate income tax than any other similar firm financed entirely with equity. The interest shield increases company's after-tax cash flow and can be used in one of two ways: (1) a small portion of higher cash flow can improve debt service on existing debt or (2) the higher cash flow can be reinvested back into the business and improve long term profits and cashflow creating a true form of value.

#### *Deleveraging*

This notion signifies the act of utilizing cash flows generated by the company to systematically pay down the principal of the acquisition debt over the period of holding the company. With every dollar of debt repaid, the sponsor's equity value increases, assuming the enterprise value of the company remains constant. In an effective LBO, the cmd-203, the leverage that has decreased (deleveraging) to increase the ratio of equity (debt to value ratio), is a huge and almost automatic way of adding value.

### **2.5.2. Operational improvements**

The most controversial aspect of value creation in LBOs is whether they actually improve the performance of the acquired companies in the first place. The literature here is vast and offers a divided and sometimes contradictory picture, and the findings vary significantly, even by period and geography.

The initial wave of the literature surveyed LBOs from the 1980's, and there was tremendous support for the operational improvement hypothesis. Kaplan (1989a) and Smith (1990) were among some of the original studies and channels that measured the LBOs and showed significant (statistically) increases in operating margins, cashflows, and efficiencies several years post buyout. Lichtenberg and Siegel (1990), with a more static plant file dataset, showed LBOs produced large increases to Total Factor Productivity (TFP). This evidence tour de force created credibility for Jensen's perspective on the LBO limited partnership structure's tremendous efficiencies from the leverage and concentrated ownership that permit previously public companies to thrive.

The studies looking at the more recent LBO waves of the 1990s and 2000s have less clear results for U.S. deals. Guo, Hotchkiss, and Song (2011) and Cohn, Nestoriak, and Wardlaw (2021), had some of the stronger data, and researched the operating performance gains of LBO targets and were often not statistically different from a closely designated control group of similar public firms. The outperformance of LBOs of this more recent time period may not have arisen from superior operational management, but from financial leverage or other favourable market conditions.

It is interesting that there appears to be more evidence substantiating operational improvements in international LBOs. Several studies have shown that European LBOs achieved more considerable post buyout operational performance improvements than their U.S. LBO counterparts. Studies examining French and Swedish buyouts and the scope of operational performance also documented large performance increases. What these geographical constructs mean for developing market efficiency, corporate governance norms, or labour market regulations, but begs important questions of whether these differences

explain varying degrees of impact of LBOs at different international locations. Sectoral differences are also significant: industries with high fixed costs and scalable operations (e.g., industrial manufacturing) may show larger post-buyout margin gains than service-based sectors, where operational improvements are often incremental.

### **2.5.3. Multiple expansion**

The last primary lever of value creation is multiple expansion. This lever focuses on the ability to sell company at a higher valuation multiple (e.g. Enterprise Value-to-EBITDA) at exit than at entry. For example, if a company was purchased at 8.0x EBITDA and sold 5 years later at 10.0x EBITDA, the equity holders would have realized a material amount of value.

Multiple expansion can occur for many reasons. Several will be external to the sponsor and largely beyond its control, such as an overall increase in stock market valuations, improved investor sentiment for a specific sector, or a low-interest rate environment pushing asset prices higher. Multiple expansion can also significantly impact exit multiple as a result of actions taken while owning the asset. The sponsor can always try to change the company's growth, profitability, and competitive position to make it a more attractive company for buyers in the future, thereby enabling the sponsor to receive a higher exit multiple. Additionally, a common PE strategy called "buy-and-build", is the use of the portfolio company as a "platform" to acquire multiple smaller "add-on" companies. A larger entity can be valued at a higher multiple than smaller companies were valued at individually, and this provides an opportunity to create value through arbitrage of the exit multiple of the larger entity. Although many PE firms are naturally cautious about relying on this lever's potential volatility, there is ample evidence that this lever can contribute a material amount of return, especially for investments made during economic recessions when entry multiples were depressed.

## **2.6. A critical perspective: risks, criticisms, and evolving paradigms**

Although the LBO model has theoretical appeal and is backed by various successes, it has inherent risks and has undergone systemic critique. A complete evaluation of the LBO model includes a critical assessment of possible drawbacks, including the greater risk of financial distress it incurs, its controversial effects on certain non-equity stakeholders such as employees, and the chances for new agency problems to develop within the private equity industry itself.

### **2.6.1. Financial distress and bankruptcy risk**

The most direct risk of an LBO stems from its leverage: the heavy debt burden makes the target company vulnerable and highly sensitive to economic or market downturns. For example, a recession can lead to lower revenues or higher costs which can quickly inhibit the company's ability to make its large debt service payments (interest and principal), making it prone to financial distress, default, or bankruptcy.

The empirical literature on LBO failure rates is a point of contention. Critics point to the evidence that suggests a forced bankruptcy rate of LBO-backed companies is dramatically high. For example, Ayash and Rastad (2021) evaluated 458 LBOs between 1980-2006. They found that LBO transactions seems to increase the probability of bankruptcy for the target firm by 18%. Evidence like this supports the position that PE firms will "overleverage" their portfolio company and expose the target to unneeded risk while chasing higher equity returns. High-profile failures, such as the bankruptcy of Toys "R" Us after its LBO, are often described as cautionary tales of debt burdens limiting a company's capacity to reinvest and to evolve.

Despite the many instances of high-profile failures, this is not always borne out by the data. Other research has found different conclusions. For example, research studying European LBOs after the financial crisis in 2008 has shown that PE-backed companies have a lower likelihood of becoming insolvent than comparable non-buyout firms (Guo, Hotchkiss &

Song, 2011; Tykvová & Borell, 2012). This finding indicates that PE sponsors, through enhanced monitoring, operational know-how, and active governance, position firms for better financial distress management and have greater success navigating poor economic performance (Acharya et al., 2013). The strong conflict of findings potentially can be attributed to differences in sample structure, geographical region with different legal and economic systems, or the nature and experience of the PE sponsors in the study sample, as higher experience firms have been shown to have lower failure rates (Kaplan & Schoar, 2005; Acharya et al., 2013).

