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Value and Liquidity Effects in the Thai Stock Market: Evidence from Fama-MacBeth Cross-Sectional Regressions and the Role of Financial Statement Consolidation Status

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Abstract

This study examines three cross-sectional return anomalies in the Stock Exchange of Thailand (SET): the value premium (proxied by price-to-book value, P/BV), an illiquidity premium (proxied by trading turnover), and whether the value premium's strength depends on financial statement type (consolidated versus company-only), as predicted by the information uncertainty hypothesis. Evidence on these anomalies in Southeast Asia remains thinner than in developed markets and has not previously been tested jointly at high frequency (Charoenwong et al., 2021; Saengchote, 2021). Weekly security-level data were retrieved via the SETSMART API for common stocks, yielding a panel of 233,584 firm-week observations from 1,045 firms across 285 weeks (January 2021-June 2026). The Fama-MacBeth (1973) two-stage procedure was applied at quarterly, monthly, and weekly frequencies. The value premium is negative and significant at the weekly frequency, strengthening as frequency increases; a one-standard-deviation difference in log(P/BV) corresponds to an estimated 4.9 percent difference in annualized return. Neither turnover nor market capitalization shows a significant relationship with forward returns at any frequency. The value premium is significant in both the consolidated and company-only subsamples, but the interaction term testing the difference between groups is not significant, offering no support for the information uncertainty hypothesis, though the smaller company-only subsample (208 firms versus 777) limits this test's power. The findings support value-based investment strategies in Thailand but lend no support to turnover-based liquidity timing, contributing new, frequency-robust evidence on the joint behavior of these anomalies in a Southeast Asian equity market.

Keywords: Value Premium; Illiquidity Premium; Fama-MacBeth Regression; Information Uncertainty; Stock Exchange of Thailand

Introduction

Modern asset pricing theory has long grappled with the empirical failure of the Capital Asset Pricing Model to fully explain the cross-section of expected stock returns. Fama and French (1992, 1993) showed that market beta carries little independent explanatory power once size and the book-to-market ratio are accounted for, formalizing a risk-based three-factor framework built around this finding. An alternative, behavioral account attributes the same pattern to investor overextrapolation, with value strategies built on low valuation multiples systematically outperforming glamour strategies because the market overprices firms with a history of strong growth (Lakonishok, Shleifer & Vishny, 1994); the anomaly itself predates this debate, having first been documented as abnormal returns to inexpensive stocks screened on book-to-price (Rosenberg, Reid & Lanstein, 1985). The value premium has since proved one of the most geographically pervasive anomalies in empirical finance, present in nearly every major developed region (Fama & French, 2012) and strong and pervasive across eighteen emerging

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economies, particularly in Asia, even as size and momentum prove considerably less reliable there (Cakici, Fabozzi & Tan, 2013; Cakici, Tang & Yan, 2016).

Alongside value, a parallel literature asks whether investors demand compensation for holding illiquid securities. Amihud (2002) proposed a price-impact ratio and showed that harder-to-trade stocks earn systematically higher returns; using the more readily available proxy of share turnover, Datar, Naik and Radcliffe (1998) documented a comparable negative turnover-return relationship in U.S. data. Pástor and Stambaugh (2003) further distinguished the level of illiquidity from exposure to liquidity risk, showing that stocks whose returns co-move with aggregate liquidity shocks earn a distinct premium. Whether trading turnover, the proxy most readily available for Thai-listed securities, captures either channel in an emerging Southeast Asian market remains an open question, one made more pointed by the SET's unusually retail-heavy trading base (31 percent local individual investors in 2023, whose trading behavior is linked to prospect-theory-style responses to price movement rather than fundamentals; Chen, Wang & Zhong, 2024) and by its mandated disclosure of consolidated versus company-only reporting status, a distinction that leaves company-only reporters' investors to reconstruct group-level fundamentals from supplementary disclosures.

Within Southeast Asia, the evidence on both anomalies is considerably thinner and less conclusive than in developed markets. Perez (2017b) found that value stocks outperformed growth stocks in Thailand when measured through style indices over seventeen years, though the relationship weakened once portfolios were built from individual securities; applying the Fama-French three-factor model to both the SET and the smaller, less liquid Market for Alternative Investment (MAI), Kitkanasiri, Palahan and Pan-urai (2025) found that book-to-market and size retain explanatory power on the SET, though the size relationship reverses sign on the MAI. A companion study using earlier Thai data found evidence of a significant company-size effect (Perez, 2017a), underscoring that the size effect's presence and direction in Thailand remain sensitive to sample period and market segment. Two more recent studies confirm the value anomaly has not disappeared under newer multifactor benchmarks: Charoenwong, Nettayanun and Saengchote (2021) found value-related characteristics retain independent explanatory power in the SET against a q-factor model, and Saengchote (2021) reports a fresh Thai value premium using data into the early 2020s. No published Thai study, however, has documented the value and turnover-based liquidity relationships jointly at weekly frequency using a firm-week panel of comparable breadth.

