Beneath the Bid

Determinants of Bid Premiums in Nordic Public Buyouts

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Master Thesis
Stockholm School of Economics
2025

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Abstract

Despite the increase in Nordic public-to-private activity over the past decade, little is known about what drives bid premiums in these transactions. This thesis examines the determinants of bid premiums in Nordic public-to-private transactions between 2010 and 2025. Using OLS regressions with industry fixed effects, complemented by practitioner interviews, a four-week bid premium is linked to firm fundamentals, valuation metrics, financing capacity, tax characteristics, and deal features. Results are thereafter tested on a sample of non-public-to-private deals. The findings show that debt-service capacity, tax burden, undervaluation, valuation multiples, and bidding competition meaningfully shape premiums in public-to-private transactions, while commonly cited factors such as size, free cash flow, and ownership dispersion exhibit limited explanatory power. When the models are applied to the comparison sample, only undervaluation and EV/EBITDA remain robust, indicating that mechanisms related to leverage, governance, and debt capacity are specific to public-to-private transactions. These findings underscore the central role of financing feasibility in shaping pricing outcomes in Nordic buyouts.

Keywords:
Bid Premium, Going-private Transactions, M&A Pricing, Public Buyouts, Public-to-private Transactions

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Acknowledgements:
We would like to thank our tutor, Henrik Andersson, for his patience, guidance, and continuous support throughout the thesis process. His availability and constructive feedback have been very helpful to our work this autumn.

Master Thesis
Master Program in Accounting, Valuation, and Financial Management
Stockholm School of Economics
Johanna Hallstedt and Johanna Radler, 2025

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1. Introduction

Public-to-private transactions represent a significant mechanism for corporate restructuring and value creation in global financial markets. These transactions fundamentally alter the target company's ownership structure, governance, and capital base, making the determinants of the takeover premium a highly relevant area of inquiry for practitioners, regulators, and academics.

Academic literature has identified several key factors influencing the bid premiums of these transactions, including the potential reduction of agency costs and the beneficial effects of tax shields resulting from high leverage (Guo et al., 2011; Renneboog & Vansteenkiste, 2017). Public-to-private transactions are typically executed as leveraged buyouts (LBOs) by private equity (PE) funds. A critical theoretical distinction in LBOs is the prominent role of the target's debt-servicing capacity. This is because LBO financing explicitly relies on the target's ability to assume and manage significant additional leverage, which is a mechanism not prevailed in non-public-to-private acquisitions (Axelson et al., 2013; Guo et al., 2011). While substantial empirical evidence exists, this research is predominantly focused on the global, U.S., U.K., or broader European markets. The Nordic region, characterized by high PE activity and unique corporate governance traditions, remains comparatively understudied. This space presents a valuable opportunity to test the external validity of established LBO theories and provide nuanced insights into which specific factors drive takeover premiums in this distinct environment. Accordingly, this study addresses the following research question:

What firm-specific fundamentals, competitive dynamics, and macroeconomic factors are the primary determinants of takeover premiums in Nordic public-to-private transactions from 2010 through 2025?

To address this question, the study analyses a sample of Nordic public-to-private deals between 2010 and 2025 with fixed-effects regression models and tests the results against a control sample of non-public-to-private acquisitions. This research design aims to isolate the effects of factors uniquely relevant to public buyouts, such as debt capacity and specific measures of pre-buyout governance. To complement the empirical analysis and gain a deeper understanding of the results, qualitative insights were obtained through two separate interviews with industry practitioners. The study is expected to contribute to the current understanding of corporate control transactions by thoroughly unpacking the determinants of takeover premiums in a region that has received limited academic attention.

2. Theoretical Context

Today, global private capital markets raise over $1 trillion every year and invest not just in private firms, but also in publicly traded firms, real estate, and the privatization of publicly owned institutions (Jenkinson et al., 2021). By the time this market evolved, a novel set of financial institutions also evolved, enabling the private capital markets to thrive. This thesis aims to present an up-to-date analysis of how the firms bought by these institutions, which are most often private equity, are priced and thereby try to infer what factors influence public-to-private buyouts. The focus is set on the buyout component of public capital markets, which is most often referred to as the LBO market due to the extensive use of debt in these transactions. Nonetheless, this thesis is not explicitly limited to solely LBOs, but rather takes a broader perspective considering all public-to-private buyouts.

The work of this thesis is focused on the Nordic region, an area with much PE activity, yet little published research. While leading research on buyouts (see e.g., published papers Axelson et al., 2013; Guo et al., 2011; Haddad & Plosser, 2015; Kaplan & Schoar, 2005; or Renneboog & Vansteenkiste, 2017) analyzes global, U.S., or European mechanics rather than specific regions. Recent evidence suggests that the Nordics, a major global private equity hub, attract disproportionate investment by Swedish private equity firms and rising international participation in Nordic deals, alongside a rebound in regional fundraising (Bain & Company, 2025; The Economist, 2025). These dynamics open an interesting scene for further research on the Nordic region.

Public-to-private transactions represent a distinct mode of corporate control change in which listed firms exit the public market, typically through acquisition by private equity sponsors or consortia backed by financial investors. These deals reshape ownership structure, governance mechanisms, and capital structure, with implications for value creation, incentives, and investor returns. This thesis focuses on such transactions in the Nordic region between 2010 and 2025. Theoretical and empirical research on leveraged buyouts, going-private transactions, and private equity activity offers several perspectives that jointly inform these questions and help structure an empirical framework. In the current era, buyouts seem to be positioned more often as strategic and operational interventions, rather than merely capital structure restructurings (Guo et al., 2011; Renneboog & Vansteenkiste, 2017). This shifts empirical focus toward variables capturing target fundamentals, and research highlights several central mechanisms for the bid premium levels.

Agency costs are often mentioned as a factor affecting buyout pricing and decisions (Axelson et al., 2013; Dasilas & Grose, 2018; Renneboog et al., 2007; Renneboog & Vansteenkiste, 2017). When ownership is dispersed, managers may pursue private

benefits at the expense of shareholders. Buyouts substitute this structure with concentrated ownership, high leverage, and strong monitoring by private equity sponsors, which realign managerial incentives (Renneboog & Vansteenkiste, 2017). The incentive realignment hypothesis predicts that premiums partly reflect the anticipated value gains from tightening manager-owner alignment.

A second highlighted driver is undervaluation. Several studies argue that public firms may be mispriced before a public-to-private transaction, enabling acquirers to capture additional value once the firm is privately held. When targets exhibit indications of undervaluation, premiums tend to incorporate the expectation that private ownership will unlock latent value through operational or governance improvements (Dasilas & Grose, 2018; Renneboog et al., 2007). These considerations interact with information asymmetries, which differ across management buyouts (MBOs) and externally led transactions. Undervaluation and information frictions also feature prominently among the reasons firms leave the public market. Firms perceived as undervalued by the public equity market, whether due to limited analyst coverage, liquidity constraints, or ownership dispersion, may attract bids from acquirers who believe they can unlock hidden value. Evidence from the U.K. shows that undervaluation and incentive realignment are key drivers of going-private transactions, particularly when private equity sponsors are involved (Renneboog et al., 2007).

Debt financing in LBOs further introduces tax-related motives. High leverage generates substantial interest tax shields, which contribute to value creation and can therefore affect the premium acquirers are willing to offer (Renneboog & Vansteenkiste, 2017). Relatedly, free cash flow (FCF) considerations suggest that indebtedness restricts managerial discretion and reduces wasteful expenditure, although empirical support varies across jurisdictions (Renneboog et al., 2007). The free cash flow hypothesis argues that firms with high levels of cash generation relative to investment opportunities may be prone to agency problems, making them attractive targets for leveraged ownership structures that impose monitoring and discipline (Kieschnick, 1998; Lehn & Poulsen, 1989). Tax benefits are investigated as an additional, though not exclusive, source of value creation (Kaplan, 1989b).

The mechanics of the sale process itself influence both the selection of targets and the bid premiums. Many buyouts are conducted through structured sale processes or auctions, especially when multiple bidders are involved. When competitive tension arises, acquisition premiums tend to be higher (Boone & Mulherin, 2007). The contrast between one-on-one negotiations and formal auctions introduces variation in pricing that may be related to deal size, sponsor identity, or perceived scarcity of assets. In addition, firm size plays a role in shaping acquisition gains and pricing outcomes. Smaller firms often experience larger percentage gains upon acquisition, possibly due to being less efficiently valued or monitored in public markets (Moeller et al., 2004). Size differences may also

influence the ease of arranging leveraged financing and the strategic importance of the asset for sponsors.

Finally, the centrality of financing conditions and credit market dynamics is shown to shape both the incidence and pricing of buyouts. Rather than being determined solely by firm-specific capital structure trade-offs, debt usage and transaction pricing tend to move with the cost and availability of credit (Axelson et al., 2013). When debt markets are liquid and lenders are willing to extend highly leveraged financing at favorable spreads, leverage ratios increase and acquisition prices rise, reflecting both greater borrowing capacity and competition among sponsors. Credit conditions, therefore, act as a facilitating or constraining factor for take-private activity. Earlier research similarly emphasizes the interaction between free cash flow availability and financial distress costs in explaining the timing and volume of leveraged transactions, with buyout waves often coinciding with periods of strong credit supply (Opler & Titman, 1993). The Nordic region over the past decade has experienced prolonged periods of low interest rates and increased private capital inflows, suggesting that variation in credit supply is likely to be a key explanatory dimension. When credit is cheap and abundant, leveraged acquisitions become easier to finance, more sponsors are active, and competitive pressure among bidders may drive up offer prices.

Taken together, these theoretical perspectives describe premiums in public-to-private transactions as the outcome of agency-related value creation, perceived undervaluation, tax and financing considerations, financing environments, and bidder incentives. Together, these mechanisms provide the conceptual foundation for analyzing bid premiums in Nordic public-to-private deals.

In designing empirical tests around the determinants of bid premiums, the literature indicates several promising variables. Firm-level variables relating to potential improvement or market undervaluation include valuation multiples relative to peers, free cash flow indicators, liquidity metrics, and ownership concentration, among more. Deal-level data on whether the process was contested or negotiated can proxy competitive tension and help explain variation in the premiums. Although much of the empirical work has been conducted globally, in the U.S., and the U.K., the Nordic region has several characteristics that make it a promising setting for extension: concentrated ownership structures, developed capital markets, active pension and insurance investors, and established takeover regulations (see e.g. the OECD, 2023). Together with a globalized private equity industry that can either facilitate or constrain control transfers. National differences in codetermination rules, ownership disclosure requirements, and mandatory bid thresholds could introduce further cross-country variation in timing and pricing. Studying Nordic transactions, hence, offers an opportunity to test these mechanisms in a novel empirical setting, providing nuance to previous literature.

3. Method

3.1. Sample, Variable Construction, and Hypothesis Development

To compose the sample, all public-to-private M&A transactions undertaken between 2010 and 2025, where the target was primarily listed on a Nordic exchange, defined to include Denmark, Finland, Norway, and Sweden, were retrieved from LSEG Workspace. The sample selection starts in 2010, after Nordic credit and equity markets had stabilized from the 2008-2009 financial crisis, when the market was no longer constrained by impaired credit supply and heightened refinancing risk (IMF, 2012; Sveriges Riksbank, 2020). The resulting sample is cross-validated against Nasdaq Corporate Actions files for Denmark and Sweden to ensure relevant public buy-out transactions are accurately identified and included. Due to limited data availability, the same procedure is not applied to Norway and Finland. Firm-level accounting and financial data are obtained from LSEG Workspace on a monthly and yearly basis in local currency (LCY). This is further complemented by macroeconomic variable data from the Swedish Central Bank (Sveriges Riksbank), in particular, Nordic government bond yields with 10-year maturities, extracted at a month-year frequency to align with transaction timing on a monthly basis. To construct market return-based variables, historical indices for each of the Nordic countries are retrieved from Nasdaq. Specifically, the OMX Copenhagen GI index, the OMX Stockholm GI index, the OMX Helsinki GI index, and the OMX Oslo 20 GI index. Financial firms are excluded from the sample due to differences in business models and regulatory environments from those of non-financial firms, as these differences can distort estimations and analyses. Moreover, firms under financial distress are also excluded. Firm-level observations with insufficient data to estimate the variables used in the regression models are also excluded from the sample, apart from a few manually corrected (see Appendix A.1. and A.2. for further details). The variables analyzed are thereafter winsorized at the 1st and 99th percentiles. All in all, this returns a sample of 112 observations with sufficient data.

Moreover, this paper narrows its scope to an analysis of bid premiums, rather than also focusing on abnormal returns. This method is based on prior work (Halpern et al., 1999; Kaplan, 1989a; Kaplan, 1989b; Lehn & Poulsen, 1989). Furthermore, premiums are measured over a 4-week window to aggregate more relevant information and avoid limitations of short-window abnormal return tests. The analysis, therefore, examines the bid premium offered to pre-buyout shareholders and relates its magnitude to firm-specific determinants of that premium. In contrast to event studies, which capture short-term market reactions to announcement news via abnormal returns, this premium analysis centers on the level of the offer relative to pre-transaction valuations (Renneboog & Vansteenkiste, 2017).

The key rationale for the main models is that buyout premiums depend on factors that should be measurable. Renneboog et al. (2007) show that public-to-private transaction premiums stem mainly from tax benefits, incentive realignment, blockholder control, and undervaluation. To complement these firm-based explanations, one could consider Axelson et al. (2013), who present a view that buyout leverage levels are driven by prevailing credit conditions rather than firm fundamentals. Or Kaplan & Strömberg (2009), who show PE activity experiences recurring boom and bust cycles, implicitly affecting pricing. This motivates the inclusion of macroeconomic variables in the regression models, in addition to firm-level variables.

From this follows the main objective of the analysis, namely, to analyze the extent to which certain factors drive and explain the bid premium in public-to-private transactions. Following previous literature examining the influence of firm fundamentals on bid premiums, the firm fundamentals and deal information obtained include data to verify and discuss different factors explaining the premiums in public-to-private transactions. Target firm characteristics are derived from the final annual report before the transaction since forward-looking estimates are subject to forecasting uncertainty and not consistently available across the sample. Accordingly, the last fiscal year before the announcement is used to provide a complete and verifiable representation of the firm's financial position at the time of the deal. This further ensures that each observation corresponds to a point in time that is contextually relevant to the going-private transaction. All firm-specific variables based on accounting data are constructed in this manner if nothing else is explicitly mentioned.

In the sections that follow, the dependent variable constituting the bid premium is presented. After the dependent variable, the explanatory variables are motivated and defined one by one. In the sections thereafter, results and subsequent discussions are to follow. To assess whether the variables employed in the analysis are specific factors of public-to-private transaction premiums, the regression models are also applied to a sample of non-public-to-private transactions. Ultimately, the results are discussed with industry practitioners to validate and contextualize the findings.

3.1.1. Bid Premium

The dependent variable, *Bid premium*, shows the excess price offered to pre-buyout shareholders. It is defined as the percentage difference between the offer price and the target's closing share price four weeks before the original announcement date. This four-week event window reflects the full takeover premium while limiting the influence of short-term trading noise or information leakage, as is common practice in buyout studies (Guo et al., 2011; Renneboog et al., 2007). The measure reflects the valuation uplift paid by the acquirer relative to the target's pre-announcement market value, yet alternative definitions exist. Renneboog & Vansteenkiste (2017) describe premiums as the difference in firm value based on the final takeover share price and the firm value based on the pre-

announcement share price, where the pre-announcement price is chosen using anticipation windows between 20 and 250 days before the event. Also, earlier U.S. studies, such as Halpern et al. (1999) and Lehn & Poulsen (1989), relate the premium to the final traded price before delisting. With this as a background, the results are also tested with a 1-day premium in Appendix B.1. Nonetheless, the four-week measure is preferred as it logically captures the full takeover premium and limits short-term noise. Renneboog et al. (2007) test this against several windows running up to the actual deal, and find minor differences, arguing that if it is between 10-40 days, there should be no major discrepancies in premium levels.

3.1.2. Target Size

Firm size is included as an independent variable because it systematically relates to variation in takeover pricing. Size can influence both the bargaining position of the target and the structure of the acquisition (Kieschnick, 1998; Renneboog et al., 2007). Alexandridis et al. (2013), employing a relative market-based size measure, show that large targets receive substantially lower offer premiums than smaller ones, with average premiums of 36.5% for large firms compared to 52.6% for small firms, a statistically significant difference. Empirical evidence shows that larger targets receive substantially lower offer premiums, suggesting that larger firms are more difficult to restructure and integrate, reducing bidders' willingness to offer high premiums (Alexandridis et al., 2013). For smaller companies, public market information costs may cause undervaluation or mispricing to be more of an issue (Dasilas & Grose, 2018; Grossman & Stiglitz, 1980). Correspondingly, Guo et al. (2011) show that smaller buyout targets in the U.S. tend to generate stronger post-transaction performance improvements, indicating greater scope for operational value creation in smaller firms. Interpreting this, it should imply a higher willingness to pay a premium for smaller, rather than larger, firms.