### **2.6.2. Employment and wages**

The popular image of LBOs is one of ruthless corporate raiders engaging in "asset stripping" and "flipping" companies for a quick profit, leaving a trail of job losses and shattered communities in their wake. This narrative portrays PE firms as entities that extract value from companies at the expense of their workforce, and it is often supported by powerful case studies and political rhetoric. However, a large and growing body of systematic academic research, often using vast, confidential employer-employee datasets, presents a far more nuanced and often contradictory picture. Several rigorous studies conducted in the United Kingdom and Sweden have found no consistent evidence that LBOs lead to higher rates of redundancies, increased use of insecure temporary contracts, or greater overall job insecurity when compared to similar firms that were not acquired.

The reality appears to be highly complex and context-dependent. A landmark U.S. study by Davis et al. (2014) found that while employment growth at a firm's *existing* establishments tends to be lower following a buyout, this is largely offset by a higher rate of job creation at *new* establishments opened by the LBO-backed firm. This suggests a dynamic of creative destruction, where resources are reallocated from less productive to more productive uses. The impact can also vary significantly by the type of worker, with some studies indicating that white-collar or older workers may be more vulnerable to displacement, and by the nature of the deal itself, with reorganization-focused buyouts potentially having more negative consequences for workers than growth-oriented transactions.

Further complicating the picture, some research points to positive impacts on the quality of work. One UK study found that LBO employees reported higher levels of job discretion and participation in decision-making. Another study, analyzing employee reviews, found that while overall satisfaction tends to decrease after any acquisition (LBO or otherwise), employees in post-LBO firms complain less about operational issues like decision-making processes, suggesting some improvements in the work environment.

### **2.6.3. The "short-termism" critique**

Another major criticism is that the intense pressure to generate short-term cash flow to service debt forces LBO firms to adopt a myopic perspective, sacrificing crucial long-term investments in areas like Research & Development (R&D) and capital expenditures (CapEx). The fear is that PE owners will mortgage the company's future for the sake of near-term cash extraction. The evidence on this front is also mixed. Some early studies did find that CapEx tended to decline after a buyout. However, the seminal work by Lichtenberg and Siegel (1990), which had access to detailed plant-level data, found that LBOs did *not* lead to a reduction in R&D spending relative to their industry peers. More recent research suggests that the focus may be on improving capital *productivity* rather than simply cutting spending. Furthermore, a class of "entrepreneurial" or growth-oriented LBOs explicitly focuses on new product development and strengthening business capabilities to achieve a higher sale price. The academic literature on the specific impact of modern LBOs on R&D is less developed than on employment, representing a key area for future research.

### **2.6.4. The post-Jensenian paradigm**

The classic Jensenian model of the LBO is centred on resolving the agency conflict between the managers and diffuse shareholders of a public corporation. However, as the private equity industry has matured and grown into a dominant force in capital markets, a new and more complex set of agency problems has emerged. As argued by recent scholarship, the contemporary large-scale PE firm is no longer a "slim boutique" but a sophisticated "multi-

product suite" managing hundreds of billions or even trillions of dollars in assets across a wide array of funds and strategies. This evolution has given rise to a critical new agency conflict: the one between the General Partner (GP) and its own investors, the Limited Partners (LPs). This conflict stems from the GP's dual revenue streams: the performance-based "carried interest" and the fixed management fees calculated as a percentage of assets under management (AUM). While the carried interest aligns the GP's incentives with maximizing returns for LPs, the management fee does not. The fee structure creates a powerful incentive for GPs to engage in an "asset-gathering mentality". The primary goal can shift from generating the highest possible returns on invested capital to simply raising ever-larger funds to maximize the stable, predictable stream of fee income. This can lead to "deal heat" and pressure to deploy capital even in overheated markets or into less-than-ideal investments, potentially diluting returns for LPs. This represents a critical evolution in the application of agency theory to private equity, suggesting that a straightforward application of Jensen's 1980s framework is no longer sufficient to understand the governance dynamics of the modern industry. This "Post-Jensenian" conflict between GP and LP may be a key driver of future performance cycles in the LBO market and is a vital frontier for academic and regulatory inquiry.

## **3. Hypothesis Development**

The previously mentioned literature review identifies a clear interplay of factors that determine the size of acquisition premiums in LBOs. We defined an "holistic model" which presents deal-specific dynamics, firm-level governance, and macroeconomic and market environment as the variables providing the foundational context in which all transactions are priced. This thesis, therefore, seeks to empirically test the influence of the primary layer, focusing on credit conditions, market uncertainty, and the competitive pressure among financial sponsors.

This analysis will not only test the direct impact of these macro-level drivers on the acquisition premium, but will also explore their conditional relationships through interaction effects. Furthermore, to ensure the robustness of the findings, the econometric models will incorporate key firm-level control variables identified in the literature. The sensitivity of the results will be tested against all three definitions of the acquisition premium, to also account for potential pre-announcement information leakages.

### **3.1. Core Hypotheses**

#### **3.1.1. H1: Market uncertainty and the inverted-U relationship**

The theoretical literature provides mixed evidence on the uncertainty and M&A activity relationship. While M&A activity might be expected to be impeded by increased uncertainty, increased uncertainty could necessitate higher premiums to compensate shareholders for greater potential risk aversion (Christensen & Simonsen, 2012). Therefore, we believe this relationship is non-linear and somewhat more complicated than presumed.

With moderate levels of uncertainty, as is proxied with the CBOE VIX, acquirers must offer a larger premium to compensate shareholders for the perceived risk of transacting in a volatile environment. The premium is an incentive to sell equity and crystallise value in a future that

is turbulent. However, at some tipping point, extreme market stress changes the transaction landscape. As debt financing becomes constrained, acquirers are generally attacked from several outside bidders (and their competition). As the number of potential transactions shrinks, the few deals that do proceed are likely to be priced more conservatively, thereby suppressing the average premium. This leads to our first hypothesis:

**H1:** *Acquisition premiums exhibit an inverted-U (hump-shaped) relationship with market uncertainty.*

*Testable prediction: a positive and statistically significant coefficient on the VIX term and a negative and statistically significant coefficient on the VIX-squared term.*

### **3.1.2. H2: Capital overhang and the concentrated effect**

We normalize the dry powder metric (the "dry powder overhang"), which measures the relative amount of undeployed capital against the recent pace of investment activity (measured by the average deal value of the prior 3 years). It is hypothesized that a higher overhang, indicating that capital is accumulating faster than it can be deployed, reflects greater competitive pressure.

$$\frac{\text{Dry powder}_t}{\frac{1}{3} \sum_{j=1}^3 \text{Deal value}_{t-j}}$$

A key narrative in the private equity space is the idea of "too much money chasing too few deals," where an excess of undeployed capital (dry powder) increases competition for investments and inflates asset prices. This research elaborates on that concept by proposing that the effect of capital overhang is not a smooth, linear function. In other words, dry powder affects pricing only when supply of capital is exceptionally high relative to recent investment activity. A modest increase in dry powder likely does not change bidding behaviour. However, once the amount of dry powder reaches extreme, top quartile levels where it disproportionately outweighs the number of recent investments, the pressure on private

equity firms to deploy funds becomes a dominant strategic consideration. This may lead to more aggressive bidding behaviour, and a greater degree of willingness to pay premia for scarce high-quality assets.