A separate strand asks whether the strength of return anomalies depends on the quality of information available to investors. Zhang (2006) formalized the information uncertainty hypothesis: when a firm is harder to value, overconfidence and slower price discovery make return anomalies, including the value premium, systematically stronger, a pattern corroborated by analyst-based uncertainty proxies under which the value premium is roughly sixty percent larger among high-uncertainty firms (Jiang, Lee & Zhang, 2005). Financial statement architecture offers a directly observable, regulator-mandated proxy for the same construct: consolidated statements incorporate subsidiary-level information that company-only statements omit, and recent evidence from India confirms that this distinction carries real information content for investors (Balachandran, Kuntluru, Manchiraju & Rajput, 2026). Whether the same channel operates in Thailand, where the SET requires listed firms to disclose their reporting basis, has not previously been examined.

Three gaps therefore motivate this study. First, no prior Thai study has tested the value premium at a data frequency sufficient to give the Fama-MacBeth procedure adequate statistical power, nor traced how the finding changes as frequency is varied -- a choice that matters because Fama-MacBeth power depends on the number of independent time periods rather than the number of securities, and because ASEAN-6 liquidity conditions have been shown to shift within

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as little as 121 trading days around a market-wide shock (Pham, Nguyen & Vu, 2025), a horizon a monthly or quarterly panel would tend to average away. Second, no study has tested whether trading turnover is priced in the Thai cross-section using a large, weekly firm-level panel. Third, no study has used the mandated consolidated/company-only distinction as an observable proxy for information uncertainty in testing whether the value premium is conditional on reporting transparency. This paper addresses these three gaps using a panel of 1,045 SET-listed common stocks observed weekly between January 2021 and June 2026, restricted to Common Stock and Common Stock-Foreign security types (233,584 firm-week observations after removing incomplete observations arising from trading suspensions); momentum, industry classification, and market beta are deliberately excluded from the main specification as scope decisions revisited in the Future Research discussion.

Research Objectives

This research pursues the following three objectives:

1. To examine whether stocks with low price-to-book value ratios earn higher one-week-forward returns than stocks with high price-to-book value ratios in the Stock Exchange of Thailand (the value premium).
2. To examine whether stocks with lower trading turnover earn a return premium relative to higher-turnover stocks in the Stock Exchange of Thailand (the illiquidity premium).
3. To examine whether the strength of the value premium differs between firms that report consolidated financial statements and firms that report company-only financial statements, consistent with the information uncertainty hypothesis.

Literature Review

The Value Premium: Risk-Based and Behavioral Explanations

Fama and French (1993) formalized the value premium within a risk-based framework: firms trading at low prices relative to book value are structurally weaker and more exposed to distress, so their higher average returns compensate investors for a genuine systematic risk, a reading reinforced when Fama and French (1996) showed that most CAPM-related irregularities besides short-term momentum are absorbed once this three-factor structure is applied. An opposing, behavioral explanation locates the same pattern in investor psychology: Lakonishok, Shleifer and Vishny (1994) showed value portfolios outperform glamour portfolios by ten to eleven points annually without being detectably riskier, attributing the gap to investors overextrapolating past growth. Internationally the premium has proved durable, present across major developed regions (Fama & French, 2012) and, using the same Fama-MacBeth (1973) methodology applied here, across forty-nine countries generally (Hou, Karolyi & Kho, 2011), with some of the strongest emerging-market premia found in Asia specifically alongside a far less dependable size effect (Cakici, Fabozzi & Tan, 2013; Cakici, Tang & Yan, 2016).

Finding: this literature establishes the value premium as one of the most replicable anomalies in asset pricing, present in nearly every market tested regardless of mechanism, and indicates that emerging Asian markets sometimes pair a resilient value effect with a weaker, less stable size effect consistent with the present study's expectation of a significant value coefficient alongside an insignificant size coefficient. This expectation is reinforced by two Thailand-specific studies: Charoenwong, Nettayanun and Saengchote (2021) found value-related characteristics retain independent explanatory power in the SET against a q-factor benchmark, and Saengchote (2021) reports a statistically detectable value premium using data into the early 2020s, indicating the anomaly is neither disappeared nor fully absorbed by newer factor models in this market.