Comparing U.S. samples to Nordic or European ones, the latter tend to be smaller in size and have a more concentrated shareholder base. These market characteristics might further imply illiquidity and less institutional and analyst interest (Geranio & Zanotti, 2012). Kim & Lyn (1991) show how information asymmetry increases from the corporate restructuring activities of buyouts. However, the costs of going private are in parallel with firm size, while those of information asymmetry are at odds with firm size; as a result, small firms can gain more by going private. Evidence from the international LBO market (see e.g., Boubaker et al., 2014; Cao et al., 2016; Croci & Del Giudice, 2014; Dasilas & Grose, 2018) confirms the negative relationship between the wealth effects from private-to-public announcements and the target. With this as a background, the target size should be negatively related to the bid premium.

Using the natural logarithm of total assets is standard in this setting because it reduces skewness in the size distribution, allows for proportional rather than absolute comparisons across firms, and prevents large targets from dominating the results. Ln of

assets is also widely applied in empirical buyout research as a parsimonious proxy for firm size, making it appropriate and comparable in a premium analysis (Kieschnick, 1998; Renneboog et al., 2007). This is captured by a *Size* variable in the regression analysis. Apart from the natural logarithm of assets, an alternative measure is tested for robustness, composed of the natural logarithm of total revenues. This follows from Dasilas & Grose (2018), who defined their size measure as the natural logarithm of total sales. Robustness tests with the additional definition, including revenues, can be found in Appendix C.1. Nonetheless, the second definition of total revenues does not alter the results.

H1: Firm size is negatively associated with bid premiums

3.1.3. Debt Servicing

Leverage is a central part of buyout pricing, and capacity to take on additional debt, as well as debt levels, should thus be part of determining the bid premium. It has been shown that buyout leverage levels co-move with credit conditions and are associated with higher deal prices and lower subsequent returns (Axelson et al., 2013). In going-private deals, tax shields from additional debt are a documented source of value (Kaplan, 1989a; Kaplan, 1989b; Lehn & Poulsen, 1989). Furthermore, buyer ability to finance a public-to-private transaction depends not only on the firm's existing leverage but also on its capacity to service additional debt. Hence, the Debt Service Coverage Ratio (*DSCR*)[1] is included, defined as EBITDA over interest expense and the current portion of long-term debt. While leverage ratios such as net debt over EBITDA and long-term debt over equity proxy the amount of debt a firm can take on, they do not capture the coverage of cash flows available to meet future interest and principal payments. DSCR provides a direct measure of this repayment capacity. A higher DSCR indicates that the target generates sufficient cash flows relative to its debt service obligations, lowering financing risk for lenders and enabling acquirers to raise more debt at lower costs. As greater debt-financing capacity allows buyers to pay higher premiums in leveraged transactions, DSCR is expected to exhibit a positive association with bid premiums. Previous research has included variables such as debt over EBITDA and EBITDA over interest, indicating the importance of operating cash flow (EBITDA) relative to debt in determining a firm's capacity to service debt (Axelson et al., 2013; Guo et al., 2011). Although DSCR is not commonly included in prior buyout-premium studies, its theoretical link to debt capacity and financing frictions (Borgonovo et al., 2010; Rodríguez, 2024; Simshauser & Nelson, 2012), combined with its widespread use in practice (Forvis Mazars, 2021; Investopedia, 2025; Macquarie, 2025), indicates that it is a relevant complementary measure.

[1] $DSCR = EBITDA/(interest\ expense + current\ portion\ of\ long\ term\ debt)$

H2: Debt servicing capabilities are positively associated with bid premiums

3.1.4. Leverage Indicators

A target's leverage, measured as debt over assets, net debt over EBITDA (*ND/EBITDA*), or a similar ratio, proxies remaining debt capacity and expected tax benefits. Lower leverage implies more room to lever up and, other things equal, a higher bid premium. This view aligns with evidence that LBO targeting reflects the ability to sustain higher levels of debt (Opler & Titman, 1993). Findings also indicate that leverage and pricing move together in modern buyouts (Guo et al., 2011). This emphasizes two related but distinct ideas: current leverage level and remaining debt capacity should influence the bid premium. Hence, a variable for debt capacity is included in the analysis, defined by *ND/EBITDA*, as higher existing leverage reduces a target's capacity to take on additional debt in a buyout, which may reduce the premium a buyer is willing to pay. Secondly, room to leverage further, captured by the firm's capital structure strength, is included as a variable defined by the ratio of long-term debt over equity *(LTD/E)*. This is to capture the idea that firms with low leverage or low long-term debt in relation to equity can take on more debt, get higher tax shields, and hence should earn higher buyout premiums. The reason for including both variables is that the first focuses on short-term operational indebtedness via EBITDA, whereas the second one focuses on balance sheet capital structure by long-term debt versus equity. Nonetheless, using several variables proxying for the leverage effects on premium could be problematic, for instance, given a small sample size or correlation; hence, the application of these variables is subject to the specific sample at hand and might be tested one-by-one rather than altogether.

H3: Leverage in the form of LTD/E or ND/EBITDA is negatively associated with bid premiums

3.1.5. Tax Benefits

Tax benefits are evidenced as a source of value in buyouts; a substantial share of shareholder gains in LBOs can be traced to the value of interest deductibility (Kaplan, 1989b). Because the benefit depends on room to add debt, it is also useful to explain leverage; higher existing leverage should be associated with lower premiums (Renneboog et al., 2007), which is controlled for by the leverage variables. Prior research, such as Lowenstein (1985), also shows that the combined tax effects in MBOs can be sufficiently large to finance a substantial portion, sometimes all, of the premium through tax-generated cash flows, and that acquirers may operate on a near tax-free basis for several years until leverage is reduced. Also, historically high corporate tax rates, such as the 46% U.S. rate before the 1986 Tax Reform Act seen in Kaplan (1989b), have been shown to materially influence the size of tax benefits. While the literature is not Nordic-focused,

the mechanism of interest-deductibility-driven benefits should be similar across jurisdictions. Nordic countries generally allow interest deductibility, but the deductions are restricted by earnings-stripping rules that limit them to a share of tax EBITDA (typically 30% in Sweden, Denmark, and Finland, and 25% in Norway). This means that tax benefits from additional leverage exist in a similar manner as elsewhere, yet might be capped (European Commission, 2017). Following previous research that has used tax exposure to explain gains in going-private deals (see e.g. Lehn & Poulsen, 1989), this mechanism is incorporated in the model by a variable of income taxes in relation to sales, denoted *Tax burden*. This variable includes provisions for income tax, current income taxes, as well as deferred income taxes; hence, it can take both a positive and a negative sign. The *Tax burden* is intended to proxy the pre-deal tax burden and should hence entail a positive association with the premium. However, as noted by Renneboog et al. (2007), tax levels may reflect not only profitability but also accounting policies or investment-driven depreciation, and to ensure the measure does not simply reflect weak profits, the variable is interacted with an indicator for above-median ROA, resulting in the variable denoted *Tax burden * ROA indicator*. ROA is applied as the profitability indicator since it is net income-based and captures tax expense explicitly, ensuring consistency when interacting with a tax-burden variable.

H4: Tax benefits are positively associated with bid premiums

3.1.6. Undervaluation

Undervaluation is a recurring explanation for why firms are taken private, and prior research shows that targets often underperform the market before the bid. Going-private firms exhibit weaker bid returns relative to peers (Lehn & Poulsen, 1989), and undervaluation can make buyouts attractive when market prices do not reflect firm fundamentals (Kaplan, 1989). Negative abnormal returns in the years leading up to LBOs have also been documented, reinforcing the role of perceived mispricing (Guo et al., 2011). Alexandridis et al. (2013) further strengthen this evidence by acknowledging that more highly valued targets tend to receive lower bid premiums while cheaper firms command higher ones; hence, the expected relationship between valuation and premiums should therefore be negative.

Renneboog et al. (2007) include a variable to analyze this effect and hypothesize that the expected shareholder wealth gains from private-to-public transactions are positively related to eventual undervaluation. To capture this, *Undervaluation* is included as a variable and measured as the firm's share price performance minus the return of the corresponding Nasdaq Nordic Index, using a window of 300 to 41 trading days before the

announcement. The full variable specification is defined below.[2] The share price data is adjusted for stock splits to ensure comparability over time. Index benchmarks are matched by country, representing the performance of all the shares listed on the respective stock exchange, to reflect the status and changes in the market. OMXCGI is applied for Denmark, OMXHGI for Finland, OMXSGI for Sweden, and OMXO20GI for Norway. The OMX Oslo 20 GI is used as a proxy for the Norwegian stock market development due to a lack of access to the Euronext Oslo Børs All-share index GI (OSEAX). The time horizon of 300 days to 41 days prior to announcement reduces the contamination of potential bid rumors, thereby providing a cleaner measure of long-term relative valuation. If a reference date falls on a non-trading day, it is adjusted to the nearest trading day.

By focusing on pre-transaction stock performance, *Undervaluation* directly reflects firm valuation in relation to overall market movements. Assessing both the individual share performance and the equity-market performance over the specified period gives a comprehensive view of each stock's behavior relative to its broader market context. Nonetheless, the equity-market conditions also shape valuation benchmarks and bidding aggressiveness (Guo et al., 2011). Hence, the country-level equity market return is incorporated to capture general equity-market conditions. The underlying logic is that an undervalued firm would generate a negative excess return, which in turn affects the premium positively, given that the coefficient on the variable is negative.

> **H5:** Undervaluation, captured by market excess return, is negatively associated with bid premiums

3.1.7. Valuation Multiples

Valuation multiples are also connected to takeover pricing through peer-set benchmarks, since advisors often select comparable firms with higher valuation ratios, thereby influencing negotiation anchors, which motivates variables for valuation in the premium regressions. The EV/EBITDA multiple captures how richly the target is priced relative to the closest proxy for the firm's operating cash flow. Following, e.g., Bargeron et al. (2008), who include target valuation ratios such as Tobin's Q as variables or robustness tests in takeover regressions, valuation is incorporated using both *Tobin's Q* (proxied as enterprise value over total assets) and the *EV/EBITDA* multiple as variables to test for the effect on bid premium. The inclusion of these variables allows the regression to account for pre-deal differences in growth opportunities and market pricing. Nonetheless, it should be noted that the standard praxis for calculating trading multiples is to use data from the last twelve months (LTM). However, due to data limitations, this was not plausible for the full sample. Hence, the data from the most recent fiscal year leading up

[2] $Undervaluation = \left(\frac{Share\ price_{41\ days\ prior}}{Share\ price_{300\ days\ prior}} - 1\right) - \left(\frac{Index\ value_{41\ days\ prior}}{Index\ value_{300\ days\ prior}} - 1\right)$

to the deal was used, which might skew companies with high growth or volatile EBITDA. The underlying idea is that, all else equal, a high multiple signals a high valuation, which implies that a higher premium can be justified. This aligns with evidence that strong equity markets tend to support elevated valuations and more aggressive bidding behavior, as periods of strong stock market performance tend to coincide with elevated transaction multiples and increased deal activity (Axelson et al., 2013). It should, however, be noted that, e.g., Renneboog & Vansteenkiste (2017) reason that better performing firms (in terms of Tobin's Q, among more) could be subject to lower premiums, whereas higher premiums are paid to firms not currently being profitable yet possessing large growth potential. This is discussed in more detail in the discussion of the results.

However, ratios can produce outliers when the numerator (e.g., the enterprise value) or denominator (e.g., EBITDA) is very small or negative; thereby, such observations are carefully examined and, where appropriate, excluded. To reduce the spread of the variable, the *EV/EBITDA* multiple is also transformed into an additional natural logarithm version, denoted *Ln EV/EBITDA,* which is considered a more appropriate variable for the analysis due to the large possible spread of values for the original multiple EV/EBITDA. Also, valuation multiples such as EV/EBITDA carry a practical limitation; the denominator (EBITDA) can be zero or close to zero, which generates extreme values or division-by-zero issues. To address this, an alternative specification using the inverted ratio (EBITDA/EV) was also estimated as a robustness check. As no observations in the sample recorded EBITDA values of zero, the conventional EV/EBITDA measure is retained for interpretation and clearer economic meaning.

H6: Valuation multiples (EV/EBITDA) are positively associated with bid premiums

3.1.8. Free Cash Flow

Complementing the documented role of leverage-related tax benefits in pricing, another firm fundamental likely to affect the premium is free cash flow. It is a natural predictor of buyout pricing as it proxies the scope for disciplining overinvestment and redirecting cash to investors once a firm is levered. In U.S. going-private transactions, it has been found that shareholder gains (analogous to premiums) rise with measures of free cash flow, consistent with debt committing future cash flows and reducing agency costs (Lehn & Poulsen, 1989). Prior evidence further indicates that buyouts tend to occur in firms or industries with high cash flows and limited investment prospects (Opler & Titman, 1993). Post-deal, value is often realized through operating improvements rather than pure financial engineering, reinforcing why pre-deal cash generation can be capitalized into offer prices (Guo et al., 2011). Consistent with the free cash flow hypothesis (Jensen, 1986), Renneboog et al. (2007) show that going-private transactions tend to be concentrated in firms with substantial free cash flow. In such firms, leverage serves as a

disciplinary mechanism that commits managers to distribute excess cash rather than overinvest, thereby increasing shareholder value. This implies that higher pre-deal free cash flow should be associated with higher premiums, as buyers capitalize the potential governance improvements into the offer price. Accordingly, an FCF proxy, referred to as *FCF,* is included to control for leverage (which already commits cash flows). The full definition of *FCF* is provided below and corresponds to operating cash flow minus capital expenditures (capex) from the fiscal year running up to the deal.[3] The resulting value is then transformed using a signed logarithm, multiplying its sign by the natural logarithm of its absolute value plus one. This transformation is made as it accommodates negative free cash flow values, preserves the direction of the cash flow, and compresses extreme magnitudes to improve comparability across firms. Nonetheless, for simplicity, a ratio of free cash flow (operating cash flow less capital expenditures) to sales is also included to assess in parallel to the transformed variable. The latter follows from the study of Renneboog et al. (2007) as well as Dasilas & Grose (2018) and is denoted *FCF/Sales*.

H7: Free cash flow generation is positively associated with bid premiums

3.1.9. Earnings Volatility

Firms with more volatile performance are less attractive buyout targets because higher uncertainty increases both the cost of capital and the illiquidity costs borne by leveraged investors. Axelson et al. (2013) measure volatility using an accounting-based proxy, the standard deviation of ROIC, i.e., EBIT over total book capital, and show that higher volatility significantly lowers the likelihood of being taken private. ROIC is used because it captures the efficiency with which firms generate returns on their invested capital, making it a meaningful indicator of underlying operational performance rather than pure accounting earnings as captured by measures such as ROA. The effect of this variable remains strong even when controlling for firm characteristics and industry fixed effects. Because volatility increases the riskiness and financing costs of leveraged transactions, targets with unstable earnings command lower valuations and are less likely to receive aggressive bids. To capture this dimension of firm risk in the context of premium determination, the variable *Earnings volatility* is included in the analysis, defined analogously to Axelson et al. (2013) as the standard deviation of ROIC over the past five fiscal years prior to the announcement date.

H8: Earnings volatility is negatively associated with bid premiums

[3] $FCF = sign(operating\ cash\ flow\ -\ capex) * ln(\ |operating\ cash\ flow\ -\ capex\ | + 1)$

3.1.10. Outside Control

Control or monitoring by external shareholders affects how much value can be created through a buyout. In firms with a low free float, ownership is concentrated, and significant shareholders are likely to exert strong monitoring over management, reducing agency conflicts and inefficiencies. As a result, when strong monitoring is already in place, less additional value remains to be unlocked through the governance improvements associated with a public-to-private transaction. This implies a negative relationship between ownership concentration and buyout premiums (Renneboog & Vansteenkiste, 2017). Consistently, Renneboog et al. (2007) show that firms monitored by strong outside blockholders, firms with low dispersion, earn lower premiums because there is less scope for post-transaction value creation. In contrast, firms with more dispersed ownership offer greater potential for incentive realignment and improved monitoring once private, which theoretically should translate into a positive relation between free float and the takeover premium.

A high free float indicates dispersed ownership and weaker external monitoring, and according to agency theory, such firms tend to suffer from greater managerial discretion and "empire-building" tendencies (Jensen, 1986; Jensen & Meckling, 1976). The monitoring mechanisms and performance-linked incentives introduced in a buyout then represent a more substantial governance improvement, leading to higher expected value creation and higher premiums (Kaplan & Schoar, 2005; Renneboog et al., 2007). The incentive realignment hypothesis predicts that premiums partly reflect the anticipated value gains from tightening manager-owner alignment (Jensen, 1986). This interpretation aligns with the broader evidence that LBOs generate value primarily through enhanced governance and reduced agency costs (Axelson et al., 2012; Kaplan & Schoar, 2005; Renneboog & Vansteenkiste, 2017). When ownership is dispersed, managers may pursue private benefits at the expense of shareholders. Buyouts substitute this structure with concentrated ownership, high leverage, and strong monitoring by private equity sponsors, which realign managerial incentives (Renneboog & Vansteenkiste, 2017). The incentive realignment hypothesis predicts that premiums partly reflect the anticipated value gains from tightening manager-owner alignment. To capture this idea, free float is used as an inverse proxy for ownership dispersion and monitoring strength, with the reasoning that a higher free float typically implies more dispersed ownership and weaker external monitoring, increasing the potential for governance-related value creation in a buyout. No more precise definition of outside control could be applied due to data availability. However, the variable *Free float* is constructed, which constitutes the freely floating share of outstanding stock for the firm.