**H2:** *The positive effect of private equity dry powder on acquisition premiums is concentrated in periods when the capital overhang is in the top quartile of its historical distribution.*

*Testable Prediction: A positive and statistically significant coefficient on a dummy variable that indicates a top-quartile dry powder regime.*

### **3.1.3. H3: Risk management, deal size, and market volatility**

The third hypothesis provides a link between market-level characteristics and firm-specific characteristics arguing that acquirer behavior toward risk is dynamic. Acquiring a large firm is riskier than acquiring a small firm, as the firm-specific issues a firm has in terms of financing, due diligence, and post-merger integration also magnify risk. In other words, during times of high uncertainty, the perceived risk of executing a large, complex transaction is magnified. As a result, financial sponsors will have a tougher time maintaining pricing discipline with a larger target, which means that they will de-prioritize their premium offers to create a larger margin of safety. Overall, this means that the positive relationship often cited between firm-size and premium size will decline as market-volatility increases.

**H3:** *The premium paid for larger target firms weakens as market volatility rises.*

*Testable Prediction: A negative and statistically significant coefficient on an interaction term between the target's size and the VIX.*

### **3.1.4. H4: Credit conditions and premium determination**

Since debt financing represents the vast majority of the total financing structure of an LBO, availability and cost of debt becomes primary drivers of those kinds of transactions. When credit spreads are narrow, money is “cheap”, meaning that funds can borrow at a low cost. This enhanced access to capital increases financial capacity of sponsors and intensifies

competition for suitable targets, thereby driving up assets valuations, and consequently, acquisition premiums offered to the target company's shareholders.

**H4:** *A negative relationship exists between credit spreads and acquisition premiums.*

*Testable Prediction: A negative and statistically significant coefficient on the credit spread variable.*

## 4. Data and Methodology

### 4.1. Sample selection:

Our dataset comprises 970 LBO public-to-private transactions in the period 1 Jan, 2000 to 31, Dec 2024. The source is LSEG (Refinitiv). Geographies include United States and Western Europe. For each target company, we additionally have all the relevant and needed financial information for our model, including premiums paid, EV/EBITDA LTM, Net debt LTM, Enterprise value, Revenue LTM, and EBITDA LTM.

### 4.2. Variables description

#### 4.2.1. Premium paid on acquisition

The dependent variable for this empirical research is the acquisition premium in each public-to-private LBO transaction. Consistent with customary market practice, the premium is measured as the percentage difference of the final offer price, and the target's "unaffected" stock price on the date or time prior to the announcement. This was done to avoid having the benchmark of the target's value fall prey to price movements due to market speculation about the deal.

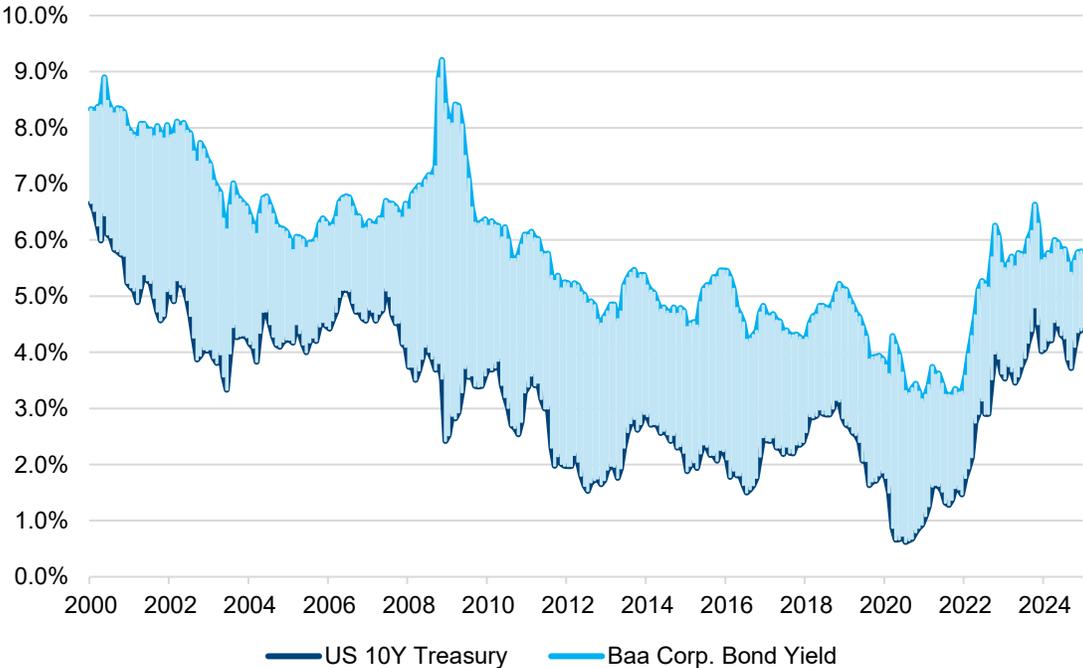
$$P_i = \frac{PP_i - MP_i}{MP_i}$$

Where:  $P_i$  represents the premium paid,  $PP_i$  is the purchase price per share offered at announcement date;  $MP_i$  is the market price of the share. To support the validity of the empirical findings, and to test the sensitivity of the findings, this research will use three different premium definitions based on the target's closing stock price one day, one week, and one month prior to the date of the transaction announcement.