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Liquidity, the Illiquidity Premium, and Market Microstructure

Amihud (2002) showed that securities with greater price impact per unit of trading volume earn higher average returns, an effect concentrated among smaller firms; using the more readily observable proxy of share turnover, Datar, Naik and Radcliffe (1998) found a comparable negative turnover-return relationship. Pástor and Stambaugh (2003) separated the level of illiquidity from exposure to liquidity risk, showing that stocks whose returns move most with aggregate liquidity shocks earn a distinct premium, later unified with the level effect in a single liquidity-adjusted pricing model (Acharya & Pedersen, 2005); regionally, Lam and Tam (2011) found a liquidity factor added explanatory power beyond the standard Fama-French factors in Hong Kong. Other evidence complicates the turnover-illiquidity link in emerging markets specifically: Rouwenhorst (1999) found that low-turnover stocks in a twenty-market emerging-economy sample tend simply to be the same stocks that are small and inexpensive, so turnover may proxy for size and value rather than an independent liquidity effect, a concern echoed by evidence that liquidity risk explains momentum but not value returns across markets (Asness, Moskowitz & Pedersen, 2013) and that microstructure biases can inflate apparent illiquidity premia among thinly traded securities (Asparouhova, Bessembinder & Kalcheva, 2010). Recent ASEAN-6 evidence reinforces the case for testing turnover in a post-pandemic Thai setting specifically, with bid-ask spreads, the Amihud ratio, and the return-turnover ratio all moving measurably within 121 trading days of a market-wide shock (Pham, Nguyen & Vu, 2025).

Finding: the literature offers two candidate readings for a null turnover result of the kind expected here. Either Thai trading turnover fails to capture the systematic liquidity risk of Pástor and Stambaugh (2003), or, as Rouwenhorst (1999) suggests for emerging markets generally, turnover's information is already absorbed by the value and size variables included alongside it in the same cross-sectional regression.

Information Uncertainty and Financial Statement Transparency

Zhang (2006) proposed that price anomalies are systematically amplified among firms whose fundamental value is harder to assess, because greater uncertainty invites overconfidence and slower price discovery; using five complementary information-quality proxies, Jiang, Lee and Zhang (2005) confirmed the book-to-market effect, post-earnings-announcement drift, and momentum are all significantly stronger among high-uncertainty firms, with the value premium roughly sixty percent larger in the highest-uncertainty quintile. A related channel operates through investor breadth, with lower-breadth stocks earning systematically higher subsequent returns as short-sale constraints prevent pessimistic views from being fully reflected in prices (Chen, Hong & Stein, 2002), and momentum research offers a parallel demonstration through a different channel of opacity, with slow price adjustment especially pronounced among small, low-coverage firms following bad news (Jegadeesh & Titman, 1993; Hong, Lim & Stein, 2000). Financial statement architecture provides a directly observable, regulator-mandated proxy for the same construct: standalone statements exhibit significantly higher discretionary accruals than consolidated statements, indicating systematically lower earnings quality when subsidiary information is omitted (Comporek, 2023), and using Indian data where both statement types are mandatorily filed, Balachandran, Kuntluru, Manchiraju and Rajput (2026) found investors assign significant independent weight to parent-only earnings surprises, particularly among firms with weaker earnings quality.

Finding: this literature yields a directional, testable prediction rather than a certainty. If financial statement type functions in Thailand as it appears to in India and Poland, as a genuine marker of reduced transparency, the value premium should be measurably stronger

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among company-only reporters, though the magnitude of that gap is an open empirical question.

Discussion (Summary from all Theories/Literatures/Concepts)

The three literatures motivate a coherent, three-part empirical strategy rather than three unrelated tests. The value-premium literature establishes a strong prior that a negative, statistically detectable P/BV-return relationship should be observable in the SET; the liquidity literature motivates testing turnover as a complementary predictor while warning it may fail to survive once value and size are controlled for; and the information-uncertainty literature supplies the study's third and most novel test, whether the mandated consolidated/company-only distinction, not previously used in Thai asset-pricing research, moderates the value premium's strength. Existing Thai evidence (Perez, 2017a, 2017b; Kitkanasiri et al., 2025) confirms that value and size effects behave differently in Thailand than in developed markets, but no prior study has tested all three channels jointly within a single, frequency-robust Fama-MacBeth framework. The gap is concrete rather than definitional: Kitkanasiri, Palahan and Pan-urai (2025) test book-to-market and size separately from liquidity in the SET and MAI; Charoenwong, Nettayanun and Saengchote (2021) test value and liquidity-adjacent characteristics against a q-factor benchmark but do not condition on financial statement type; and no existing Thai study varies estimation frequency systematically to demonstrate that a documented anomaly is not an artifact of a single, arbitrarily chosen sampling interval. The present design closes each of these three gaps within one estimation framework.