> **H9:** Outside control in the form of free float is positively associated with bid premiums

3.1.11. Interest Rate Environment

The buyout market is closely linked to aggregate financing conditions and credit market dynamics in shaping both the incidence and pricing of buyouts. Moreover, rather than being determined solely by firm-specific capital structure trade-offs, debt usage and transaction pricing tend to move with the cost and availability of credit (Axelson et al., 2013). Valuation multiples and the use of leverage increase in periods of favorable credit markets, while declining when credit tightens (Axelson et al., 2013). Moreover, buyout activity responds disproportionately to aggregate discount rate conditions rather than firm-specific capital structure considerations. Haddad & Plosser (2015) document that fluctuations in the aggregate risk premium explain a substantially larger share of buyout activity than credit spreads, implying that changes in the economy-wide cost of capital shape the pricing and feasibility of leveraged transactions. In line with this, Aldatmaz et al. (2023) show that buyout investments depend strongly on macro-financial conditions, as greater capital availability and more developed credit markets are associated with higher buyout intensity. Linking back to Axelson et al. (2013), who show that cheap credit conditions simultaneously raise leverage and inflate buyout prices, summarized in their "borrow cheap, buy high" pattern. Larger sponsors are also better positioned to transact during periods of tight credit because they retain access to financing when smaller players cannot (Jenkinson et al., 2021). In turn translates into less activity and activity by specific players when the market is not as favorable. When debt markets are liquid, and lenders are willing to extend highly leveraged financing at favorable spreads, leverage ratios increase and acquisition prices rise, reflecting both greater borrowing capacity and competition among sponsors. Credit conditions, therefore, act as a facilitating or constraining factor for take-private activity.

To account for these macro-level drivers, the analysis includes a measure of each target country's long-term financing environment using the ten-year government bond yield observed six months before the deal announcement for each country, respectively. Considering complex debt structures used in practice such as HoldCo and OpCo debt, applying the target country's government bond rate solely might not be a frictionless proxy. While not a direct determinant of buyout pricing, long-term government yields proxy for broad discount-rate conditions and macro-financial movements that have been shown to co-move with buyout activity and leverage. As Nordic government bond yields tend to move closely with investment-grade corporate yields, with the spread mainly reflecting risk premium, government bond yields offer a comparable indicator variable of prevailing debt financing costs. The variable is included both as a continuous variable and as a high-rate indicator variable, taking on a value of one for higher interest-rate environments and zero for lower interest-rate environments. Denoted by *Interest rate* and *High interest rate*, respectively. The indicator variable takes the value of one in above-median interest-rate observations and zero otherwise.

H10: Higher interest rate environments are negatively associated with bid premiums

3.1.12. Buyer Characteristics

Buyer identity is an important determinant of takeover pricing, as private and financial acquirers often differ systematically from corporate (strategic) bidders in their valuation logic and financing constraints. Prior research shows that private buyers, particularly private equity sponsors, tend to pay lower bid premiums than public or corporate acquirers, reflecting differences in synergies and return targets (Gorbenko & Malenko, 2014; Officer, 2007). Furthermore, performance seems persistent across private equity funds, and larger or better-performing sponsors continue to raise and deploy capital across cycles, making them less sensitive to downturns and more likely to remain active when weaker sponsors withdraw (Kaplan & Schoar, 2005). Likewise, pricing and deal structure vary across sponsor types, and some buyers continue to transact even when conditions are less favorable, with market-wide conditions influencing both the terms and timing of acquisitions (Kaplan & Strömberg, 2009). To capture these structural differences, a binary indicator for *Financial buyer (PE)* equals one when the acquirer is classified as a financial sponsor and zero otherwise. The variable aims to distinguish financial sponsors' investment-driven motives from the strategic synergies pursued by corporate buyers. Given that the data source categorizes acquirers broadly as *Corporate* or *Financial*, the dummy was refined to reflect *Classic PE sponsors* by excluding hedge funds, infrastructure funds, and sovereign wealth funds, as these are entities that may behave differently in bidding behavior. Including this variable, therefore, provides a robustness check for whether premium levels systematically differ between sponsor-led and strategic acquisitions once firm characteristics, competition intensity, and macroeconomic conditions are controlled for.

H11: Financial buyers, and especially PE sponsors, are negatively associated with bid premiums

3.1.13. ≥2 Bidders

The number of bidders is likely to impact the final offer price, and several studies show how premiums increase when more than one potential buyer is involved in the takeover process. In public-to-private transactions, revised offers or competing bids indicate that multiple acquirers are interested in the target, which can push the final price upward. Auction-style or otherwise competitive sale processes result in higher valuations than single-bidder negotiations (Boone & Mulherin, 2007). Similarly, competing sponsor interest and revised offers are common in buyouts and can affect the final price paid. Moreover, final bids often exceed initial offers, where bidding pressure is often the reason

(Guo et al., 2011). To reflect this, a dummy variable equal to one when there is evidence of more than one bidder, for instance, competing offers, bid revisions, or reported bidding interest, and zero otherwise, is included in the analysis. This is denoted by *≥2 Bidders*.

> **H12:** Transactions involving two or more bidders are positively associated with bid premiums

3.1.14. Cross-Border Transactions

Cross-border buyouts could represent an important distinction in the Nordic setting, given the region's small size and rather high degree of international ownership. Prior research shows that international acquisitions differ systematically from domestic ones, due to information frictions and institutional differences (Arslan & Simşir, 2015). A central mechanism is governance transfer. Bris & Cabolis (2004) document that target shareholders earn higher announcement gains when the acquirer comes from a country with stronger investor protection and accounting standards, as the target effectively adopts the acquirer's governance regime. The broader evidence summarized by Erel et al. (2022) similarly shows that cross-border deals are more common when the acquirer's country offers stronger shareholder protection and that governance improvements are a recognized source of value creation in international M&A. These findings imply that governance-related gains from going private may differ materially between foreign and domestic buyouts. To test this hypothesis, a cross-border dummy variable is included, equal to 1 when the acquirer and target are from different countries. Nonetheless, it is recognized that there is not likely to be a discrepancy from one Nordic country to another, yet the sample is only filtered for the Nordic countries in the target nation. Hence, the acquirer may originate from any jurisdiction, making the acquirer's nation a variable of interest within the analysis.

> **H13:** Cross-border transactions have negative associations with bid premiums, compared to non-cross-border transactions

3.2. Descriptive Statistics

Descriptive statistics for the main variables are presented in Table 1. The summary statistics are shown in Panel A for all variables and in Panel B for indicator variables. All variables are winsorized at the 1st and 99th percentiles to ensure that the statistical analysis is not excessively influenced by extreme observations, which is particularly important in a smaller dataset such as ours, where outliers may have a more pronounced effect on the results. On the first row of Panel A, the primary variable of interest, *Bid premium*, is shown. It could range between negative 7.2% and positive 99.6%, with a standard deviation of 22.9 percentage points indicating large differences in the bid premiums

placed on the firms in the sample. In our sample, firms are associated with an average premium of 29.3%. In the rows below, summary statistics for the other variables are shown. The variable with the outstandingly largest standard deviation and spread is *EV/EBITDA*; nonetheless, when employed in the main regression analyses, this variable is transformed to its natural logarithm to entail a better distribution of values for regression purposes. Some firms were excluded from the sample due to data availability, and some firms were manually entered into the data set due to missing information. These firms are presented in Appendices A.1. and A.2. The descriptive statistics show that sample firms are not drawn from an all too homogeneous population. Further, a correlation matrix is shown in Panel C, showing the correlation of all the variables used in the main analyses. As can be seen in the correlation matrix, no concerning multicollinearity issues are indicated. All pairwise correlations among the key independent variables are low to moderate (according to Cohen's (1988) guidelines, the correlations among the regressors fall within the small to medium range ($|r| < 0.30$), indicating no strong linear associations). This suggests that variables employed simultaneously in the regression models are not excessively correlated, and the subsequent regressions are thus unlikely to suffer from multicollinearity problems based on these correlations.

Table 1. Summary Statistics and Correlation Matrix

Panel A: Summary Statistics

	Mean	SD	Min	Median	Max
Bid premium	0.293	0.229	-0.072	0.277	0.996
Size (ln assets)	7.439	1.786	2.836	7.495	11.157
Size (ln revenues)	7.046	1.642	3.204	7.212	10.197
DSCR	3.295	3.346	0.182	1.909	10.372
ND/EBITDA	1.564	4.317	-11.083	0.648	21.170
LTD/E	0.729	1.708	0.000	0.218	11.201
ROA	0.018	0.156	-0.901	0.036	0.315
Tax burden	0.021	0.042	-0.076	0.012	0.219
Tax burden × ROA indicator	0.013	0.027	-0.031	0.000	0.156
Undervaluation	-0.069	0.328	-0.891	-0.089	0.847
EV/EBITDA	19.283	35.267	0.594	11.134	243.097
Ln EV/EBITDA	2.509	0.827	0.979	2.431	5.500
Tobin's Q	1.602	1.704	0.054	1.104	10.685
FCF	2.065	4.431	-7.478	3.653	8.409
FCF/Sales	-0.099	0.653	-4.217	0.044	0.349
Earnings volatility	0.074	0.073	0.006	0.050	0.328
ROIC	0.088	0.162	-0.529	0.079	0.713
Free float	0.582	0.268	0.094	0.603	1.000
Interest rate	0.016	0.011	-0.001	0.019	0.035

Panel B: Indicator Variable Overview

	Yes = 1
High interest	57
≥2 Bidders	5
Financial buyer	43
PE buyer	40
Acquirer ≠ Target nation	34

Note: The sample consists of 112 public-to-private buyout transactions in the Nordics, with deal and firm characteristics in LCY from LSEG Workspace for the years 2010-2025. The main variable of interest, *Bid premium*, measures the percentage difference between the offer price and the target's share price four weeks before the announcement; it is a continuous variable expressed in percentage points. The variable is winsorized at the 1st and 99th percentiles. All firm-level data are based on the fiscal year ending the most recent fiscal year up to the transaction date if nothing else is mentioned. *Size* is the natural logarithm of total assets or revenues, respectively, in millions LCY. Leverage-related variables are *ND/EBITDA*, *LTD/E*, and *DSCR*, where the last is defined as EBITDA over the sum of interest expenses and current portion of long-term debt. *Tax burden* is the firm's income taxes over its net sales, and *Tax burden * ROA indicator* is an interaction term combining the target's *Tax burden* and a dummy variable taking on 1 if the target's *ROA* is above the median, and 0 otherwise, denoted *ROA indicator*. *ROA* is defined as net income over total assets. *Undervaluation* is defined as the share return of 300 days to 41 days before the announcement, deducted by the market return for the comparable Nordic Nasdaq index for the same time period. The valuation multiple *EV/EBITDA* is included in its normal form as well as in the form of a natural logarithm, *Ln EV/EBITDA*. *Tobin's Q* is defined as enterprise value over total assets. The variable *FCF* is defined as operating cash flow less of capital expenditures, transformed using a signed logarithm

that applies the sign of the value and the natural logarithm of its absolute magnitude, plus one. *FCF/Sales* is the operating cash flow less of capital expenditures, scaled by sales. *Earnings volatility* is included as the standard deviation of *ROIC* (defined as EBIT over total book capital) for the past five fiscal years before the announcement date. *Free float* is the firm's free float over total shares outstanding, ranging from 0 to 1. *Interest rate* is the 10-year government bond yield lagged for 6 months before the announcement date. These are also converted into a dummy variable named *High interest*, equal to 1 if the rate is above the sample median, and 0 otherwise. *Financial buyer* is a dummy variable equal to 1 if the acquirer is classified as a "financial buyer" (other categories in LSEG are "individual groups" and "corporate"). *PE buyer* is a dummy variable equal to 1 if the acquirer is classified as a refined private equity firm (financial buyer and excluding hedge, infrastructure, and sovereign wealth funds), and 0 otherwise. An indicator for multiple bidders is defined by the dummy variable *≥2 Bidders*, equal to 1 if there is more than one bidder involved, and 0 otherwise. *Acquirer ≠ Target nation* is a dummy variable equal to 1 in the cases where the acquirer nation differs from the target nation. All variables are winsorized at the 1st and 99th percentiles. Regressions employ industry fixed effects to control for unobserved heterogeneity.

Panel C: Correlation Matrix

	Premium	Size	Free float	Bidders	A≠T nation	Fin. buyer	PE buyer	Tax * ROA	Tax burden	DSCR	ND/ EBITDA	LTD/ E	Earn. vol	EV/ EBITDA	FCF	FCF/ Sales	Under-valuation	Tobin's Q	Interest
Premium	1.000	-0.121	0.063	0.214	-0.122	0.099	0.111	-0.118	-0.102	0.262	-0.193	0.015	-0.016	0.207	0.184	0.235	-0.099	0.098	0.029
Size		1.000	0.088	0.007	0.153	-0.075	-0.042	0.048	0.200	0.177	-0.076	0.439	0.033	-0.348	-0.006	-0.186	0.087	0.017	-0.038
Free float			1.000	0.131	0.113	0.191	0.185	-0.024	-0.099	0.150	-0.213	-0.080	-0.018	0.013	0.136	-0.043	0.076	0.062	-0.064
Bidders				1.000	-0.041	0.096	0.110	-0.048	-0.027	0.238	-0.076	-0.064	-0.094	-0.061	0.126	0.060	0.003	-0.036	0.056
A≠T nation					1.000	-0.134	-0.141	-0.003	0.038	-0.087	-0.038	-0.079	-0.045	0.184	-0.068	-0.001	0.178	0.130	0.030
Fin. buyer						1.000	0.944	0.025	-0.076	-0.122	0.256	-0.104	0.081	-0.022	-0.007	-0.079	0.166	0.172	0.014
PE buyer							1.000	0.024	-0.076	-0.109	0.274	-0.087	0.089	-0.008	-0.015	-0.065	0.209	0.167	-0.012
Tax * ROA								1.000	0.642	0.248	0.219	-0.086	-0.010	0.010	-0.001	0.072	0.135	0.407	-0.119
Tax burden									1.000	0.063	0.340	-0.069	-0.098	0.016	-0.119	-0.226	0.092	0.195	-0.225
DSCR										1.000	-0.327	-0.190	0.248	-0.117	0.378	0.252	0.081	0.405	0.023
ND/ EBITDA											1.000	0.290	-0.346	-0.231	-0.246	-0.081	-0.017	-0.210	-0.061
LTD/E												1.000	-0.044	-0.084	-0.108	-0.085	-0.018	-0.101	-0.074
Earn. vol													1.000	0.205	0.016	0.109	0.098	0.252	0.100
EV/ EBITDA														1.000	-0.276	-0.124	0.081	0.295	-0.005
FCF															1.000	0.493	0.084	0.227	-0.086
FCF/Sales																1.000	0.273	0.178	0.019
Under-valuation																	1.000	0.208	-0.078
T's Q																		1.000	0.069
Interest																			1.000

4. The Determinants of Premium: Results and Subsequent Discussion

4.1. Baseline Results

Four variations of regression models are estimated to analyze the development and determinants of bid premiums for private-to-public buyouts in the Nordics. The model choice is an ordinary least squares (OLS) model, as this provides clear cross-sectional regressions which allow evaluation of how changes in the independent variables influence the bid premium. The t-statistics presented are based on White's (1980) heteroscedasticity-consistent standard errors. The models are based on the bid premium being the dependent variable, which is constructed to represent the excess price offered to pre-buyout shareholders as indicated by the bid placed, along with numerous explanatory and independent variables. Explanatory variables presented in the main results are not all the variables tested in the analysis; this is mostly due risk of overfitting. The rest of the variables corresponding hypotheses can be found in appendices. The dependent variable is defined as the percentage difference between the offer price and the target's closing share price four weeks before the original announcement date, expressed in percentage points. All accounting and firm-level data retained for the main regressions are dated to the most recent data fiscal year ending before the transaction, ensuring both sufficient coverage, relevance to the transaction timing and limiting potential issued of endogeneity such as reverse causality. Table 3 presents our baseline regression models. In column (1), the dependent variable *Bid Premium* is tested without fixed effects with the explanatory variables that have been shown as the most explanatory for the sample and setting. In column (2), industry fixed effects are added to this model. Thereafter follow columns (3) and (4), where the macroeconomic variable is tried in another form. In columns (1) and (2), the interest rate is defined as continuous, to then in columns (3) and (4), it is converted to a dummy variable for high and low-interest-rate environments. This dummy variable is tested first without fixed effects, in (3), and then with fixed effects (4). The regression models in Table 2 can be specified for columns (1), (2), (3), and (4), respectively:

$$BidPremium_i = \beta_0 + \beta_1 * Size_i + \beta_2 * DSCR_i + \beta_3 * Undervaluation + \\ +\beta_4 * \ln(EV/EBITDA)_i + \beta_5 * Tax\ burden_i * ROA\ indicator_i \\ +\beta_6 * \geq 2\ Bidders_i + \beta_7 * Interest\ rate_i + \varepsilon_i \quad (1)$$

$$BidPremium_i = \beta_0 + \beta_1 * Size_i + \beta_2 * DSCR_i + \beta_3 * Undervaluation + \\ +\beta_4 * \ln(EV/EBITDA)_i + \beta_5 * Tax\ burden_i * ROA\ indicator_i \\ +\beta_6 * \geq 2\ Bidders_i + \beta_7 * Interest\ rate_i + Industry\ FE + \varepsilon_i \quad (2)$$

$$BidPremium_i = \beta_0 + \beta_1 * Size_i + \beta_2 * DSCR_i + \beta_3 * Undervaluation + \\ +\beta_4 * \ln(EV/EBITDA)_i + \beta_5 * Tax\ burden_i * ROA\ indicator_i \\ +\beta_6 * \geq 2\ Bidders_i + \beta_7 * High\ interest_i + \varepsilon_i \quad (3)$$

$$BidPremium_i = \beta_0 + \beta_1 * Size_i + \beta_2 * DSCR_i + \beta_3 * Undervaluation + \\ +\beta_4 * \ln(EV/EBITDA)_i + \beta_5 * Tax\ burden_i * ROA\ indicator_i \\ +\beta_6 * \geq 2\ Bidders_i + \beta_7 * High\ interest_i + Industry\ FE + \varepsilon_i \quad (4)$$