### 4.2.2. Credit spread

To investigate the impact of capital market conditions on acquisition multiples, this study defines the credit spread as the difference between Moody's Seasoned Baa Corporate Bond Yield and the U.S. 10-Year Treasury Yield. For all interest rate variables, a monthly frequency was chosen. This decision is intended to mitigate the impact of short-term market ‘noise’ inherent in daily data, which is unlikely to influence a long-term strategic decision such as an LBO. The negotiation and due diligence process for an acquisition spans several weeks or months, making the prevailing monthly interest rate environment a more accurate reflection of the conditions considered by investors. This approach is also consistent with standard practice in financial research for this type of study, increasing the robustness of the empirical results. Both historical series were obtained from the FRED (Federal Reserve Economic Data) database, managed by the Federal Reserve Bank of St. Louis, ensuring consistency and reliability of sources.

**Chart 6:**  
*Monthly credit spread (2000-2024)*

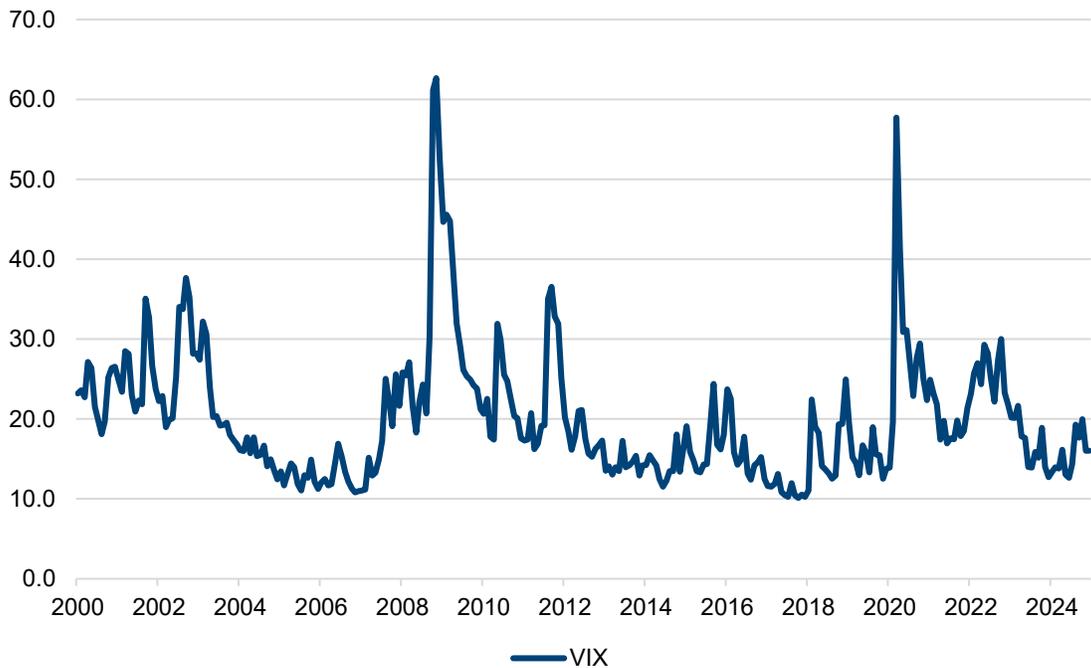


Source: FRED Saint Louis Database

### 4.2.3. VIX

To quantify the uncertainty and risk perception prevailing in financial markets, this study uses the CBOE Volatility Index (VIX). Commonly known as the ‘fear index’, the VIX measures the 30-day volatility expectation of the S&P 500 index, derived from option prices. Its adoption as a proxy for uncertainty is methodologically robust, as it represents the most widely used and accepted standard in financial literature. Its forward-looking nature (based on expectations) makes it particularly suitable for modelling investment decisions, which are by definition future-oriented. Historical data for the VIX index were obtained from the FRED (Federal Reserve Economic Data) database, VIXCLS series. Although the native frequency of the series is daily, the data were aggregated on a monthly basis by calculating the average of the daily values. This aggregation was carried out to mitigate short-term volatility (‘noise’) and to obtain a more stable measure of the prevailing climate of confidence in each month and to align the frequency with the abovementioned variables.

**Chart 8:**  
*CBOE Volatility Index: VIX (2000-2024)*



Source: FRED Saint Louis Database

#### **4.2.4. Dry powder**

To measure competitive pressure on the acquisitions market resulting from available capital, the historical series of global private equity dry powder was used as an independent variable. This metric represents the total capital raised by funds but not yet invested and is a key indicator of potential demand for quality assets. The data was obtained from S&P and Preqin which provide it only on an annual basis. Although a higher frequency would theoretically be preferable to align with the other monthly variables, the choice of annual data is considered methodologically acceptable, since dry powder is a “stock” variable that moves slowly, unlike more volatile “flow” variables such as the VIX or interest rates. Therefore, the year-end value can be considered a reasonable proxy for the average level of capital available during that calendar year. As previously mentioned, we normalized dry powder data since the absolute value, which has been growing year-on-year for decades would be meaningless.

#### **4.3. Data cleaning and preprocesses**

The dataset has been adjusted before the empirical analysis, for instance, regarding outliers and time alignment issues across sources. Macroeconomic variables such as the VIX index and credit spreads were lagged by one month relative to the transaction announcement date, avoiding look-ahead bias and, therefore, ensuring that the explanatory variables reflect only information available prior to each transaction. Economically, this also represents a more logical approach since the purchase price for a transaction is probably decided a couple of months (or even one month) before the announcement date.

##### *Winsorization & Scaling*

In order to mitigate the influence of outliers, we winsorized leverage ratios and deal values at the 1st and 99th percentiles. Continuous explanatory variables, including credit spreads, VIX, dry powder overhang, deal value, and leverage, were standardized to have a mean of zero and a standard deviation of one. Because macro series are monthly and matched to

announcement dates, a small number of observations lack a macro match; this explains why macro-based regressions use 970 observations, versus 975–976 rows in the raw sample.

This preprocessing procedure makes the dataset internally consistent and statistically robust.

#### 4.4. Descriptive statistics:

This section provides a summary of the key statistical properties of all variables used in the empirical analysis. The following table presents the number of observations (N), mean, median, standard deviation, and the minimum and maximum values for the dependent, independent, and control variables.