Research Methodology

This research is quantitative in design, employing a non-experimental, archival cross-sectional asset-pricing methodology to test three hypotheses concerning return predictability in the Stock Exchange of Thailand (SET). All data used in the analysis are secondary and were retrieved programmatically through the SETSMART Application Programming Interface (API); no primary data collection was undertaken.

Research Scope: The study examines the cross-sectional relationship between one-week-forward stock returns and three firm-level characteristics: trading liquidity (turnover), firm size (market capitalization), and relative valuation (P/BV). To address the third objective, the analysis further incorporates each firm's predominant financial statement type, consolidated (C) or company-only (U), as a categorical moderating variable. Momentum, industry classification, and market beta are deliberately excluded from the main specification: momentum would require constructing a rolling look-back return outside this study's specific focus; industry dummies would leave the 208-firm company-only subsample too thin for stable weekly estimation; and a reliable rolling beta for 1,045 securities over five and a half years introduces its own estimation-window bias. These are deliberate scope decisions, revisited directly in the Future Research discussion below.

Population and Sample Scope: The population comprises all common stock securities listed on the SET, restricted to the Common Stock (CS) and Common Stock – Foreign (CSF) security types; warrants, preferred shares, derivative warrants, and mutual funds were excluded because their pricing mechanisms differ fundamentally from ordinary equity. After computing forward returns and removing incomplete observations, the final panel comprised 233,584 firm-week observations drawn from 1,045 unique firms across 285 weekly periods. For the financial-statement-type subsample, firms reporting under the equity method were excluded due to insufficient group size, leaving 985 classifiable firms: 777 reporting on a consolidated basis (Group C) and 208 reporting on a company-only basis (Group U).

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Area Scope: The study is confined to securities listed on the Stock Exchange of Thailand; no sub-national or sectoral restriction was applied beyond the security-type filter described above.

Time Scope: Weekly price and trading data span 8 January 2021 to 19 June 2026 (285 weekly observation points, sampled on the last trading day of each week), representing the maximum historical depth accessible under the SETSMART data package used for this study. Financial statement type was retrieved across 21 quarterly reporting periods within the same window.

Document Study: Price and trading data were retrieved from the SETSMART eod-price-by-security-type endpoint, which provides daily closing price, market capitalization, price-to-book value ratio, and trading turnover for every listed security. Financial statement type was retrieved separately from the financial-data-and-ratio endpoint and assigned to each firm using the modal (most frequently reported) statement type across the 21 available quarters, since a firm's consolidation basis is ordinarily stable unless its group of subsidiaries changes materially.

The dependent variable, one-week-forward return, was constructed for each security i at week t as:

$$ForwardReturn_{i,t} = \frac{Close_{i,t+1}}{Close_{i,t}} - 1$$

Where close denotes the closing price. Because turnover, market capitalization, and P/BV are strongly right-skewed in raw form, each independent variable was log-transformed prior to estimation, a standard procedure that reduces the influence of extreme observations. Prior to transformation, turnover ranged from 0 to 241.877 times and P/BV ranged from 0.03 to 1,027.15 times, values that are economically implausible for most observations and likely reflect isolated corporate events or data-reporting irregularities. To limit the influence of such outliers without discarding observations, the forward return and all independent variables were winsorized at the 1st and 99th percentiles of the pooled distribution before estimation, following standard asset-pricing practice.

The primary analysis applies the two-stage Fama-MacBeth (1973) cross-sectional regression procedure. In the first stage, a separate cross-sectional regression is estimated at every weekly time period t:

$$ForwardReturn_{i,t} = a_t + b_{1,t}\log(Turnover_{i,t}) + b_{2,t}\log(MarketCap_{i,t}) + b_{3,t}\log(PBV_{i,t}) + e_{i,t}$$

Where i indexes securities and t indexes weeks. In the second stage, the time series of estimated slope coefficients b1, b2, and b3 is averaged across all periods, and statistical significance is assessed using a t-statistic computed as the time-series mean of the coefficient divided by its time-series standard error:

$$t = \frac{\overline{b}}{SD(b)/\sqrt{T}}$$

Where T is the total number of time periods used in estimation. This approach yields standard errors robust to cross-sectional correlation among securities observed at the same point in time, a common feature of stock market panel data that ordinary pooled regression does not address. Averaging the period-by-period coefficients in this way treats each week as one independent observation of the cross-sectional relationship, in contrast to pooled OLS, which treats each firm-week pair as independent despite the strong same-period correlation typical of stock market data.