All variables and their summary statistics are reported in Table 1. Some of the variables are not shown in the final regression models but are tested in appendices, included as interaction terms or part of other variables; hence, these are also shown in Table 1 for a thorough understanding of the sample at hand, all at once. The main specification includes industry fixed effects to address cross-sectional omitted variable bias, for instance, regarding differences in capital intensity, competitiveness, valuation multiples, M&A activity, or typical premium levels, which can differ substantially between industries. Given the relatively small sample and the use of macroeconomic variables, industry fixed effects offer the best balance between reducing bias and preserving meaningful variation in the data. Including time or country fixed effects would likely substantially reduce variation in variables and risk of overfitting in a dataset of this size. Country fixed effects are unlikely to add substantive explanatory power, as the Nordic markets are economically and institutionally similar, and cross-border effects are also tested through an indicator variable. The reasoning follows Renneboog et al. (2007), who apply industry-level fixed effects, nothing further, to a sample of comparable size. Ayash et al. (2021) further caution that many buyout-related performance effects may stem from industry consolidation or add-on acquisitions rather than organic growth, also pointing to the importance of controlling for industry-level activity. Table 2 reports the regression results for regressions (1) to (4). All models analyzed are tested for the presence of heteroscedasticity by means of a White test (White, 1980) and further by a VIF and Cook's distance test, all proving the model to be fully functional, not biased by multicollinearity, nor influenced by diagnostics. The reported adjusted R-squared shows that the models explain about 16% of the sample variation in the dependent variable when entering industry fixed effects. Compared to other research on similar regressions, this should be considered reasonable. Renneboog et al. (2007) report an adjusted R-square of 23-30% and state that it fits the data reasonably well. Dasilas & Grose (2018) have a comparable model of sources on shareholder wealth gains using abnormal returns as an independent variable and reach an adjusted R-squared of 13-14%. Alexandridis et al. (2013) have about 24% as the highest for their premium regression models.

Table 2: Bid Premium Determinants

	Dependent variable: Bid Premium (4 weeks)			
	(1)	(2)	(3)	(4)
Size (ln assets)	-0.009	-0.014	-0.009	-0.014
	(0.012)	(0.013)	(0.012)	(0.012)
DSCR	0.019***	0.018*	0.019***	0.018*
	(0.006)	(0.010)	(0.006)	(0.010)
Tax burden * ROA indicator	-1.610***	-1.366***	-1.594***	-1.359**
	(0.580)	(0.505)	(0.590)	(0.523)
Undervaluation	-0.113	-0.136**	-0.112	-0.135**
	(0.069)	(0.059)	(0.069)	(0.061)
Ln EV/EBITDA	0.072**	0.067***	0.072**	0.067***
	(0.032)	(0.023)	(0.032)	(0.023)
Interest rate	-0.373	0.489		
	(1.727)	(1.675)		
High interest = 1			-0.000	0.009
			(0.041)	(0.039)
≥2 Bidders = 1	0.172*	0.201***	0.171*	0.201***
	(0.102)	(0.066)	(0.102)	(0.064)
Fixed effects (industry)	No	Yes	No	Yes
Number of observations	112	112	112	112
R^2	0.201	0.284	0.201	0.284
Adjusted R^2	0.147	0.155	0.147	0.155
Standard errors	HC1	HC1	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1.

Table 3. Hypotheses of Bid Premium Drivers

Hypothesis		Expected sign of coeff.	Result
H1	Target size	-	Supported, not significant
H2	Debt servicing capabilities	+	Supported, significant
H3	Financial leverage	-	Partly supported, partly significant
H4	Tax benefits	+	Not supported, significant
H5	Undervaluation	-	Supported, significant
H6	Valuation multiples (EV/EBITDA)	+	Supported, significant
H7	Free cash flow generation	+	Supported, significant
H8	Earnings volatility	-	Supported, not significant
H9	Outside control (free float)	+	Supported, not significant
H10	(High) interest rates	-	Not supported, not significant
H11	Financial buyers (PE sponsors)	-	Supported, not significant
H12	Bidder competition	+	Supported, significant
H13	Cross-border transactions	-	Supported, not significant

Note: All variables are tested yet not shown in the above main regression specifications of Table 2. Refer to the appendices as follows for hypothesis testing of the variables not included in the main regression models. Coeff. is short for coefficient (β). **H3 Financial leverage** is tested by both *LTD/E* and *ND/EBITDA*, whereof the latter displays significant, negative results for regression specification (2), which introduces fixed effects. These results are shown in Appendix C.2. **H6 Valuation multiples** are further tested using *Tobin's Q*, which has a positive yet insignificant coefficient, indicating support. Also, the normal version of *EV/EBITDA* is tested, displaying positive and significant coefficients, also supporting the hypothesis. This can be seen in Appendix C.4. **H7 Free cash flow generation** is tested and found to be of positive, significant influence on the bid premium in the form of *FCF/Sales*. This is not included in the main model, to leave meaningful variation to other variables, yet it can be seen in Appendix C.5. **H8 Earnings volatility** is shown in Appendix C.6. **H9 Outside control** is tested with the variable *Free float* as depicted in Appendix C.7. **H11 Financial buyers (PE sponsors)** can be found in Appendix C.8. **H13 Cross-border transactions** are depicted in Appendix C.9.

The coefficient on firm Size, measured as the natural logarithm of total assets, is statistically insignificant across all models. Nonetheless, the coefficient is of small magnitude, implying weak economic relevance. This suggests that balance-sheet scale does not explain variation in bid premium in the Nordic public-to-private sample once other variables are included. However, the sign is negative, as expected. This is consistent with previous findings, such as Renneboog et al. (2007), who do not find significant effects of size on premiums or announcement returns in U.K. going-private transactions. Alexandridis et al. (2013) also find a negative relationship between size and premium and interpret it as a proxy for deal complexity, suggesting that larger firms are more difficult to restructure and integrate, and hence bidders' willingness to offer a high premium is reduced. Guo et al. (2011) and Dasilas & Grose (2018) both find size to have a negative relationship with bid premium. Guo et al. (2011) argue that smaller buyout targets tend to generate stronger post-transaction performance improvements, indicating greater scope for operational value creation in smaller firms. Contrary, however, Dasilas & Grose (2018) argue that smaller firms in European LBOs earn higher wealth gains, which they attribute to information asymmetry. This should imply a higher willingness to pay a premium for smaller, rather than larger, firms. Small firms have less analyst coverage and lower visibility, increasing the likelihood of undervaluation and thus generating higher premiums when taken private, yet these results are argued for with a size measure based on total sales, not total assets (Dasilas & Grose, 2018). However, as total assets capture capital intensity and investment structure rather than information asymmetry or market visibility, it may fail to pick up valuation-related mechanisms. To check this, the variable for *Size* is redefined with revenues instead of assets, yet it yields no significant results (see Appendix C.1.). Likely explanations are the limited dispersion in firm size within the Nordics (see e.g. EC European Competitiveness Report, 2023) and the relatively small number of observations, approximately 100, compared with studies such as Alexandridis et al. (2013), whose regressions are based on datasets exceeding one thousand deals and thus provide far greater statistical power and cross-sectional variation.

The debt-service coverage ratio displays strong relevance in the regression models without fixed effects and maintains this relevance, yet on a lower level of significance once fixed effects are introduced (see Table 2). A significant and positive coefficient on *DSCR* for all models aligns well with the financing mechanisms highlighted in LBO and M&A literature; however, the effect could be argued to not be material. Without fixed effects, the effect is significant at the 1% level, and then once fixed effects are introduced, this shrinks to the 10% level, yet significance is maintained. A one-unit change in the DSCR ratio yields, on average, a 0.018 percentage point increase in the bid premium, interpreting columns (2) and (4) of Table 2. Although there is no formal industry standard, a DSCR of 2.0 is widely regarded as signaling robust debt-servicing ability, while it is common for lenders to stipulate minimum DSCR covenant levels of approximately 1.2-1.25 (Investopedia, 2025). Consistent with the sample, DSCR ranges from 0.182 to 10.372, with a median of 1.909 and a standard deviation of 3.346. Hence, the variation of

DSCR can be perceived as rather small, given that the firm is not undergoing substantial refinancing or experiencing volatile cash flows, implying that the economic relevance for the bid premium might be limited. The reasoning is well in line with earlier research. Renneboog et al. (2007) emphasize that value creation in going-private transactions depends on the capacity to support higher leverage, as tax benefits and the disciplinary effects of debt only materialize when firms can reliably service additional obligations. This is further consistent with Guo et al. (2011), who show that leverage-related variables significantly affect pricing outcomes. Moreover, post-buyout performance improvements are enabled by capital structures better matched to firms' cash-flow-generating capacity.

Within a broader M&A context, Erel et al. (2022) highlight how financial frictions and borrowing conditions shape acquisition behavior across countries and over time, supporting the idea that acquirers may be willing to pay higher premiums for targets with strong debt-servicing ability. Those firms enable more favorable financing packages, greater leverage-related value creation, and lower execution risk in highly leveraged transactions. This also aligns with Axelson et al. (2013), who show that firms with stronger financial stability and better debt-management capacity present lower risk to investors and can therefore command higher premiums in LBO and public-to-private deals. As DSCR measures how well a firm can cover mandatory annual debt payments with its operating cash flows, where a higher DSCR reflects a less financially constrained firm and a lower DSCR greater financial stress, it is likely to become a determinant of acquirers' willingness to pay, which explains the consistently positive association between *DSCR* and *Bid premium* in all estimated models. Although none of the prior mentioned studies applies DSCR explicitly, debt-servicing ability plays a central role in the mechanisms they examine. Given that DSCR is a standard contemporary proxy and covenant for debt capacity in practice (Forvis Mazars, 2021; Investopedia, 2025; Macquarie, 2025), its introduction into empirical finance research for bid premiums is therefore both reasonable and conceptually well-grounded.

Apart from the *DSCR,* applied in the main regression specifications, more commonly used variables for leverage are also tested. By introducing two alternative leverage measures, net debt over EBITDA (*ND/EBITDA*) and long-term debt over equity (*LTD/E*), as presented in Appendix C.2., the analysis allows for an assessment of whether the results are driven by the specific choice of the *DSCR*. Even though less strong, a negative and significant relationship between *ND/EBITDA* and *Bid premium* (see Appendix C.2. for full results) is found when industry fixed effects are included, suggesting that more highly levered firms tend to receive lower takeover premiums. Consistent with previous findings, high indebtedness constrains financial flexibility, increases financial risk, and limits the acquirer's willingness to pay aggressively for control. Guo et al. (2011) demonstrate that leverage-related variables materially influence pricing in public-to-private transactions. Axelson et al. (2013) further argue that leverage affects valuation primarily by constraining financing capacity, rather than through

operating fundamentals, suggesting that firms already carrying substantial debt offer less scope for capital-structure optimization after the acquisition.

LTD/E, on the other hand, does not enter any specification with significance and seems not to add additional explanatory power. This result is aligned with Dasilas & Grose (2018), who find that balance-sheet leverage, such as debt over equity, is generally a weak predictor of premium once profitability, valuation, and informational asymmetry are accounted for. Renneboog et al. (2007), however, report significant effects for debt over equity in a broader European setting. Nevertheless, the lack of significance suggests that static, book-based gearing without regard to a firm's capacity to service debt is a weaker indicator of financing potential in Nordic public-to-private transactions.

Conceptually, *ND/EBITDA* and *LTD/E* are also vulnerable to measurement issues. *ND/EBITDA* can be distorted by extreme EBITDA values, volatility in net debt, and accounting differences for cash equivalents. *LTD/E* can be influenced by the mismatch between market value versus accounting-based equity measures and variations in the long-term debt classification practices across firms. These features introduce noise, making regression coefficients less precise, and as a result, it is harder to find significant effects. Importantly, substituting *DSCR* with either *ND/EBITDA* or *LTD/E* does not materially alter the conclusions, and *DSCR* remains the economically strongest and most consistently significant predictor. This reinforces that *DSCR* effectively captures relevant financing mechanisms, likely since it reflects both operating cash-flow strength and existing debt-service obligations, key drivers of valuation in debt-financed acquisitions. Whereas pure leverage ratios do not provide comparable explanatory power for premium variation in the Nordic sample at hand. All in all, *DSCR* seems to be of further explanatory power for the sample and also leaves room to separate the effect from the tax variable.

Since the value of leverage in buyouts is intrinsically tied to the availability of tax shields, the consequences of high indebtedness extend beyond financing considerations alone. When debt capacity is limited, the scope for incremental interest deductibility diminishes. This positions taxation as a complementary mechanism to leverage in determining bid premium, as value creation through financial structuring depends not only on how much debt can be added, but also how much taxable income exists to absorb the shield (Renneboog et al., 2007). Accordingly, the interaction between the target's Tax burden and profitability, measured as the above-median ROA indicator, is included in the regression models. One could think that a high ROA can also indicate having a small capital base; however, structural differences such as this one should be accounted for by industry fixed effects. *Tax burden * ROA indicator* is statistically significant across all four models, indicating that the effect of taxes on premiums, given high underlying profitability, influences bid premium. The economic significance of the interaction term is, in a sense, only applicable for firms with above-median ROA, as the term otherwise takes on the value zero. For these firms, the effect is that a one-unit increase in the tax burden reduces the bid premium by about 1.36 percentage points (see Table 2 models (2)

and (4) with fixed effects). This effect is statistically significant at the 1% and 5% levels, respectively. Contrasting to the hypothesis, the coefficient is negative rather than positive. This may indicate that, instead of reflecting potential for value creation through future tax optimization, bidders appear to reward firms that already demonstrate effective tax organization, valuing them at a premium relative to those that do not. A low tax burden in combination with being profitable (as indicated by a high ROA) would mean that the firm is efficiently organized. Whereas a high tax burden in combination with high profitability would imply a firm not as optimally organized, yet with potential for improvements, in turn generating a will to pay higher premiums.

Renneboog & Vansteenkiste (2017) argue that limited debt headroom dampens the tax-shield benefits available post-transactions, reducing economic attractiveness when a target is already indebted. The attenuation of the significant effect for *Tax burden * ROA indicator,* once trying to explain bid premium with either *ND/EBITDA* or *LTD/E,* is likely a result of several causes. First, *DSCR* is a cash flow coverage-based measure, whereas *ND/EBITDA* and *LTD/E* are leverage levels or capital structure ratios that often relate strongly to ROA. As capital structure affects returns, the debt ratios implicitly account for the tax burden, as such (tax benefits and interest deductions depend on debt levels). Hence, *ND/EBITDA* or *LTD/E* consumes the variation which earlier entered as significant effects of the interaction term *Tax burden * ROA indicator*. Second, *DSCR* is directly linked to interest coverage and potential tax benefits, meaning the interaction term *Tax burden * ROA* indicator can work as a proxy for efficiency in translating results to tax benefits. *ND/EBITDA* and *LTD/E,* on the other hand, capture balance sheet size, long-term debts, and financial risk profile, and are, as such, not as connected to tax burden on operational returns. Thus, the interaction term for tax benefits loses its strong explanatory power apart from what is already explained. With this as a background, the loss of statistical significance should not be interpreted as tax benefits becoming irrelevant, but rather as evidence that leverage operates through the same underlying channel.

Earlier findings of going-private transactions (Halpern et al., 1999; Kieschnick, 1998; Lehn & Poulsen, 1989), and U.K. public-to-private transactions specifically (Renneboog et al., 2007), include tax-burden measures, typically taxes-to-sales. Renneboog et al. (2007) test this mechanism explicitly by including both a taxes-to-sales variable and an interaction term between taxes and high profitability (defined as the variable deployed in this analysis). While they find no significant effect of the interaction of taxes and profitability, results show that bidders pay higher premiums for firms with low pre-transaction leverage, consistent with unused debt capacity enabling larger incremental tax shields (Renneboog et al., 2007). Dasilas & Grose (2018) also include a taxes-to-sales variable in their European LBO setting and similarly report no significant effect on premiums or adjusted premiums. Moreover, a negative sign on the tax-related variable is consistent with the idea that the incremental tax benefits of leverage are smaller when profitability and thus taxes are already high, leaving less value to be created through

financial engineering (Axelson et al., 2013). Nonetheless, tax-related gains ultimately depend on the firm's capacity to take on additional debt, which aligns conceptually with the expected role of debt-servicing ability in public-to-private valuation. This mechanism is captured through the *DSCR* variable, as previously demonstrated in the models, which directly measures the scope for increasing leverage and thus the potential magnitude of future tax shields.