**Table 2:**  
*Descriptive statistics*

Variable	N	Mean	Min	25%	50%	75%	Max	Std
Premium paid 1 day prior	703	29.8%	-99.5%	12.6%	25.0%	39.6%	273.1%	30.8%
Premium paid 1 week prior	703	32.3%	-99.5%	15.4%	27.4%	42.8%	240.1%	31.3%
Premium paid 4 weeks prior	703	34.3%	-99.4%	17.2%	28.3%	43.1%	300.0%	33.1%
VIX (index level)	703	18.78	10.26	13.51	17.43	22.72	62.67	6.71
VIX squared (index level)	703	397.67	105.36	182.39	303.80	516.12	3927.40	350.57
Dry powder overhang (ratio)	0.80	0.31	0.64	0.80	1.01	1.19	0.25	0.42
Leverage (x, winsorized)	703	4.3x	0.0x	1.2x	2.4x	4.2x	55.9x	7.4x
Credit spread (%)	703	2.3%	1.4%	1.7%	2.2%	2.8%	5.7%	0.6%
Target size (log)	703	6.62	3.07	5.38	6.73	7.87	10.70	1.63
Enterprise value (\$m)	976	2,067	631	4,271	22	164	631	2,052

## 4.5. Methodology

This study uses a multivariate regression framework in order to investigate and empirically test the hypotheses outlined in Chapter 3. The analytical approach used in this research allows us to not only obtain an average effect of the market drivers over our entire sample period but also to assess the stability of these relationships across different macroeconomic regimes.

### 4.5.1. Econometric models

The primary backbone of the analysis is a multivariate Ordinary Least Squares (OLS) regression model with sector fixed effects. The fixed effects allow the model to control for unobservable, time-invariant heterogeneity across different sectors, such as different capital structures, growth profiles, or regulatory contexts, that potentially affect acquisition premiums in a systematic way. The model is specified as follows:

$$\begin{aligned} Premium_i = & \beta_0 + \beta_1 VIX_t + \beta_2 VIX_t^2 + \beta_3 TopQuartileDryPowder_t \\ & + \beta_4 TargetSize_i + \beta_5 (TargetSize_i \times VIX_t) + \beta_6 CreditSpread_t \\ & + Controls_i + SectorFE_i + \varepsilon_i \end{aligned}$$

Where:

- $Premium_i$  is the acquisition premium for transaction  $i$ .
- $VIX_t$  and  $VIX_t^2$  test the non-linear uncertainty hypothesis (H1).
- $TopQuartileDryPowder_t$  is a dummy variable testing the concentrated capital overhang effect (H2).
- $TargetSize_i \times VIX_t$  is the interaction term testing the risk-management hypothesis (H3).
- $CreditSpread_t$  tests the credit conditions hypothesis (H4).
- $Controls_i$  include target leverage.

- $\text{SectorFE}_i$  represents a full set of dummy variables for each target industry sector.
- $\epsilon_i$  is the error term.

The continuous explanatory variables are standardised to have a mean of zero and a standard deviation of one, thus allowing comparison of the magnitude of their relative effects. To account for potential heteroscedasticity, all models are estimated using robust standard errors (HC3).

#### **4.5.2. Analytical strategy**

The empirical analysis occurs in two key stages. First, we run the model with the full sample of 703 transactions from 2000 up to 2024. This allows us to get an initial assessment of our four hypotheses and allows the analysis to determine an average effect of the key market drivers over the 25-year period. Second, the key focus of the analysis is a structural break analysis. We re-estimate the model across four distinct macroeconomic periods:

1. Pre-GFC Boom (2000-2007): period of credit expansion and high levels of M&A activity.
2. GFC & Sovereign Debt Crisis (2008-2012): period of extreme market stress and deleveraging.
3. Post-Crisis Recovery (2013-2019): period of quantitative easing and low interest rates.
4. COVID & Post-COVID (2020-2024): period of unprecedented fiscal stimulus and subsequent inflation.

This type of analysis is built to investigate structural breaks and illustrate how the fundamental drivers of LBO premiums evolved over different periods of time, moving beyond a static view to provide a dynamic picture of the market.

### **4.5.3. Robustness checks**

To verify the validity and reliability of our findings, we incorporate a key robustness check on our main findings. We re-estimate the main model and the structural break analysis with two alternative definitions of the dependent variable: the premium calculated relative to the target's unaffected stock price one day prior and four weeks prior to the transaction announcement, to ensure that our main conclusions are not overly sensitive to the specific measurement window chosen for the acquisition premium.

## 5. Empirical Results

This chapter presents the empirical findings of the study, starting with the estimation of the main regression model on the full sample of 703 public-to-private LBO transactions. The first step establishes the average effect of the key market-wide drivers on acquisition premiums during the entire 2000-2024 period. Following this, the chapter then continues to examine the specific time period analysis, which considers the stability of these relationships across different macroeconomic regimes.

### 5.1. Full-sample estimation results

Table 5.1 shows the results of the main Ordinary Least Squares (OLS) regression including sector fixed effects. The model is overall statistically significant, as shown by the F-statistic ( $p < 0.001$ ), and gives credible grounds to test the hypotheses developed in Chapter 3. The R-squared of 0.115 indicates that the model explains 11.5% of the variation in the one-week acquisition premium, which is a reasonably robust degree of explanatory power for a cross-sectional model of this type. The coefficients in Table 5.1 will allow for a straightforward interpretation of the four principal hypotheses.

***H1: Market uncertainty and the inverted-U relationship is strongly supported.***

Results support the existence of a non-linear, hump-shaped relationship between market uncertainty and acquisition premiums. The coefficient on the linear VIX term is positive and statistically significant (0.322,  $p < 0.01$ ). The coefficient on the VIX-squared term is negative and statistically significant (-0.137,  $p < 0.01$ ). This indicates that premiums will rise with uncertainty for some period, and then extreme stress will cause premiums to fall.