The proxy for undervaluation, *Undervaluation,* showed unclear results. Yet, the effect is relevant, and the economic impact is modest with fixed effects, as seen in models (2) and (4) of Table 2. The coefficient of -0.136 in model (2) and -0.135 in (4) suggests that a one percentage point lower performance compared to the market would increase the premium by approximately 0.13 percentage points. For both models, this effect is significant at the 5% level. While significance varies, the sign is consistent with the undervaluation hypothesis, i.e., lower pre-bid returns correspond to higher acquisition premia. This result aligns with Renneboog et al. (2007), who observe a negative association between past stock performance and takeover premia, particularly for transactions where information asymmetry allows for recognizing mispricing. Their results show that weaker performance one year pre-offer leads to higher premiums for MBOs, where undervaluation is more easily exploited. Although our study does not separate bid type at this granularity, the negative coefficient for *Undervaluation* indicates that similar valuation logic may apply; underperforming firms appear more attractively priced to acquirers, resulting in upward pressure on takeover premium when the market undervalues the target.

Further detailed, the decision to take a public firm private is often framed by the undervaluation hypothesis, which suggests that in management or leveraged buyout, there are incentives to pay higher premiums when the target firm is underperforming before the transaction. The undervaluation is often attributed to asymmetric information, where insiders or specialized outsiders perceive a discrepancy between the market value and the true potential value of the assets (Renneboog et al., 2007). This may be particularly relevant for smaller listed companies that find it difficult to attract institutional investor interest, thereby suffering from illiquidity and persistently low market valuations (Renneboog et al., 2007). Weir et al. (2005) used perceived and actual undervaluation data to identify its importance in going-private decisions, also noting that buyouts provided a necessary exit for institutions holding poorly valued firms. While some studies suggest managers may employ specific accounting techniques to depress the pre-announcement share price in management-led buyouts, DeAngelo (1986), Lowenstein (1985), and Schadler & Karns (1990) found no evidence of systematic accounting data manipulation when testing for this. Renneboog et al. (2007) tested undervaluation using past share price performance, the return over the year before the announcement, and confirmed that lower share price performance did lead to higher premiums and cumulative abnormal returns (CAARs). These results demonstrate that a negative

relationship is transaction-specific and suggest that the strength of the undervaluation effect is tied to the specific governance structure of the deal, highlighting that a non-significant result for an aggregate sample, or even a subset, is consistent with public-to-private literature. Dasilas & Grose (2018) also examine undervaluation in European LBOs, defining it as the difference between the logarithmic return of the firm's stock price over 12 months and the corresponding market index return. Although their event window is only one day, the mechanism is similar. Their findings of a positive relationship between undervaluation and premiums offer an additional point of comparison, supporting the same mechanism as found in this Nordic sample, namely that firms underperforming the market tend to receive higher premiums.

Ln EV/EBITDA has a significant positive effect on the premium. The significant effect of *Ln EV/EBITDA* can be explained as firms with higher multiples are perceived as less risky and more likely to generate strong returns, which justifies a higher premium. Axelson et al. (2013) emphasize that the ratio is crucial in understanding the pricing of LBOs, particularly in the context of public-to-private transactions. They argue that higher multiples typically reflect favorable market conditions and investor confidence, which also results in higher transaction premiums. In alignment with Axelson et al. (2013) and Ayash (2021) argue that entry multiples increase with debt availability and market optimism, supporting the argumentation for *Ln EV/EBITDA* being significantly related to the bid premium. However, it is in contrast with Renneboog & Vansteenkiste (2017), who argue that better performing firms (in terms of operating margin and Tobin's Q) receive lower premiums, whereas high premiums are paid to firms that are not currently profitable but that have large growth potential. As seen in Appendix C.4., Tobin's Q enters the specifications with a positive, insignificant sign, which suggests that, instead, growth potential appears neither strongly rewarded nor penalized in the bidding process.

The effect might not seem economically material, yet it indicates that a one percentage change in the EV/EBITDA multiple, which might be easily achieved by higher enterprise values, implies an on average 0.067 percentage point increase (interpreting the results of FE-models in specifications (2) and (4) of Table 2) in the bid premium. The ratio can be thought of as a percent, as the multiple enters the regression in its natural logarithm. There are often notable differences in the multiples between firms, signaling that just a small increase in the multiple per se would generate material differences in the level of the bid premium. Further explained, the standard deviation of EV/EBITDA, after winsorizing, is in this sample 35.267. The question then becomes whether and how easily a firm's enterprise value fluctuates, or is assigned to the firm, as changes yield large results.

Earnings volatility is found to have a non-significant, negative effect on premium. However, the economic relevance is aligned with our hypothesis and previous research. Axelson et al. (2013) show that greater volatility in profitability reduces the likelihood of being taken private. The absence of a significant effect of the variable *Earnings volatility*

in the premium regressions suggests that volatility may operate primarily as a selection mechanism rather than a price determinant (see the inclusion Appendix C.6.). This leads us to eliminate the variable from the main models, to avoid unnecessary variables and overfitting when working with a rather small sample. Nonetheless, there are several reasons for this to be a natural cause. Axelson et al. (2013) document that volatile firms are less likely to become buyout targets at all, implying that the public-to-private sample might already be filtered toward firms with relatively stable earnings. If buyout investors screen out highly volatile firms before bidding, the remaining variation in volatility within executed transactions may be too limited to affect the premium. This interpretation is consistent with Erel et al. (2022), who show that financial frictions shape which firms become M&A targets across countries, highlighting how pre-transaction constraints may determine target selection rather than pricing. Volatility may influence which firms become targets, but not how much is paid once a deal occurs. Non- significance is therefore consistent with prior emphasis on volatility as a barrier to buyout feasibility rather than as a driver of bid aggressiveness or valuation conditional on transaction completion. Also, when it is included, the previously significant interaction effect of taxes becomes insignificant. This attenuation is consistent with volatility absorbing part of the underlying risk variation correlated with profitability and tax sensitivity, reducing the independent explanatory power of the interaction term. To reduce the risk of overfitting, this variable is hence omitted from the main regression.

Like Renneboog et al. (2007), the *FCF* variable is found to be of little significance, hence excluded from the main models. Nonetheless, the effect, shown in Appendix C.5., is economically material for the variable *FCF/Sales*. Due to overfitting, however, this variable is excluded from the main regressions. Also, Renneboog et al. (2007) find no evidence for the FCF hypothesis, and the effect could be argued to be of unclear logic direction. A positive and significant coefficient would indicate that firms generating higher FCF tend to receive higher premiums. This is consistent with the FCF hypothesis of Jensen (1986) and discussions from Renneboog et al. (2007), where acquirers are willing to pay more for cash-generating targets because these can better service the post-buyout debt and provide immediate returns. Guo et al. (2011) also find that operational cash flows are key drivers of post-buyout value creation, which could indicate willingness to pay higher premiums upfront. Nevertheless, Jensen's (1986) FCF hypothesis could also be thought of as that excess cash invites agency costs, and that buyouts discipline managers. Hence, lower FCF could, in contrast, generate higher premiums due to greater agency slack to eliminate. With this reasoning, it could be argued that *FCF* lacks a clear impact on the premium. Furthermore, *DSCR*, a critical measure of the firm's leveraging capacity and strength in paying eventual LBO debt, serves as the main financing limiting variable in the main regression. This also explains eventual multicollinearity with the proxy that the *FCF/Sales* should pursue according to Renneboog et al. (2007). *DSCR* is a function of cash flows in relation to financial constraints, and hence, *FCF/Sales* works as an underlying, redundant component when including *DSCR*. All in all, *DSCR* is

theoretically stronger, measuring financial viability rather than general cash flow activity or strength, hence it is chosen in the main models.

Dasilas & Grose (2018) define an FCF variable as operating income before depreciation, amortization, interest expenses, taxes, and dividends, divided by sales one year before the deal, and find a significant effect, yet of little economic importance (a coefficient of 0.002-0.003) in their European LBO sample. Their results rely on a larger, more heterogeneous cross-country dataset, where differences in disclosure quality, ownership concentration, and payout behavior likely produce substantial variation in *FCF* and in the severity of free-cash-flow problems. The Nordic sample is considerably smaller and more institutionally uniform, with firms operating under high transparency and broadly similar governance standards, limiting the cross-sectional dispersion in *FCF* and reducing the likelihood that mispricing linked to FCF drives premium variation. These structural and methodological differences provide governing thoughts on why *FCF* is significant in their sample but not in the public-to-private transactions of this study.

The impact of the macroeconomic environment on premium formation appears. Neither the continuous *Interest rate* variable nor the threshold-based *High interest* indicator is statistically significant in any model, although the negative sign on the continuous rate aligns with established theory. Higher borrowing costs reduce the affordability of leveraged transactions and tighten financing conditions, which in turn constrain bidders' ability to offer high premiums. It should, however, be noted that both interest rate-based variables vary in sign between specifications, which makes any conclusions ambiguous. Prior work confirms that buyout activity and pricing are strongly procyclical, with valuations rising when capital is abundant and debt is inexpensive (Aldatmaz et al., 2023; Axelson et al., 2013). In such periods, PE funds face both lower financing costs and higher pressure to deploy capital, amplifying the willingness to pay elevated premiums. The insignificance of *High interest* suggests that a simple threshold indicator captures financing conditions too crudely for a relatively small and homogeneous region such as the Nordics. Threshold variables tend to miss the gradual tightening or easing of credit markets that affect deal pricing before rates cross a predetermined boundary. Nordic economies share highly integrated bond markets, similar monetary policy environments, and stable institutional structures, which limit variation in rate regimes across time and across countries. As a result, the indicator is likely to exhibit limited cross-sectional and temporal variation, reducing its ability to explain differences in premiums once the other variables are included.

Another explanation for the insignificant results could be multicollinearity between the interest rate and other variables capturing financing frictions. Debt-servicing capacity, leverage ratios, and valuation multiples all partially reflect prevailing credit conditions. Thus, the *High interest* indicator may add little incremental information once these variables are accounted for. This is consistent with evidence in Renneboog & Vansteenkiste (2017), who emphasize that buyout pricing depends more on credit market

liquidity, lending spreads, and investor sentiment than on nominal interest rate levels alone. While one might expect buyers to pursue undervalued targets when prices are low, empirical findings repeatedly show that buyout valuations rise, not fall, during favorable credit conditions, as private equity firms tend to follow liquidity cycles rather than purely exploiting mispricing (Axelson et al., 2013; Kaplan & Schoar, 2005). The smooth and incremental nature of credit cycles, combined with the integration and stability of Nordic capital markets, helps explain why *Interest rate* retains the theoretically correct sign, and all in all, the variables are kept as is alters other effects once introduced, and it is very likely to have an impact on financing conditions and market perceptions. All in all, there are several potential factors for the absence of an effect of the interest variables, such as multiple bidders. When credit is cheap and abundant, leveraged acquisitions become easier to finance, more sponsors are active, and competitive pressure among bidders may drive up offer prices. Kaplan & Strömberg (2009) describe this dynamic as "boom and bust cycles" where the amount of leverage available, often driven by the high yield spread, directly affects private equity activity.

In the main specifications, the *Financial buyer* is excluded since it provides little explanatory power, both lacking significance and economic relevance, once other variables with more explanatory power and fixed effects are included. Albeit it is coherent with the hypothesis and sustains a negative coefficient. Bargeron et al. (2008) also find similar variables to explain no variation in target gains. They find PE buyers consistently pay lower premiums than public buyers, but this difference is not explained by target or deal characteristics. It arises from stronger managerial incentives and more concentrated ownership among private acquirers. That they find the variable to be insignificant shows that private bidders do not systematically pay higher premiums once bidder incentives and deal characteristics are controlled. The *Financial buyer* variable is also noisy because the category aggregates heterogeneous investor types, and similar issues related to acquirer heterogeneity, weakening systematic relations with bid premiums, are documented in Alexandridis et al. (2013). The refined *Acquirer PE* variable, which removes hedge funds, sovereign wealth funds, and infrastructure investors, does not improve the results, indicating that the lack of significance is not simply due to classification noise. The issue could also be the sole focus on public-to-private transactions, a setting in which pricing differences between financial and strategic bidders tend to be smaller than in broader M&A samples. Research on U.K. LBO transactions shows that these deals share relatively uniform value-creation mechanisms, such as tax-related benefits, incentive realignment, and undervaluation, regardless of whether the buyer is a private equity sponsor or another institutional investor (Renneboog et al., 2007). This reduces the likelihood that buyer-types meaningfully explain variation in premiums. Therefore, these variables are not included in the main regressions; nonetheless, their results can be seen in Appendix C.8.

Despite the theoretical relevance of the degree of ownership dispersion in public-to-private transactions, no significant effect was found for the *Free float* variable supposed to proxy for this. Therefore, this variable is not presented in the main regression table (refer to Appendix C.7.). Given the relatively concentrated ownership structures and limited cross-sectional variation in Nordic firms, the variable likely lacks the power needed to meaningfully explain premium differences in this dataset; hence, it is not present in the main regression model.

The indicator variable *≥2 Bidders* is included in the main regression models and proven to be statistically significant across all four specifications. The effect is also of economically significant magnitude; being more than one bidder increases the bid premium by, on average, 0.201 percentage points, interpreting the results of the fixed effect specifications (2) and (4) in Table 2. The positive and statistically significant coefficient is fully consistent with established theory on competitive bidding in takeovers. The positive sign confirms that competitive auctions drive higher premiums, one of the most robust results in the takeover literature, where bidder rivalry leads to value revelation and s-curse dynamics that push the final price upward (Kaplan & Schoar, 2005; Renneboog et al., 2007). In this sample, although only five transactions involve multiple bidders, these deals exhibit a substantially higher average premium of 52.6%, compared to 30.1% for the full sample, a pattern that mirrors the strong auction effects observed in prior research. Renneboog et al. (2007) document a highly significant and positive effect of bidder competition in UK public-to-private transactions, reporting coefficients of 0.131 and 0.247 for 20- and 40-day premiums, respectively, and explicitly concluding that "bidder competition is also likely to push up the premium and CAARs". The effect in the Nordic context is found to be 0.201, statistically significant at the 1% level for both fixed-effects models. For specifications (2) and (4) with fixed effects, very similar to the results of Renneboog et al. (2007) for the 40-day premium. According to Renneboog et al. (2007), longer windows tend to capture more of the price impact from auction dynamics, run-ups, and market anticipation. In line with this pattern, the coefficient in the Nordic sample falls squarely between their 20- and 40-day estimates, suggesting that a four-week horizon similarly picks up the gradual incorporation of competitive tension into market prices. This reinforces that the strong positive effect in this study is consistent with prior evidence and reflects how bidder rivalry unfolds over extended event windows, especially in smaller and less liquid markets.

In contrast, Alexandridis et al. (2013) find that their competition indicator is statistically insignificant in explaining acquisition premia in a broad U.S. M&A sample once payment method and target size are controlled for. They note that larger, more complex targets tend to attract fewer competing bids, thereby weakening competition effects. The fact that competition is significant in the public-to-private sample, therefore, underscores the role of market structure: in thinner, less liquid markets, competitive tension may be more intense when it does occur, forcing the winning bidder to pay a

premium closer to the firm's full standalone or private-value potential. Altogether, the results align closely with Renneboog et al. (2007) and reinforce the general principle that even limited bidder rivalry can materially raise premiums in buyout transactions.

Even though prior research documents systematic differences between domestic and cross-border acquisitions, driven primarily by governance transfers and information frictions (Arslan & Simşir, 2015; Bris & Cabolis, 2004; Erel et al., 2022), the coefficient on the *Acquirer ≠ Target nation* indicator is not statistically significant in the specified models (see Appendix C.9.). This suggests that foreign buyers do not pay higher or lower premiums than domestic acquirers systematically once the other variables are included. A plausible interpretation is that governance-driven valuation differences, prominent in large international samples, are less pronounced in the Nordic context, where countries share highly similar institutional frameworks, accounting standards, investor-protection regimes, and disclosure quality. Such regional homogeneity limits the scope for the governance-transfer gains documented by, e.g., Bris & Cabolis (2004), who show that target shareholders benefit when acquirers originate from countries with stronger investor protection. Likewise, information asymmetries typically raise the cost of cross-border acquisitions. Moreover, Arslan & Simşir (2015) may be muted within a region characterized by high transparency and relatively integrated capital markets. In general, the variation captured by the indicator may already be absorbed by other covariates, leaving little unique explanatory power for the cross-border indicator. Although one might expect foreign acquirers to pay higher premiums due to broader access to capital or stronger financing capacity, the insignificance of the coefficient indicates that such advantages do not translate into systematically higher offer prices in these Nordic public-to-private transactions. Taken together, the results imply that the mechanisms highlighted in the cross-border M&A literature are either weaker or less differentiated within the Nordic region during the 2010–2025 period.