**Table 5.1:***OLS Regression Results for Determinants of LBO Premiums (Full Sample)*

<b>Variable</b>	<b>Coefficient (Std. Error)</b>
Constant	<b>0.2961***</b> (0.033)
VIX_scaled	<b>0.3221***</b> (0.095)
VIX_squared_scaled	<b>-0.1369***</b> (0.050)
Top quartile dry powder	<b>0.0561*</b> (0.029)
Target size (log, scaled)	<b>0.0778*</b> (0.043)
Interaction VIX × size (scaled)	<b>-0.1447**</b> (0.065)
Credit spread (scaled)	<b>0.0144</b> (0.023)
Leverage (win, scaled)	<b>0.0120</b> (0.012)
<i>Sector: Consumer Staples</i>	<i>-0.0421 (0.048)</i>
<i>Sector: Energy and Power</i>	<i>-0.0074 (0.048)</i>
<i>Sector: Financials</i>	<i>0.0001 (0.050)</i>
<i>Sector: Healthcare</i>	<i>0.0662 (0.069)</i>
<i>Sector: High Technology</i>	<i>0.0196 (0.044)</i>
<i>Sector: Industrials</i>	<i>0.1110** (0.045)</i>
<i>Sector: Materials</i>	<i>-0.0853 (0.059)</i>
<i>Sector: Media and Entertainment</i>	<i>0.0629 (0.049)</i>
<i>Sector: Real Estate</i>	<i>-0.0932 (0.060)</i>
<i>Sector: Retail</i>	<i>-0.0189 (0.043)</i>
<i>Sector: Telecommunications</i>	<i>-0.0159 (0.096)</i>
Observations: 703	
R-squared: 0.115	
F-statistic: 4.415***	

**Notes:** The dependent variable is the acquisition premium measured one week prior to announcement. Standard errors are robust (HC3) and reported in parentheses. Significance levels are denoted as follows: \* p<0.1, \*\* p<0.05, \*\*\*p<0.01.

***H2: Capital overhang, and the Concentrated effect is supported.***

The hypothesis that the effect of capital overhang is concentrated at extreme levels is supported. The coefficient for Top-Quartile Dry Powder dummy variable was positive and statistically significant at the 10% level (0.056,  $p=0.053$ ). Thus, when the supply of undeployed capital is in the top quarter of its historical range, acquisition premiums are, on average, 5.6 percentage points higher. This supports the notion of "too much money chasing too few deals" does explain premiums, especially when there are periods of exceptional capital supply.

***H3: Risk Management, Deal Size, and Market Volatility is strongly supported.***

The model provides support for the hypothesis that acquirers adjust their pricing for large deals in times of volatility. The coefficient on the interaction term between target size and VIX was negative statistically significant at the 10% level (-0.145,  $p = 0.025$ ). Therefore, the larger and more complex the target, the more acquirers will systematically discount any premium during extreme market uncertainty. This suggests a risk-management behaviour.

***H4: Credit conditions are not a significant driver.***

The hypothesis of a direct, negative relationship between credit spreads and premiums is also not supported as the coefficient on the credit spread variable was not statistically significant ( $p = 0.524$ ). This confirms that, while the cost of debt is critical to the validity of LBOs, it is likely not a driving force behind the final premium paid to shareholders in this model. Debt is not the only one of the two financing sources in an LBO, in fact, it could be the case that private equity sponsors tend to *rebalance* the financing mix in period of unfavourable credit conditions, rather than completely abandon the potential transaction. In other words, equity becomes a larger part of the financing mix and *replaces* expensive and risky debt. This topic, on the back of real-world evidence coming from recent major private equity fund deals, characterized by a more balanced debt/equity structure, could be an avenue for future research.

## 5.2. Analysis across economic regimes

### 5.2.1. Pre-GFC vs. post-GFC

The main research question of this thesis seeks to determine if the drivers of LBO premiums have remained stable over time. To provide insight into these questions the core model was re-estimated over two time intervals, namely the Pre-Global Financial Crisis (GFC) (2000-2007) and Post-GFC (2008-2024). The results, as presented in Table 5.2, reveal a strong structural break and indicate that the market for corporate control was fundamentally altered by the 2008 financial crisis.

**Table 5.2:**

*Comparative Results for Pre- and Post-GFC*

<b>Variable</b>	<b>(1) Pre-GFC</b>	<b>(2) Post-GFC</b>
VIX (scaled)	<b>0.572***</b> (0.160)	<b>0.190</b> (0.176)
VIX-squared (scaled)	<b>-0.234**</b> (0.118)	<b>-0.114</b> (0.080)
Top-Quartile Dry Powder	<b>0.000</b> 0.000	<b>0.028</b> (0.035)
Target Size (log, scaled)	<b>0.185***</b> (0.056)	<b>-0.001</b> (0.076)
Interaction (Size × VIX)	<b>-0.281***</b> (0.074)	<b>-0.028</b> (0.121)
Constant	<b>0.231***</b> (0.031)	<b>0.414***</b> (0.066)
Sector Fixed Effects	Included	Included
Adjusted R-squared	0.127	0.077
Observations	367	336

**Notes:** The dependent variable is the acquisition premium measured one week prior to announcement. Standard errors are robust (HC3) and reported in parentheses. Significance levels are denoted as follows:  
\* p<0.1, \*\* p<0.05, \*\*\*p<0.01.

### *The Pre-GFC Era (2000-2007)*

In the period leading up to the financial crisis, the model is strong and explains 12.7% of the variation in premiums. The results depict a market that was acutely informed about risk and firm characteristics. The inverted-U relationship for VIX is fully developed and highly significant, as is the VIX-size interaction, as is the direct effect of Target Size. This indicates that in the credit “boom”, premiums were systematically governed by an explicit risk-pricing logic.

### *The Post-GFC Era (2008-2024)*

In the wake of the crisis, the market logic appears to have broken down completely. The explanatory power of the models declines, but most significantly, all of the main explanatory variables lose their statistical significance. In particular, the vanishing VIX effect is striking. All of which suggests that the 2008 crisis acted as a fundamental structural break ushering in a "new normal" in which previously important, market-wide determining factors of risk and capital supply disappeared from determining premiums. Pricing in the post-crisis world is driven by more idiosyncratic, deal-only factors that were not considered in this model. This is in line with the fact that this period was characterized by extremely low interest rates and a general positive macroeconomic environment, where we expect uncertainty (VIX) and undeployed capital pressure (dry powder) to be less relevant.

## **5.2.2. The evolution of market drivers across four macroeconomic regimes**

To gain a deeper understanding of this structural break, we extended beyond a simple two period analysis by investigating four distinct macroeconomic periods. The results, displayed in Table 5.3, show a clear evolutionary path demonstrating not only that the market changed but how it changed in moving from one dominant logic to another over the last twenty years.