4.2. A Comparison: Non-Public-to-Private Transactions

To benchmark the buyout-specific results, the same regression specification is re-estimated on a non-public-to-private sample. Prior research shows that premiums differ systematically across acquirer and deal types, indicating that the mechanisms driving buyout pricing are not necessarily the same as those in conventional M&A. Bargeron et al. (2008) document that transactions involving private acquirers exhibit significantly different premium patterns than those involving public bidders. For instance, private acquirers systematically pay materially lower premiums than public bidders across multiple premium measures, and these differences persist even after adjusting for target and deal characteristics. Moreover, Renneboog & Vansteenkiste (2017) show that buyouts are shaped by governance- and ownership-related factors that are largely absent in standard takeover settings. Further buyout literature emphasizes that leveraged transactions respond to distinct financing, governance, and discount-rate channels

(Axelson et al., 2013; Haddad & Plosser, 2015), which suggests that certain determinants should matter more in public-to-private transactions than in non-public-to-private transactions. Re-estimating the model on a non-public-to-private group, therefore, allows the analysis to assess whether the identified premium drivers are genuinely buyout-specific or simply reflect general M&A pricing patterns.

Building on this, certain determinants in the main specifications capture mechanisms argued to be unique to public-to-private rather than general M&A transactions. For instance, variables indicating debt capacity should be more related to buyouts rather than common determinants of premiums in general M&A transactions. Debt capacity is buyout-specific because buyout financing relies on the target's ability to sustain additional leverage, and firms with lower leverage can support more debt and therefore generate larger interest-tax benefits. This is rather absent in non-public-to-private acquisitions where the acquirer's balance sheet, not the target's, funds the deal (Axelson et al., 2013; Renneboog et al., 2007). Ownership dispersion, proxied by free float, is also specific to buyouts. Governance improvements and reductions in agency costs are a primary source of buyout value creation, and these gains are largest when pre-buyout monitoring is weak (Jensen, 1986; Kaplan & Schoar, 2005; Renneboog & Vansteenkiste, 2017). Control is another key distinction between public-to-private and general M&A on public markets. Most often in going-private transactions, buyers gain full control over the firm's decision-making and operations, whereas ordinary acquisitions often involve buying minority stakes without obtaining control. Finally, earnings volatility matters in buyouts as stable cash flows are necessary to support the high debt loads that characterize buyout structures, whereas non-public-to-private acquirers are not constrained by the target's debt-service capacity (Axelson et al., 2013). Testing these variables on a non-public-to-private sample, therefore, helps identify whether their effects on premiums are genuinely buyout-specific or simply reflect general M&A pricing patterns.

The sample consists of 251 transactions of targets that are listed in the Nordics, although not taken private. Notably, transactions indicating stock repurchases are excluded. The data is filtered and handled in the same manner as the public-to-private sample. All variables are also constructed in the same manner, winsorized, and applied to the same regression models as specified in Section 4.1. Baseline Results. In Table 4 Panel A, the summary statistics for the sample are presented; no major discrepancies are observed between the samples. In Panel B, the indicator variables are shown, followed by a correlation matrix in Panel C.

Table 4: Non-Public-to-Private Summary Statistics and Correlation Matrix

Panel A: Summary Statistics

	Mean	SD	Min	Median	Max
Bid premium	0.242	0.269	-0.096	0.166	1.308
Size (ln assets)	7.325	1.961	3.126	7.182	12.021
Size (ln revenues)	6.675	1.885	0.201	6.855	11.302
DSCR	2.175	2.290	0.096	1.281	7.329
ND/EBITDA	3.226	5.901	-11.481	1.589	25.353
LTD/E	0.708	1.098	0.000	0.350	6.394
ROA	-0.005	0.160	-0.639	0.036	0.262
Tax burden	0.025	0.073	-0.087	0.000	0.388
Tax burden * ROA indicator	0.028	0.088	-0.245	0.012	0.391
Undervaluation	-0.033	0.373	-0.783	-0.087	1.401
EV/EBITDA	19.425	31.738	0.525	12.314	214.488
Ln EV/EBITDA	2.618	0.886	0.442	2.580	5.375
Tobin's Q	1.452	1.083	0.191	1.156	6.797
FCF	0.876	4.807	-8.191	2.683	8.149
FCF/Sales	-0.461	2.624	-21.364	0.037	0.550
Earnings volatility	0.219	0.879	0.003	0.056	7.290
ROIC	0.042	0.221	-0.948	0.060	0.531
Free float	0.546	0.288	0.005	0.547	1.000
Interest rate	0.015	0.011	-0.003	0.014	0.040

Panel B: Indicator Variable Overview

	Yes = 1
High interest	57
≥2 Bidders	14
Financial buyer	63
PE buyer	62
Acquirer ≠ Target nation	107

Note: The sample consists of 251 non-public-to-private buyout transactions in the Nordics, with deal and firm characteristics in LCY from LSEG Workspace for the years 2010-2025. All variables are defined as specified as by Table 1. All variables are winsorized at the 1st and 99th percentiles. All firm-level data are based on the fiscal year ending the most recent fiscal year up to the transaction date if nothing else is mentioned. The regressions employ industry fixed effects to control for unobserved heterogeneity.

Panel C: Correlation Matrix

	Premium	Size	Free float	Bidders	A≠T nation	Fin. buyer	PE buyer	Tax * ROA	Tax burden	DSCR	ND/ EBITDA	LTD/ E	Earn. vol	EV/ EBITDA	FCF	FCF/ Sales	Under-valuation	Tobin's Q	Interest
Premium	1.000	-0.043	0.025	0.091	0.170	-0.053	-0.059	0.121	0.048	0.080	0.113	-0.049	-0.035	-0.047	0.086	0.015	0.080	0.010	-0.111
Size		1.000	-0.008	-0.013	0.042	-0.055	-0.073	-0.026	0.311	0.345	-0.164	0.397	0.351	-0.103	-0.085	-0.081	-0.009	-0.136	-0.168
Free float			1.000	0.249	0.104	0.126	0.126	-0.012	-0.184	-0.199	0.147	-0.260	-0.116	-0.037	0.053	0.058	0.039	0.232	0.186
Bidders				1.000	-0.013	0.044	0.047	0.087	0.035	0.012	0.170	-0.050	-0.057	-0.033	0.097	-0.050	-0.005	0.017	0.037
A≠T nation					1.000	-0.067	-0.060	-0.026	0.049	0.079	0.041	-0.011	-0.054	-0.035	0.003	0.124	0.094	-0.036	-0.032
Fin. buyer						1.000	0.988	0.057	0.008	-0.004	0.032	0.017	-0.080	0.096	-0.073	0.135	0.143	0.117	0.036
PE buyer							1.000	0.054	0.003	-0.008	0.037	0.020	-0.078	0.098	-0.076	0.139	0.145	0.105	0.033
Tax * ROA								1.000	0.188	0.078	0.382	-0.043	0.023	-0.067	0.522	-0.232	-0.044	0.301	0.082
Tax burden									1.000	0.884	-0.121	0.482	0.045	-0.092	-0.040	0.065	0.227	-0.328	-0.308
DSCR										1.000	-0.099	0.471	0.171	-0.112	-0.016	0.050	0.156	-0.321	-0.338
ND/ EBITDA											1.000	-0.419	-0.113	0.010	0.528	-0.209	-0.217	0.423	0.233
LTD/E												1.000	0.336	-0.134	-0.251	0.224	0.368	-0.453	-0.460
Earn. vol													1.000	-0.064	0.057	-0.007	-0.089	-0.119	-0.138
EV/ EBITDA														1.000	-0.190	0.087	0.126	-0.033	0.044
FCF															1.000	-0.385	-0.433	0.374	0.176
FCF/Sales																1.000	0.786	-0.205	-0.144
Under-valuation																	1.000	-0.257	-0.254
T's Q																		1.000	0.535
Interest																			1.000

Table 5: Bid Premium Determinants in Non-Public-to-Private Transactions

	Dependent variable: Bid Premium (4 weeks)			
	(1)	(2)	(3)	(4)
Size (ln assets)	-0.010	-0.006	-0.010	-0.005
	(0.010)	(0.011)	(0.010)	(0.011)
DSCR	0.015*	0.010	0.015*	0.010
	(0.008)	(0.010)	(0.008)	(0.011)
Tax burden * ROA indicator	0.323	0.504	0.315	0.488
	(0.233)	(0.314)	(0.227)	(0.318)
Undervaluation	-0.107**	-0.109**	-0.109**	-0.111**
	(0.053)	(0.051)	(0.053)	(0.049)
Ln EV/EBITDA	0.040	0.034***	0.038	0.032***
	(0.025)	(0.011)	(0.024)	(0.012)
Interest rate	2.843	3.566**		
	(1.816)	(1.529)		
High interest = 1			0.061*	0.072**
			(0.036)	(0.033)
≥2 Bidders = 1	0.094	0.129	0.097	0.131
	(0.092)	(0.109)	(0.092)	(0.109)
Fixed effects (industry)	No	Yes	No	Yes
Number of observations	251	251	251	251
R^2	0.064	0.094	0.063	0.092
Adjusted R^2	0.037	0.028	0.036	0.026
Standard errors	HC1	HC1	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results, i.e., exactly as for the main results and the public-to-private sample. Summary statistics for this sample can be found in Table 4.

The comparison between the public-to-private sample and the matched non-public-to-private sample reveals substantial differences in the determinants of bid premiums. While the public-to-private regressions display clear and economically meaningful patterns, in particular for debt capacity proxied by DSCR, earnings volatility, bidder competition, and valuation multiples, the non-public-to-private results shown in Table 5 highlight that almost none of these factors are statistically significant, except *Undervaluation* and *Ln EV/EBITDA*. *DSCR* proves significant with a positive sign, in the non-public-to-private sample, for models (1) and (3); nonetheless, any effect disappears once the industry fixed effects are introduced. Interestingly, the *Interest rate* variable becomes significant when introducing fixed effects, as does the indicator variable *High interest*. One plausible interpretation is that in recent periods of higher interest have coincided with lower overall market valuations, as observed in 2022-2023. In such environments, pre-transaction shareholders might be reluctant to tender their shares at depressed prices, avoiding realizing potential losses. Consequently, bidders may need to offer relatively higher premiums to compensate for lower prevailing share prices, thereby incentivizing shareholders to accept the deal.

Undervaluation is shown to be significant at the 5% level across all four models, with a magnitude of around negative 0.11 percentage points for models 2 and 4, meaning that a one-unit change in the valuation put in relation to the market valuation would yield, on average, a 0.11 percentage point change in the bid premium. This is of a very similar magnitude compared to the public-to-private sample. That the model has an adjusted R-square below 3%, with fixed effects, proves that tested variables do not seem to explain bid premia for non-public-to-private transactions well, but rather are specific to the public-to-private setting. The divergence of results is consistent with literature on buyouts, emphasizing that public-to-private transactions operate through fundamentally different mechanisms than conventional M&A (Axleson et al., 2013). This aligns with Eckbo's (2009) argument that public takeovers are driven by common-value synergies (market consolidation, scale economies) and competitive auction dynamics, whereas buyouts rely on mechanisms as leverage optimization or governance restructuring that are bidder-specific. The following subsections explore these mechanisms in detail.

A first explanation concerns the role of leverage and financing capacity. Prior research shows that LBOs are uniquely sensitive to the target's ability to sustain incremental debt, because value creation in buyouts relies heavily on interest tax shields and the disciplining effect of leverage (Jensen, 1986; Kaplan & Schoar, 2005; Renneboog et al., 2007). Axelson et al. (2013) document that buyout pricing depends critically on the availability and cost of debt, and that LBO valuations respond strongly to credit-market conditions ("borrow cheap, buy high"). In non-public-to-private deals, by contrast, the acquirer typically finances the transaction using its own capital structure rather than the target's, and therefore the debt-servicing capacity of the target is far less relevant. This explains why many variables are strongly significant in the public-to-private sample but

do not seem to matter in non-public-to-private transactions. This is in line with the idea that such large companies, which often are subject to these kinds of transactions, despite high profitability and a great DSCR indicating strong financial feasibility, yield a lower premium as the incremental tax benefits of leverage are smaller since the tax base already is high.

Second, governance and ownership dispersion have been argued to play a much larger role in buyouts than in standard M&A. Jensen (1986), Jensen & Meckling (1976), and Kaplan & Schoar (2005) argue that public-to-private transactions allow acquirers, particularly private equity sponsors, to reduce agency costs by imposing stronger monitoring and incentive alignment. Renneboog et al. (2007) and Renneboog & Vansteenkiste (2017) show that weak monitoring and diffuse ownership increase the scope for post-buyout improvements, which in turn increases the premium that acquirers are willing to pay. By comparison, non-public-to-private acquirers do not obtain the same governance-transfer benefits: their existing monitoring systems and dispersed shareholder base remain unchanged after the acquisition, reducing the relevance of ownership-structure variables. The Nordic region also exhibits relatively homogeneous governance structures, including, e.g., concentrated ownership, similar company law, and semi-two-tier boards, which reduce variation in governance quality between firms (Thomsen, 2016). Hence, governance transfers between two public firms could be likely to generate less incremental value than in a buyout setting. Eckbo (2009) furthermore argues for free-rider issues, where dispersed shareholders would refuse to tender in anticipation of post-acquisition value gains, as a central driver of premiums in public takeovers with fragmented ownership. In a Nordic context, with concentrated ownership structures, often with founding families or institutional blockholders or foundations, ownership is typically less dispersed in Anglo-Saxon markets (Thomsen, 2016). This could potentially mitigate free-riding concerns. Yet the effect could be thought of as pronounced in public-to-private deals, where sponsors can negotiate directly with controlling shareholders, reducing the need for premium-inflating offers to dispersed minority holders. However, even in deals with institutional blockholders, minority shareholders may resist tendering when they perceive undervaluation, forcing acquirers to raise their initial offer price. Conversely, the Nordic jurisdictions allow squeeze-out procedures once a threshold ownership level above 90% is reached, limiting minority blocking power and mitigating the need for incremental bidding. These opposing forces might explain why *Free float* does not exhibit a significant effect, despite theoretical expectations.

Third, competitive dynamics seem to differ for the two transaction types. Bidder competition is one of the strongest determinants of premiums in the public-to-private sample, consistent with theoretical auction literature and empirical evidence from Renneboog et al. (2007) that competing bids drive substantial increases in both premiums and CAARs. Alexandridis et al. (2013) similarly find that competition effects tend to

vanish in broad U.S. M&A samples once target size and deal characteristics are controlled for, which helps explain why the *≥2 Bidders* dummy is powerful in the public-to-private regression but insignificant in the non-public-to-private sample. Eckbo (2009), however, documents that in U.S. takeover transactions, a single bidder deal exhibits initial premiums that most often remain stable through completion, whereas contests of multiple bidders often start slightly lower to then escalate. Contested deals are rather rare in the Nordic dataset, whereas Eckbo (2009)'s large U.S. sample captures sufficient variation to detect the premium escalation, explaining this discrepancy. Additionally, the matched-sample approach prioritizes comparability with the public-to-private deals, potentially excluding some of the most competitive non-public-to-private transactions.

Fourth, valuation-related variables behave differently depending on the transaction type. In public-to-private transactions, undervaluation and relative pricing distortions can be exploited by financial buyers, especially when combined with leverage (Kaplan & Schoar, 2005; Renneboog et al., 2007). *DSCR* and *EV/EBITDA* capture both valuation and financing channels. In non-public-to-private deals, valuations tend to be determined by strategic synergies, relative industry considerations, and long-term fit rather than capital-structure redesign, which could render the *EV/EBITDA* multiple a weaker predictor of the bid premium.

Fifth, cross-border mechanisms that matter in general M&A play a limited role in buyouts. Literature shows that governance transfers can influence premiums when foreign acquirers come from jurisdictions with stronger investor protection (Arslan & Simşir, 2015; Bris & Cabolis, 2004; Erel et al., 2022). In the Nordic setting, however, the institutional similarity between countries limits such effects even in buyouts, and these mechanisms are largely irrelevant in non-public-to-private transactions where the governance regime of the acquirer typically dominates post-acquisition anyway.

Finally, market-wide conditions affect the two transaction types differently. *Undervaluation*, which is significant in the non-public-to-private regression models, reflects broad sentiment and valuation conditions. This aligns with the finding that premiums in conventional M&A are cyclically sensitive to equity-market momentum (Bargeron et al., 2008). But buyouts depend on both equity-market sentiment and the cost of debt financing, meaning that interest rates, debt-capacity variables, and valuation multiples jointly influence premiums in a way that seems absent in non-public-to-private transactions.

In conclusion, bid premiums in Nordic public-to-private transactions are, in this study, shown to be driven by debt capacity, valuation distortions, and bidder competition, among more. Conversely, the bid premium of Nordic non-public-to-private deals are shown to be driven largely by factors other than those specified for the public-to-private sample. All in all, the two transaction types seem to operate under different economic mechanisms and sentiments for bid premiums.

4.3. Practical Perspectives

To complement the quantitative findings, interviews were conducted with a Managing Director at an investment bank and a Partner at a consulting firm. The interviews provide practical context. First, on how DSCR is evaluated in deal structuring and how it aligns with the empirical interpretation of DSCR in public-to-private transactions. Second, on what is perceived to be driving prices and bid levels in public-to-private deals, and whether there are any differences between more general M&A to going-private buyouts.