**Table 5.3:***Comparative Results for Pre- and Post-GFC*

Variable	(1) Pre-GFC	(2) GFC/Crisis	(3) Recovery	(4) COVID Era
VIX (scaled)	<b>0.572***</b> (0.160)	<b>-0.822</b> (inf)	<b>0.009</b> (0.232)	<b>0.455</b> (0.320)
VIX-squared (scaled)	<b>-0.234**</b> (0.118)	<b>-0.303</b> (inf)	<b>0.04</b> (0.219)	<b>0.065</b> (0.433)
Top-Quartile Dry Powder	<b>0</b> 0.000	<b>0.121</b> (inf)	<b>-0.039</b> (0.044)	<b>-0.007</b> (0.096)
Target Size (log, scaled)	<b>0.185***</b> (0.056)	<b>-0.28</b> (inf)	<b>0.224**</b> (0.112)	<b>-0.036</b> (0.136)
Interaction (Size × VIX)	<b>-0.281***</b> (0.074)	<b>0.319</b> (inf)	<b>-0.325**</b> (0.143)	<b>0.076</b> (0.253)
Constant	<b>0.231***</b> (0.031)	<b>0.467</b> (inf)	<b>0.294***</b> (0.085)	<b>0.486***</b> (0.077)
Sector Fixed Effects	Included	Included	Included	Included
Adjusted R-squared	0.127	0.041	0.169	0.089
Observations	367	127	125	84

**Notes:** The dependent variable is the acquisition premium measured one week prior to announcement. Standard errors are robust (HC3) and reported in parentheses. Significance levels are denoted as follows: \* p<0.1, \*\* p<0.05, \*\*\*p<0.01. *inf* std. error for the GFC/Crisis period indicates multicollinearity issues due to limited observations.

#### *Phase I: The Pre-GFC Era (2000-2007)*

This phase confirms the findings from the two-period analysis. The market is governed by a defined logic, where premiums are systematically adjusted for (a) market-wide risk (VIX), and (b) firm specific risk (the size interaction).

### *Phase 2 & 3: The Post-Crisis Decade (2008-2019)*

The decade following the GFC appears to be a transitional phase. The old logic of risk-pricing has been broken as evidenced by the insignificant VIX coefficients. There is no new clear market-wide driver to take its place. The model has low and inconsistent explanatory power which indicates that our pricing was driven by idiosyncratic, deal-specific opportunities rather than through a coherent market-wide logic.

### *Phase 4: The COVID Era (2020-2024)*

A new and distinct market logic appears to have crystallised in the post-COVID era. While the model's overall explanatory power is modest, the key change is the emergence of a new dominant driver: the pressure to deploy capital. This is consistent with the broad market narrative of the post-Covid period, where dry powder accumulation started to hit the headlines.

## **5.4. Robustness checks**

To ensure the findings were reliable, the regression model was re-estimated using two alternate dependent variable definitions: the premium measured one day prior and four weeks prior to the transaction announcement. The results, shown in Table 5.4, demonstrate that the main findings from the study are incredibly robust to this change in specification.

The results reveal remarkable consistency across all three models. The inverted-U relationship for VIX (H1) and the VIX-size interaction (H3) are persistent in being negative and highly statistically significant, confirming that they are stable and reliable predictors of LBO premiums. The concentrated effect of dry powder (H2) remains positive and statistically significant in both the 1-day and 1-week models, providing strong support for its validity as well.

Additionally, the overall explanatory power of the model remains consistent, with the overall Adjusted R-squared ranging from 9.2% to 10.3%. This shows that the main findings from this thesis are not an artefact of some particular measurement decision, but rather the result

of the underlying characteristics of the market for corporate control. The complex story of a market that has changed through distinct economic regimes is therefore strongly supported by the data.

**Table 5.4:**

*Robustness Check Across Alternative Premium Definitions*

<b>Variable</b>	<b>(1) 1-Week Premium</b>	<b>(2) 1-Day Premium</b>	<b>(3) 4-Weeks Premium</b>
VIX (scaled)	<b>0.322***</b> (0.095)	<b>0.331***</b> (0.089)	<b>0.345***</b> (0.097)
VIX-squared (scaled)	<b>-0.137***</b> (0.050)	<b>-0.113**</b> (0.050)	<b>-0.152***</b> (0.056)
Top-Quartile Dry Powder	<b>0.056*</b> (0.029)	<b>0.069**</b> (0.029)	<b>0.044</b> (0.031)
Interaction (Size × VIX)	<b>-0.145**</b> (0.065)	<b>-0.177***</b> (0.056)	<b>-0.157**</b> (0.065)
Constant	<b>0.296***</b> (0.033)	<b>0.284***</b> (0.032)	<b>0.300***</b> (0.032)
Sector Fixed Effects	Included	Included	Included
Adjusted R-squared	0.092	0.103	0.099
Observations	703	703	703

\*Notes: Standard errors are robust (HC3) and reported in parentheses. Significance levels are denoted as follows: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . *The full set of control variables was included in all models.*

## Conclusion

This thesis has performed an empirical analysis of one of the most critical elements in corporate finance: the acquisition premium in public-to-private leveraged buyouts. The main purpose of this thesis research was to determine the key drivers of the premiums and additionally, how these factors have been impacted by the turbulent economic landscape of the last quarter century. By using a dynamic approach, this thesis established a narrative surrounding the market for corporate control and how the fundamental logic of how the premiums is priced has changed with extreme macroeconomic shifts. At the core of the study was a large analysis of 970 LBO deals to test a series of hypotheses regarding market uncertainty, the supply of capital, and conditions of credit. The results from this analysis, which this discussion will highlight, provide a comprehensive understanding of the phenomenon and have implications for financial theory, practitioners, and managers.

The empirical results from the study indicate that there exists very clear and very compelling evidence of structural change in the market for corporate control. An initial full-sample analysis, using the entire 2000 to 2024 dataset, indicated support for several important theoretical positions from the literature. The analysis showed strong evidence for a non-linear, inverted-U relationship between market uncertainty (measured using the VIX) and premiums. This indicates a relationship where moderate volatility carries a higher price to compensate target shareholders for enhanced risk, while extreme stress in the market prices down. The analysis confirmed the empirical findings that competitive pressure from dry powder in private equity has an aggregated effect, inflating premiums only when the capital overhang becomes extreme, at top quartile levels relative to recent deal activity. The results also supported a dynamic risk-management thesis, which suggested premiums were historically a systematic discount for larger more complex targets when overall market volatility was high. This first-level analysis showed that the market for corporate control does not appear to be subject to a single unchanging logic, but has shifted through different phases that are regime dependent.