The first interview was conducted with the Managing Director and focused on questions of the DSCR, as it was shown to be of crucial importance for the main specifications of this thesis, yet had not explicitly been included in research around public-to-private deals. According to the Managing Director, DSCR plays a dual role in contemporary buyout practice. First, it functions as a feasibility threshold, where lenders and sponsors screen targets based on their ability to support incremental leverage post-acquisition. The interviewee noted that DSCR is one of the first diagnostics assessed by lenders, as it reflects forward-looking repayment capacity. Second, the interviewee emphasized that DSCR anchors the size of the cheque and leverages multiple factors that a buyer is willing to support. In infrastructure transactions, a higher DSCR allows bidders to model more favorable financing packages and therefore justify more aggressive pricing. This interpretation is consistent with the positive and significant coefficient estimated in the regression models. DSCR, even when numerically stable over time, materially affects how much a buyer can pay rather than simply describing the firm's current position of capital structure.

> "*DSCR starts as a key debt covenant, but it also feeds into how we size leverage and debt in infrastructure transactions. It helps us calibrate leverage capacity, which in turn forms our valuation and determines what a buyer can reasonably pay.*" (Managing Director, investment bank)

Altogether, the interview supports the empirical findings regarding DSCR in the thesis. Practitioners appear to rely on DSCR as a binding constraint for how much debt can be raised and, by extension, how much premium can be justified. This qualitative insight explains that DSCR captures the financing mechanism more accurately than balance-sheet approaches, which provides one possible explanation for why DSCR remains significant in the regressions while alternative leverage proxies lose explanatory power once macro conditions and fixed effects are controlled for.

The interview with the consultancy firm Partner took a broader stance on the main research questions of this thesis. Namely, what he perceives to be driving prices and bid levels in public-to-private deals, and whether he perceives any differences comparing more general M&A to going-private buyouts. He pointed to dry-powder availability and buyer reputation as the two main determinants shaping competitive bidding dynamics and

the credibility of buyers in negotiations with boards and shareholders. Reputation, being more related to soft values, opened for discussion around characteristics not included in this analysis, whereas dry-powder availability pointed somewhat towards macroeconomic conditions and the broader financing environment.

Regarding differences from general M&A, the conversation naturally centered on PE practice, highlighting how these deals often focus on value creation and synergy possibilities, being more operatively focused compared to traditional corporate acquisitions. He meant that PE buyers often anchor their bids in operational improvements, commercial excellence, governance restructuring, and disciplined pricing frameworks, whereas strategic buyers may rely more heavily on perceived synergies or strategic fit. A difference that could make price and bidding drivers diverge. At the same time, many acquisitions do happen due to a want for synergies, making the line between pure value-creation logic and synergy-driven logic somewhat blurred.

He also pointed out that PE is more structured and backed up by specific, rather than standard analyses, whereas general M&A, according to him, is not as structured. This creates scope for materially different pricing logics, particularly if synergies are uncertain or less central. He also noted that while synergies play a role in many corporate M&A transactions, the degree to which they translate into disciplined valuation varies, which again makes the boundary between "value-creation-driven" and "synergy-driven" pricing somewhat blurred in practice.

In general, he emphasized that PE bidding behavior is typically underpinned by structured analysis, repeatable playbooks, and quantitatively anchored value-creation plans, whereas general M&A processes often are less standardized, relying more on qualitative assessments and strategic narratives. Furthermore, he meant that prices and bids in PE deals are more driven by operational improvement potential, commercial robustness, and disciplined underwriting of post-acquisition value creation.

> "*In contrast to general M&A, I would say that pricing in PE-led public-to-private deals is much more structured around already secured financing and disciplined assessments of post-acquisition value-creation. General M&A bidders often assume financing to fall into place later*."
> (Partner, consultancy firm)

To illustrate this distinction, he noted that some bidders in traditional M&A may place bids partly on the assumption, or hope, that financing will fall into place later, for example, that banks will participate, that the market will remain open, or that internal balance-sheet capacity will suffice at closing. Whereas PE buyers structure bids around already secured financing and a disciplined assessment of post-acquisition value creation, reinforcing the larger contrast he drew between the two types of buyers.

Evidence from regressions and interviews together suggests that pricing in Nordic public-to-private transactions is driven primarily by financing feasibility rather than traditional firm fundamentals. DSCR emerges as the key determinant of premiums as it constrains how much leverage buyers can raise and therefore how much they can credibly bid. A mechanism that practitioners explicitly confirmed. Valuation multiples and competitive dynamics also matter, consistent with PE buyers' disciplined, model-driven approach to underwriting value creation. By contrast, variables commonly emphasised in broader M&A research, such as profitability, FCF, ownership dispersion, and size, explain little in this setting, reflecting the structured financing environment and the underwriting logic characteristic of Nordic buyouts. Overall, the synthesis of our findings is that debt capacity, valuation discipline, and bidding competition dominate premium formation in Nordic going-private deals.

5. Conclusion

5.1. Main Findings and Contributions

From 2010 to 2025, an active yet under-researched market for public-to-private transactions, emerges in the Nordic region. While much of the existing evidence on going-private deals and LBOs is drawn from the U.S. and U.K., there has been limited systematic analysis of determinants of buyout pricing in the Nordics. This thesis bridges the gap by analyzing determinants of bid premiums in Nordic public-to-private deals and contrasting them with a sample of non-public-to-private deals. Using OLS regressions with industry fixed effects, the study relates a four-week bid premium measure to firm fundamentals, financing capacity, tax characteristics, valuation metrics, deal-level features, and macroeconomic conditions.

The results point to Nordic public-to-private bid premiums being associated with a set of economically intuitive drivers. First, cash-flow related debt carrying abilities, as proxied by DSCR, are positively associated with premiums across all specifications. Second, the tax burden interacted with a profitability indicator, exhibiting a negative relationship with the bid premium. Third, undervaluation displays a negative coefficient, implying that underperforming firms command higher premiums. Likewise, higher valuation multiples are associated with higher premiums. Lastly, the presence of multiple bidders strongly increases premiums.

By contrast, several variables often emphasized in literature show weak or inconsistent effects in this setting. Firm size does not seem to explain premium variation once other determinants are included, suggesting that scale differences within Nordic listed companies are not a first-order driver of pricing in public-to-private deals. Free cash flow and ownership dispersion also show limited explanatory power. Macroeconomic variables display theoretically expected signs, yet are not statistically robust, reflecting both the integration and relative stability of Nordic credit markets and the fact that firm-level measures of debt capacity and valuation already embed much of the information contained in financing conditions.

When specifications are estimated on the non-public-to-private sample, most of the buyout-specific drivers, in particular DSCR and tax term, exhibit weaker explanatory power. The robust drivers for the comparison sample are undervaluation and EV/EBITDA. This is consistent with theoretical argumentation that buyouts hinge on private-value mechanisms such as leverage optimization, governance restructuring, and debt capacity, whereas general M&A is driven more by strategic synergies, industry consolidation, and equity-market sentiment. It also suggests that the debt capacity and tax-shield mechanisms documented are characteristics of public-to-private transactions rather than generic features of Nordic takeovers.

Accordingly, this thesis advances the current literature in two principal ways. First, it introduces the DSCR as a firm-proxy for debt capacity in public-to-private bid premium research and documents its explanatory value relative to conventional leverage measures. Second, by establishing which determinants matter in the Nordic market, an institutional setting largely unexplored in existing U.S., U.K., and continental European studies, it extends the geographical scope of buyout pricing research and highlights that drivers of public-to-private bid premiums are not uniform across regions. All in all, it presents that valuation in Nordic public-to-private transactions is governed by distinct financing and governance mechanisms, rather than by broader market-based or strategic factors observed in conventional M&A.

5.2. Limitations

As with all studies and empirical research methodologies, there are some limitations to take into consideration. Most importantly, the sample of the study could be argued to be of institutional homogeneity and limited size and dispersion. In turn, this could be a cause of some of the unclear or insignificant effects for standard M&A variables. The absence of statistical relevance and other factors causing limitations could also follow from data availability. Furthermore, the sample selection process could suffer from the risk of false negatives, where relevant transactions have been missed due to limitations of data screening, or false positives. The latter concerns particularly the difficulties in the correct treatment of transactions in cases where, e.g., company names have been altered in relation to mandatory public offerings, which risks including wrongly non-relevant transactions in the sample selection. To mitigate risks like this, the sample has been carefully walked through manually to scan for discrepancies or potential issues. Every change made to the sample extracted from LSEG is carefully reported in Appendix A.

6. Suggestions for Future Research

To extend the study at hand and future research on the topic, several suggestions can be made. These are divided into four main areas as follows.

To start broadly, the empirical analysis could be strengthened by broadening the geographical selection to minimize the risk of institutional homogeneity and thereby increase the statistical robustness in testing the variables that should have an effect and were found to be of no explanatory power in the sample. Nonetheless, it should be noted that it is part of the purpose to focus the analysis on the Nordic area; hence, future research ideas could be to investigate a broader selection of geographies to add specific variables for distinct areas, e.g., the Nordics, in turn enabling analysis of a larger, more dispersed sample, yet investigating regional insights.

Future research could also apply alternative refinements of some variables. For instance, interest rates could be replaced by credit spreads or leverage loan availability indices, which Axelson et al. (2013) show to be powerful. Moreover, the free float variable might be a weak predictor due to the data, and fully manual treatment or more reliable data might have improved the results. Moreover, a potential factor that was excluded due to data limitations was the regulatory cause of the transaction, specifically mandatory offer requirements. In Nordic markets, acquirers crossing regulatory ownership thresholds are legally obliged to extend a compulsory bid to the remaining shareholders. These rules might influence bid premium by accelerating deal timing or forcing acquirers to pay for minority blocks they did not originally intend to purchase. Examining whether premium level or bidder-competition dynamics change around the threshold-triggering transactions could help clarify how value is shared between financial sponsors and minority shareholders in Nordic M&A.

Moreover, future work could more explicitly define buyer characteristics and the impact of these on premiums. Sponsor characteristics of PE buyers as fund age, ownership share, exit route, among more, would be interesting to analyze. As argued by e.g., Dasilas & Grose (2018), governance conditions influence bid premiums, and private bidders, including PE funds, exhibit different incentive structures from public acquirers. Persistent performance differences among PE funds indicate that sponsor-specific capabilities shape deals (Kaplan & Schoar, 2005). Stronger sponsors may attract better deal flow, secure more favorable financing, or implement post-deal improvements more effectively, influencing both which firms they acquire and how much they are willing to pay. Contemporary research also emphasizes that heterogeneity across funds in terms of size, strategy, industry expertise, and fundraising cycles is an integral component of take-private activity (Jenkinson et al., 2021). One of the interviewees also argues that dry powder availability or reputation may affect both the competitive dynamics of bidding and the credibility of the buyer in negotiating with boards and shareholders.

As a last point for further research, detailed governance variables and ESG factors could be included in the analysis to investigate how these aspects influence premiums, especially as these areas often are part of the core of value creation in PE-led public buyouts. Corporate governance quality shapes investor protection and monitoring environments, which can amplify the wealth effects perceived at announcement, making it an interesting area for further research in the Nordic region. ESG variables and the impact of these on bidding and premiums would be interesting to investigate in a contemporary setting, where much is currently switching to the importance of correct reporting and matters of ESG for value creation.

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Appendices

A. Manually handled observations

A.1. Manually Excluded Firms

SDC Deal No	Company name	Reason for exclusion
2620505040	Cision AB	Duplicate
2649217040	Cision AB	Duplicate
2624909040	Hedson Technologies International AB	Duplicate
2933311040	Nordic Service Partners Holding AB	Duplicate
3001808040	Haldex AB	Duplicate
4183313040	Pagero Group AB	Duplicate
4257288040	Jetpak Top Holding AB	Duplicate
4393987040	Awardit AB	Duplicate
4187463040	Mintra Holding AS	Duplicate
2361114040	Brodrene Hartmann A/S	False positive, no buy-out
3150251040	Kobenhavns Lufthavne A/S	False positive, no buy-out
4466145040	Kobenhavns Lufthavne A/S	False positive, no buy-out
2707536040	Norwegian Property ASA	False positive, no buy-out
2398308040	Oral Hammaslaakarit Oyj	False positive, no buy-out
3647640040	SSM Holding AB	Outlier EBITDA
2597879040	NetConnect ASA	Outlier ROA
2746862040	Viborg Handbold Klub A/S	Outlier ROA
4101813040	IRRAS AB	Outlier ROA

Note: Firm observations excluded due to duplicates in the data retrieved from LSEG, false positives, and extreme outliers.

A.2. Manually Added Firms

SDC Deal No	Company name	Target nation of the primary stock exchange
4285189040	Tethys Oil AB	Sweden
4327824040	Abliva AB	Sweden
3980411040	Semcon AB	Sweden
3943109040	Cary Group Holding AB	Sweden
3915340040	LeoVegas AB	Sweden
3950053040	Atvexa AB	Sweden
3884394040	Collector AB	Sweden
3860297040	MultiQ International AB	Sweden
3883880040	GHP Specialty Care AB	Sweden
3845395040	Nobina AB	Sweden
3828430040	ICA Gruppen AB	Sweden
3435728040	KappAhl AB	Sweden
3395952040	Nuevolution AB	Sweden
3361996040	Acando AB	Sweden
3592978040	NetEnt AB	Sweden
3641826040	Gunnebo AB	Sweden
3627030040	HiQ International AB	Sweden
3514980040	Sportamore AB	Sweden
3476902040	Swedol AB	Sweden
3456373040	Hembla AB	Sweden
3477155040	Hemfosa Fastigheter AB	Sweden
3779347040	Kungsleden AB	Sweden
3764379040	ZetaDisplay AB	Sweden
3770102040	Magnolia Bostad AB	Sweden
3752118040	Feelgood Svenska AB	Sweden
3691877040	Handicare Group AB	Sweden
3654767040	Edgeware AB	Sweden
3647640040	SSM Holding AB	Sweden
4154068040	Bergs Timber AB	Sweden
3753513040	Elos Medtech AB	Sweden
4185784040	Kindred Group PLC	Sweden
4188632040	Besqab AB	Sweden
4364937040	OrderYOYO A/S	Denmark
4103649040	Digizuite A/S	Denmark
3828520040	The Drilling Company of 1972 A/S	Denmark
3664981040	Den Jyske Sparekasse A/S	Denmark
3480953040	Veloxis Pharmaceuticals A/S	Denmark
3279185040	Monberg & Thorsen A/S	Denmark
3323775040	Egetaepper A/S	Denmark
3396511040	IC Group A/S	Denmark
4012077040	Chr Hansen Holding A/S	Denmark
4248465040	Topdanmark A/S	Denmark

Note: Obtained through Nasdaq Corporate actions files, although reported as a false negative under the *Going private* flag by LSEG Workspace. Due to data availability, solely Sweden and Denmark could be cross-checked for the years 2019-2025.

B. Testing Premium Measures

B.1. Sensitivity of Bid Premium

Dependent variable: Bid premium	4 weeks (1a)	1 day (1b)	4 weeks (2a)	1 day (2b)
Size (ln assets)	-0.009	-0.010	-0.014	-0.013
	(0.012)	(0.011)	(0.013)	(0.012)
DSCR	0.019***	0.015**	0.018*	0.015*
	(0.006)	(0.006)	(0.010)	(0.009)
Tax burden * ROA indicator	-1.610***	-1.371**	-1.366***	-1.275***
	(0.580)	(0.541)	(0.505)	(0.428)
Undervaluation	-0.113	-0.179**	-0.136**	-0.195**
	(0.069)	(0.078)	(0.059)	(0.094)
Ln EV/EBITDA	0.072**	0.088**	0.067***	0.081**
	(0.032)	(0.037)	(0.023)	(0.040)
Interest rate	-0.373	-1.420	0.489	-0.227
	(1.727)	(1.954)	(1.675)	(2.812)
≥2 Bidders = 1	0.172*	0.153	0.201***	0.164**
	(0.102)	(0.119)	(0.066)	(0.076)
Fixed effects (industry)	No	No	Yes	Yes
Number of observations	112	112	112	112
R^2	0.201	0.206	0.284	0.260
Adjusted R^2	0.147	0.152	0.155	0.125
Standard errors	HC1	HC1	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results.

C. Testing Determinants of Bid Premium

C.1. Comparing Definitions of Firm Size

	Dependent variable: Bid Premium (4 weeks)			
	(1)	(1a)	(2)	(2a)
Size (ln assets)	-0.009		-0.014	
	(0.012)		(0.013)	
Size (ln revenues)		-0.005		-0.007
		(0.014)		(0.014)
DSCR	0.019***	0.020***	0.018*	0.019*
	(0.006)	(0.006)	(0.010)	(0.010)
Tax burden * ROA indicator	-1.610***	-1.715***	-1.366***	-1.422***
	(0.580)	(0.549)	(0.505)	(0.459)
Undervaluation	-0.113	-0.109	-0.136**	-0.127**
	(0.069)	(0.069)	(0.059)	(0.058)
Ln EV/EBITDA	0.072**	0.071**	0.067***	0.065***
	(0.032)	(0.033)	(0.023)	(0.024)
Interest rate	-0.373	-0.360	0.489	0.500
	(1.727)	(1.744)	(1.675)	(1.637)
≥2 Bidders = 1	0.172*	0.170*	0.201***	0.195***
	(0.102)	(0.101)	(0.066)	(0.067)
Fixed effects (industry)	No	No	Yes	Yes
Number of observations	112	112	112	112
R^2	0.201	0.198	0.284	0.277
Adjusted R^2	0.147	0.144	0.155	0.147
Standard errors	HC1	HC1	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results.

C.2. Comparing Leverage Indicators

	Dependent variable: Bid Premium (4 weeks)					
	(1a)	(1b)	(1c)	(2a)	(2b)	(2c)
Size (ln assets)	-0.007	-0.015	-0.009	-0.006	-0.014	-0.014
	(0.012)	(0.012)	(0.012)	(0.014)	(0.013)	(0.013)
ND/EBITDA	-0.007			-0.012**		
	(0.004)			(0.004)		
LTD/E		0.008			0.009	
		(0.007)			(0.007)	
DSCR			0.019***			0.018*
			(0.006)			(0.010)
Tax burden * ROA indicator	-0.750	-0.874	-1.610***	-0.542	-0.541	-1.366***
	(0.545)	(0.549)	(0.580)	(0.448)	(0.521)	(0.505)
Undervaluation	-0.105	-0.104	-0.113	-0.125**	-0.122**	-0.136**
	(0.070)	(0.070)	(0.069)	(0.057)	(0.055)	(0.059)
Ln EV/EBITDA	0.068**	0.070**	0.072**	0.061***	0.064**	0.067***
	(0.031)	(0.033)	(0.032)	(0.023)	(0.026)	(0.023)
Interest rate	-0.191	-0.079	-0.373	0.438	0.634	0.489
	(1.856)	(1.812)	(1.727)	(1.736)	(1.527)	(1.675)
≥2 Bidders	0.238**	0.254**	0.172*	0.262***	0.285***	0.201***
	(0.109)	(0.109)	(0.102)	(0.056)	(0.058)	(0.066)
Fixed effects (industry)	No	No	No	Yes	Yes	Yes
No. of observations	112	112	112	112	112	112
R^2	0.149	0.136	0.201	0.265	0.241	0.284
Adjusted R^2	0.091	0.078	0.147	0.132	0.104	0.155
Standard errors	HC1	HC1	HC1	HC1	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results.

C.3. Investigating Tax Variables

	Dependent variable: Bid Premium (4 weeks)			
	(1a)	(2a)	(1)	(2)
Size (ln assets)	-0.012	-0.009	-0.016	-0.014
	(0.012)	(0.012)	(0.012)	(0.013)
DSCR	0.016**	0.019***	0.016*	0.018*
	(0.006)	(0.006)	(0.009)	(0.010)
Tax burden	-0.735*		-0.704*	
	(0.431)		(0.371)	
Tax burden * ROA indicator		-1.610***		-1.366***
		(0.580)		(0.505)
Undervaluation	-0.121*	-0.113	-0.143**	-0.136**
	(0.069)	(0.069)	(0.058)	(0.059)
Ln EV/EBITDA	0.072**	0.072**	0.066***	0.067***
	(0.033)	(0.032)	(0.023)	(0.023)
Interest rate	-0.598	-0.373	0.352	0.489
	(1.695)	(1.727)	(1.668)	(1.675)
≥2 Bidders = 1	0.190*	0.172*	0.215***	0.201***
	(0.104)	(0.102)	(0.064)	(0.066)
Fixed effects (industry)	No	No	Yes	Yes
Number of observations	112	112	112	112
R^2	0.188	0.201	0.276	0.284
Adjusted R^2	0.133	0.147	0.145	0.155
Standard errors	HC1	HC1	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results.

C.4. Investigating Valuation Multiples

	Dependent variable: Bid Premium (4 weeks)					
	(1a)	(1b)	(1)	(2a)	(2b)	(2)
Size (ln assets)	0.001	-0.003	-0.009	-0.000	-0.005	-0.014
	(0.010)	(0.011)	(0.012)	(0.010)	(0.010)	(0.013)
DSCR	0.022***	0.017**	0.019***	0.022**	0.018*	0.018*
	(0.006)	(0.007)	(0.006)	(0.009)	(0.010)	(0.010)
Tax b. * ROA i.	-1.484**	-1.665**	-1.610***	-1.373***	-1.673**	-1.366***
	(0.588)	(0.789)	(0.580)	(0.480)	(0.800)	(0.505)
Undervaluation	-0.095	-0.087	-0.113	-0.102*	-0.104	-0.136**
	(0.063)	(0.065)	(0.069)	(0.061)	(0.066)	(0.059)
EV/EBITDA	0.002**			0.002***		
	(0.001)			(0.001)		
Tobin's Q		0.016			0.019	
		(0.018)			(0.018)	
Ln EV/EBITDA			0.072**			0.067***
			(0.032)			(0.023)
Interest rate	-0.288	-0.593	-0.373	0.344	0.304	0.489
	(1.709)	(1.690)	(1.727)	(1.749)	(1.564)	(1.675)
≥2 Bidders	0.166*	0.173*	0.172*	0.189***	0.207***	0.201***
	(0.099)	(0.103)	(0.102)	(0.061)	(0.069)	(0.066)
Fixed effects (industry)	No	No	No	Yes	Yes	Yes
No. of observations	112	112	112	112	112	112
R^2	0.211	0.149	0.201	0.296	0.235	0.284
Adjusted R^2	0.160	0.094	0.147	0.176	0.103	0.155
Standard errors	HC1	HC1	HC1	HC1	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results.

C.5. Free Cash Flow Generation

	Dependent variable: Bid Premium (4 weeks)			
	(1a)	(1b)	(2a)	(2b)
Size (ln assets)	-0.012	-0.011	-0.018	-0.017
	(0.011)	(0.011)	(0.014)	(0.011)
DSCR	0.015**	0.015**	0.015	0.016*
	(0.007)	(0.006)	(0.011)	(0.010)
FCF	0.009*		0.008	
	(0.004)		(0.007)	
FCF/Sales		0.114***		0.105***
		(0.023)		(0.035)
Tax burden * ROA indicator	-1.439**	-1.580***	-1.307*	-1.471***
	(0.656)	(0.598)	(0.659)	(0.508)
Undervaluation	-0.126*	-0.170**	-0.149***	-0.191***
	(0.067)	(0.068)	(0.049)	(0.061)
Ln EV/EBITDA	0.082**	0.081**	0.076***	0.075***
	(0.032)	(0.031)	(0.028)	(0.023)
Interest rate	-0.031	-0.573	0.681	-0.016
	(1.714)	(1.565)	(1.663)	(1.926)
≥2 Bidders = 1	0.169	0.174	0.195***	0.207***
	(0.106)	(0.109)	(0.068)	(0.063)
Fixed effects (industry)	No	No	Yes	Yes
Number of observations	112	112	112	112
R^2	0.222	0.262	0.302	0.324
Adjusted R^2	0.162	0.205	0.167	0.193
Standard errors	HC1	HC1	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results.

C.6. Including Earnings Volatility

	Dependent variable: Bid Premium (4 weeks)			
	(1)	(2)	(3)	(4)
Size (ln assets)	-0.016	-0.009	-0.017	-0.014
	(0.013)	(0.012)	(0.014)	(0.013)
DSCR		0.019***		0.018*
		(0.006)		(0.010)
Earnings volatility	-0.119		-0.280	
	(0.341)		(0.423)	
Tax burden * ROA indicator	-0.898	-1.610***	-0.544	-1.366***
	(0.544)	(0.580)	(0.512)	(0.505)
Undervaluation	-0.101	-0.113	-0.111*	-0.136**
	(0.069)	(0.069)	(0.061)	(0.059)
Ln EV/EBITDA	0.069**	0.072**	0.064**	0.067***
	(0.033)	(0.032)	(0.027)	(0.023)
Interest rate	-0.099	-0.373	0.626	0.489
	(1.830)	(1.727)	(1.491)	(1.675)
≥2 Bidders = 1	0.246**	0.172*	0.266***	0.201***
	(0.110)	(0.102)	(0.065)	(0.066)
Fixed effects (industry)	No	No	Yes	Yes
Number of observations	112	112	112	112
R^2	0.135	0.201	0.243	0.284
Adjusted R^2	0.076	0.147	0.106	0.155
Standard errors	HC1	HC1	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results.

C.7. Including Free Float

	Dependent variable: Bid Premium (4 weeks)			
	(1)	(2)	(3)	(4)
Size (ln assets)	-0.009	-0.014	-0.009	-0.016
	(0.012)	(0.013)	(0.012)	(0.013)
DSCR	0.019***	0.018*	0.019***	0.018
	(0.006)	(0.010)	(0.007)	(0.011)
Tax burden * ROA indicator	-1.610***	-1.366***	-1.603***	-1.312**
	(0.580)	(0.505)	(0.585)	(0.545)
Undervaluation	-0.113	-0.136**	-0.114	-0.141**
	(0.069)	(0.059)	(0.070)	(0.055)
Ln EV/EBITDA	0.072**	0.067***	0.072**	0.067***
	(0.032)	(0.023)	(0.032)	(0.023)
Interest rate	-0.373	0.489	-0.362	0.535
	(1.727)	(1.675)	(1.751)	(1.723)
≥2 Bidders = 1	0.172*	0.201***	0.171	0.194***
	(0.102)	(0.066)	(0.104)	(0.066)
Free float			0.006	0.059
			(0.071)	(0.110)
Fixed effects (industry)	No	Yes	No	Yes
Number of observations	112	112	112	112
R^2	0.201	0.284	0.201	0.288
Adjusted R^2	0.147	0.155	0.139	0.150
Standard errors	HC1	HC1	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results.

C.8. Including Buyer Characteristics

	Dependent variable: Bid Premium (4 weeks)			
	(1a)	(1b)	(2a)	(2b)
Size (ln assets)	-0.009	-0.009	-0.014	-0.014
	(0.012)	(0.012)	(0.013)	(0.013)
DSCR	0.020***	0.020***	0.019*	0.019*
	(0.007)	(0.007)	(0.010)	(0.010)
Tax burden * ROA indicator	-1.622***	-1.622***	-1.396***	-1.383***
	(0.602)	(0.601)	(0.490)	(0.504)
Undervaluation	-0.113	-0.113	-0.137**	-0.136**
	(0.070)	(0.070)	(0.059)	(0.059)
Ln EV/EBITDA	0.073**	0.073**	0.068***	0.067***
	(0.033)	(0.032)	(0.023)	(0.023)
Interest rate	-0.359	-0.364	0.584	0.533
	(1.744)	(1.738)	(1.698)	(1.674)
≥2 Bidders = 1	0.172*	0.172*	0.200***	0.201***
	(0.102)	(0.102)	(0.065)	(0.066)
Financial buyer	-0.005		-0.013	
	(0.042)		(0.033)	
PE buyer		-0.004		-0.020
		(0.043)		(0.031)
Fixed effects (industry)	No	No	Yes	Yes
Number of observations	112	112	112	112
R^2	0.201	0.201	0.285	0.285
Adjusted R^2	0.139	0.139	0.147	0.146
Standard errors	HC1	HC1	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results.

C.9. Including a Cross-border Indicator

	Dependent variable: Bid Premium (4 weeks)			
	(1)	(2)	(3)	(4)
Size (ln assets)	-0.009	-0.014	-0.007	-0.011
	(0.012)	(0.013)	(0.012)	(0.013)
DSCR	0.019***	0.018*	0.019***	0.018*
	(0.006)	(0.010)	(0.006)	(0.010)
Tax burden * ROA indicator	-1.610***	-1.366***	-1.669***	-1.427***
	(0.580)	(0.505)	(0.557)	(0.454)
Undervaluation	-0.113	-0.136**	-0.099	-0.121*
	(0.069)	(0.059)	(0.071)	(0.063)
Ln EV/EBITDA	0.072**	0.067***	0.077**	0.071***
	(0.032)	(0.023)	(0.032)	(0.023)
Interest rate	-0.373	0.489	-0.239	0.730
	(1.727)	(1.675)	(1.769)	(1.918)
≥2 Bidders = 1	0.172*	0.201***	0.169	0.201***
	(0.102)	(0.066)	(0.104)	(0.073)
Acquirer ≠ Target nation			-0.056	-0.058
			(0.045)	(0.044)
Fixed effects (industry)	No	Yes	No	Yes
Number of observations	112	112	112	112
R^2	0.201	0.284	0.212	0.295
Adjusted R^2	0.147	0.155	0.151	0.158
Standard errors	HC1	HC1	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results.

D. Robustness tests

D.1. Robustness Check by Winsorizing Alternatives

	Dependent variable: Bid Premium (4 weeks)	
	(2) 1% winsorizing	(2) 5% winsorizing
Size (ln assets)	-0.014	-0.014
	(0.013)	(0.014)
DSCR	0.018*	0.011**
	(0.010)	(0.005)
Tax burden * ROA indicator	-1.366***	-1.807
	(0.505)	(1.244)
Undervaluation	-0.136**	-0.101*
	(0.059)	(0.057)
Ln EV/EBITDA	0.067***	0.056**
	(0.023)	(0.021)
Interest rate	0.489	0.356
	(1.675)	(1.606)
≥2 Bidders = 1	0.201***	0.196***
	(0.066)	(0.042)
Fixed effects (industry)	Yes	Yes
Number of observations	112	112
R^2	0.284	0.258
Adjusted R^2	0.155	0.124
Standard errors	HC1	HC1

Note: T-statistics based on White's (1980) heteroskedasticity-consistent standard errors are in parentheses beneath coefficient estimates. Interpretation as follows: *** *Significant at 1% level*; ** *Significant at 5% level*; * *Significant at 10% level*. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results.

D.2. Multicollinearity Diagnostics (VIF)

Variable	GGIF	Df	Adjusted GVIF
Size (ln assets)	1.072153	1	1.035448
DSCR	1.171467	1	1.082343
Tax burden * ROA indicator	1.195731	1	1.093495
Undervaluation	1.065303	1	1.032135
Ln EV/EBITDA	1.067504	1	1.033201
Interest rate	1.026853	1	1.013337
≥2 Bidders = 1	1.080366	1	1.039407

Note: This test is applied to the main model without fixed effects, hence these are the variables displayed. The model with fixed effects would per definition create perfect collinearity between the industry dummies generated. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results. All VIF and adjusted VIF values are close to 1, well below any common multicollinearity thresholds (e.g., 5 or 10). This indicates no problematic multicollinearity among the included variables. The model is therefore concluded to be well-specified with respect to collinearity. *Df* is short for number of parameters (variables) included in the term.

D.3. Influence Diagnostics (Cook's Distance)

Observation	Cook's D
51	0.06686306
105	0.05956010
41	0.05881629
84	0.05855073
3	0.05444576

Note: This test is applied to the full sample before winsorizing. All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results. The Cook's Distance diagnostics indicate that no observations exceed common thresholds for excessive influence (D > 1). The most influential observation has a Cook's D of 0.27, which is within a normal range for corporate finance datasets. As a robustness check, the main specification was also estimated excluding this observation, yielding qualitatively similar results. In relation to this, HC1 covariances were close to singular for a few observations, suggesting that these data points may have close-to or outlier values. When the model was re-estimated without these observations, this showed that excluding them did not materially affect the model and all prior significant independent variables retained significance. Therefore, it can be concluded that the results are robust to the presence of these observations and hence they are included rather than excluded, to maintain an as large sample as possible.

D.4. White Test for Heteroskedasticity

Model	Statistic	P value
(1) No fixed effects	3.436	0.179
(2) Fixed effects (industry)	3.946	0.139
(3) No fixed effects, macro dummy	3.576	0.167
(4) Fixed effects, macro dummy	3.841	0.147

Note: This test is applied to the main models (1) to (4). All variables are defined as described by Table 1 and regressions as described in Section 4.1. Baseline Results. The conclusion from the test is that all p-values exceed 0.05 and hence homoskedasticity can be rejected (no evidence of heteroskedasticity or related issues in the models).

E. Qualitative Extension – Interview Participants

Participant	Role	Company
Interviewee 1	Managing Director	Investment bank
Interviewee 2	Partner	Consulting firm

F. Usage of AI

AI has supported this thesis by improving comprehension, efficiency, and clarity. First, AI functioned as coding assistance. ChatGPT was used as a support tool when developing and debugging code in RStudio. We provided specific instructions related to troubleshooting and error messages, and critically reviewed all outputs before incorporation.

Second, AI-supported literature exploration and comprehension. NotebookLM and ResearchRabbit were employed to help navigate academic literature and deepen our understanding of relevant research. ResearchRabbit enabled us to map and identify influential research, while NotebookLM helped clarify concepts found in the literature. These tools were used solely to enhance comprehension and sourcing efficiency.

Third, AI acted as writing support. ChatGPT and Grammarly were occasionally used to suggest improvements in phrasing, structure, and clarity of expressions. In these cases, suggestions were reviewed carefully and adopted only when they improved readability without altering meaning or reasoning.

We acknowledge that generative AI systems can provide inaccurate, incomplete, or misleading outputs. To mitigate these risks, we avoided overreliance on these tools, employed AI as a support function, and ensured that no analytical or interpretative tasks were outsourced to AI.

Reflecting on our process, we consider AI tools primarily as facilitators that helped accelerate routine tasks such as debugging code, locating relevant literature, and enhancing the clarity of text. The usage of AI enabled us to focus our time on analysis, interpretation, and discussion. All academic reasoning and contributions presented in this thesis are entirely our own.