Another key finding of this study is the fact of a structural break in LBO premium determinants, apparently after the post GFC shock of 2008. The pre-GFC period from 2000 to 2007 was a period where acquisition premiums seemed much more tractable, guided by a visible and steady risk-pricing logic. During these years, market-wide uncertainty and its interplay with deal-specific risk drivers such as target size systematically and significantly manipulated acquisition premiums. The market behaved functionally according to classical finance, pricing risks reasonably accurately and predictably. After the GFC, this entire system appears to have changed. The following decade of recovery (2008-2019) represents a transitional period in which the old rules no longer seemed to apply. The previously powerful macroeconomic drivers lost their statistical significance in the model, suggesting that takeover pricing became more idiosyncratic and deal-specific, likely driven by a search for unique opportunities in a world of suppressed interest rates, rather than a coherent market-wide logic. This was then followed by the establishment of a new and distinct regime in the post-COVID period (2020-2024). In this most recent regime, traditional drivers of risk pricing remained persistently absent while a new protagonist emerged, dry powder capital. The historic capital overhang effect, significant only in its most extreme form before, emerged as a new dominant and principle driver, indicating a fundamental shift from a market governed by risk pricing to one that is increasingly dictated by the weight of capital supply.

Although these findings were based on this thesis' dataset and methodology, they can have important implications for our understanding of financial theory more generally. Firstly, they seem to suggest that static models of premium determination, while valuable, may not fully capture the complexity of the market. The evidence indicates that the coefficients in a model of takeover pricing are not necessarily stable but can be regime-dependent. This might suggest that future theoretical work could benefit from incorporating this dynamism, with models that can allow for structural breaks and changing parameter significance. Second, the findings could fit into a wider ongoing dialogue to application of agency theory to the LBO. The classic Jensenian model positions the LBO as a governance solution to the agency costs of free cash flow in public corporations. In this context, premiums should also manifest part of what is assumed to be the possible future value extraction unlocked by correcting those

inefficiencies. However, if the premium framing is in the process of turning from risk based (perhaps a measure of what a target is looking to improve) to a function of a supply of capital, that might suggest a subtle shift in the essence of the LBO. These comments would appear to support a "Post-Jensenian" concept of an evolved and maturing private equity industry dealing with a new agency, that between the GP and the LP. The enormous pressure to put out capital to generate management fees would certainly provide incentives for GPs to focus on putting out capital and less on addressing severe agency problems, at whatever (inflated) price.

From an applied perspective, the findings of the study could be relevant to a broad range of contemporary market players. For private equity players, the findings could be interpreted as a call for dynamic, contextual valuation models and investment strategies. The reality is that a model fit on the pre-GFC context would have provided poor guidance to the new worlds post-crisis exactly as an investment strategy honed in the 2010's might not suit the larger capital-supply driven markets in the 2020's. The risk of the winner's curse would appear to be acute in existing conditions and would certainly put a significant premium on pricing rigor asked of GPs who are also under pressure from their LP's to deploy capital. For investors, LP's, the points from this paper may suggest that a sophisticated (if that is possible with limited info) approach to manager selection may be warranted. LPs were potentially evaluating a GP based only on a long-term reputation, but just as likely valuation on a GP's approach to creating (or keeping) a GP's investment strategy in line with market logic. For target company managers and boards, the findings provided a perspective on negotiation. The abundant increases in capital could have made it easier for boards to approach negotiations with a greater sense of bargaining authority, while knowing financial sponsors were competing fiercely, and were likely under pressure from their investors to acquire high quality assets.

In addition to implications for participants in the transaction, the findings lead to questions that might be of interest to policymakers and regulators. Transitioning to a capital-supply-driven market, emphasised by high prices and perhaps high leverage at several firms, may entail risks to systemic financial stability. If significant parts of the corporate sector are

purchased at peak multiples and using debt, it only increases the exposure of such firms to downturns in the business cycle should they occur. This is a topic that may indeed be of significance to boards of stability and central banks that are tracking the build-up of leverage and risks in the non-bank financial sector. Alongside that, as entry prices seem to make it more difficult to generate financial returns, the value of the interest tax shield in making the sums of a LBO work gets all the more important. This may prompt an additional debate on public policy around the debt-favoured treatment of debt financing in corporate takeovers, especially at a time when such deals may become more a question of capital supply than an obvious gap in opportunities to improve operational efficiency.

Of course, there are limitations with this project that also suggest paths for future research. While the investigation, to some extent, is broad, the analysis treats financial sponsors as a homogenous group (medium to large in size). A future more advanced study could break down the data to examine how premium determination may differ across mega-funds, mid-market funds, and sector-specialist investors. A more in-depth, country-level investigation may also reveal important differences that are influenced by the local institutions and regulatory environment, which are largely averaged out in a regional perspective. The most important next step for research in this area, however, would be to connect the drivers of the premium to the drivers of post-acquisition performance. A further question left unresolved is whether those deals that were priced in the capital-supply regime yield systematic underperformance (on the measures of operational improvement and ultimate returns) than deals that were priced in the risk-pricing regime. Answering this would create a stronger judgement on whether the current market logic is resulting in investments that create value, or simply higher prices, resulting from capital-fuelled competition. Finally, the meteoric rise of private credit as the primary means of financing LBOs marks yet another major structural change. Future research could do well to explore how the disintermediation of ordinary lenders has shaped the cost of capital, deal structures and therefore, premiums.

In conclusion, the analyses conducted as part of this thesis lead us to suggest that the corporate control market is not simply a static domain governed by non-negotiable laws, but a dynamic ecosystem that is evolving in temporally distinct epochs. The empirical evidence

suggests the market is moving from a period in which risk was the prominent currency of pricing, towards one in which it seems to be increasingly dominated by the availability of capital. This journey has uncovered a reflexive and adaptable market that is strongly interrelated to the macroeconomic context in which it is situated. The acquisition premium is not a series of numbers in a deal sheet, it is an indicator of the prevailing finance environment. In tracing the rise and fall of the acquisition premium, this study has sought to map the shifting sands of the modern financial world, and created a framework for how it evolved. The consideration for investors, managers and academics alike, is to recognize and adjust to this new realm of existence, rather than seek to navigate today's markets with yesterday's map.

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