Because the statistical power of the Fama-MacBeth procedure depends on the number of time-series periods T rather than the number of cross-sectional units, the analysis was repeated at

three data frequencies, quarterly (20 periods), monthly (65 periods), and weekly (285 periods), using the same variables and specification throughout, in order to confirm that the findings are stable and are not an artifact of insufficient statistical power at any single frequency.

To address the third research objective, the strength of the value premium was compared between the consolidated (C) and company-only (U) subsamples in two complementary ways. First, the Fama-MacBeth procedure described above was estimated separately within each group. Second, a pooled specification incorporating an interaction term between log(P/BV) and a dummy variable for company-only reporting was estimated across the full sample:

$$ForwardReturn_{i,t} = a_t + b_{1,t}\log(Turnover_{i,t}) + b_{2,t}\log(MarketCap_{i,t}) + b_{3,t}\log(PBV_{i,t}) + b_{4,t}[\log(PBV_{i,t}) \times isU_i] + b_{5,t}\, isU_i + e_{i,t}$$

Where is U is an indicator equal to one for firms in Group U and zero otherwise. The coefficient b4 tests directly whether the value premium differs significantly in magnitude between the two financial-statement-type groups, using the Fama-MacBeth time-series procedure described above.

Field Study

As this study relies exclusively on secondary, exchange-reported price and financial-statement data obtained through the SETSMART API, no field data collection, such as surveys, interviews, or direct firm contact, was undertaken.

Research Finding

This section presents the empirical findings of the study in four parts. It begins with the descriptive statistics of the variables used in the analysis, followed by the results relevant to each of the study's three research objectives in turn: the value premium, the illiquidity premium, and the role of financial statement type. Throughout, results are reported first at the weekly frequency, which offers the greatest statistical power, with the frequency-robustness comparison reported alongside the first objective.

Table 1 reports the descriptive statistics of the dependent and independent variables after winsorization at the 1st and 99th percentiles of the pooled distribution (N = 233,584 firm-week observations).

Table 1 Descriptive Statistics of Variables Used in the Model (N = 233,584)

Variable	Mean	SD	Min	Max	Skewness	Kurtosis
Forward Return (1 week)	-0.0011	0.0516	-0.1538	0.2131	0.770	6.970
log(Turnover)	-2.9244	2.1883	-9.1695	1.6734	-0.463	3.083
log(MarketCap)	21.9570	1.7220	15.8241	29.1413	0.725	3.400
log(P/BV)	0.1775	0.8344	-1.6607	2.4899	0.412	3.045

Note. All variables are winsorized at the 1st and 99th percentiles of the pooled distribution.

As shown in Table 1, the winsorized variables display skewness and kurtosis values within an acceptable range, considerably closer to normal than the raw, untransformed data. Prior to winsorization, turnover reached a maximum of 241.877 times and P/BV reached 1,027.15 times, confirming the extreme values that motivated the data-cleaning procedure described in the Research Methodology section. The mean one-week-forward return across the full sample is slightly negative (-0.11 percent), consistent with the SET's relatively flat aggregate performance over the period.

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Objective 1 The results of the research were as follows. To confirm that the value-premium finding is not an artifact of limited statistical power, the Fama-MacBeth procedure was first estimated at three different data frequencies using an identical specification. Table 2 reports the resulting p-values for the turnover and P/BV coefficients at each frequency.

Table 2 Fama-MacBeth Results Compared Across Data Frequencies

Frequency	Time Periods	Observations	p-value: log(Turnover)	p-value: log(P/BV)
Quarterly	20	16,451	0.151	0.071
Monthly	65	53,151	0.369	0.0156
Weekly	285	233,584	0.858	0.0001

As Table 2 shows, the statistical significance of the log(P/BV) coefficient strengthens systematically as the data frequency increases, moving from p = 0.071 at the quarterly frequency (20 time periods) to p = 0.0156 at the monthly frequency (65 time periods) and to p = 0.0001 at the weekly frequency (285 time periods). Figure 1 illustrates this pattern graphically, plotting the p-values for both coefficients on a logarithmic scale across the three frequencies.

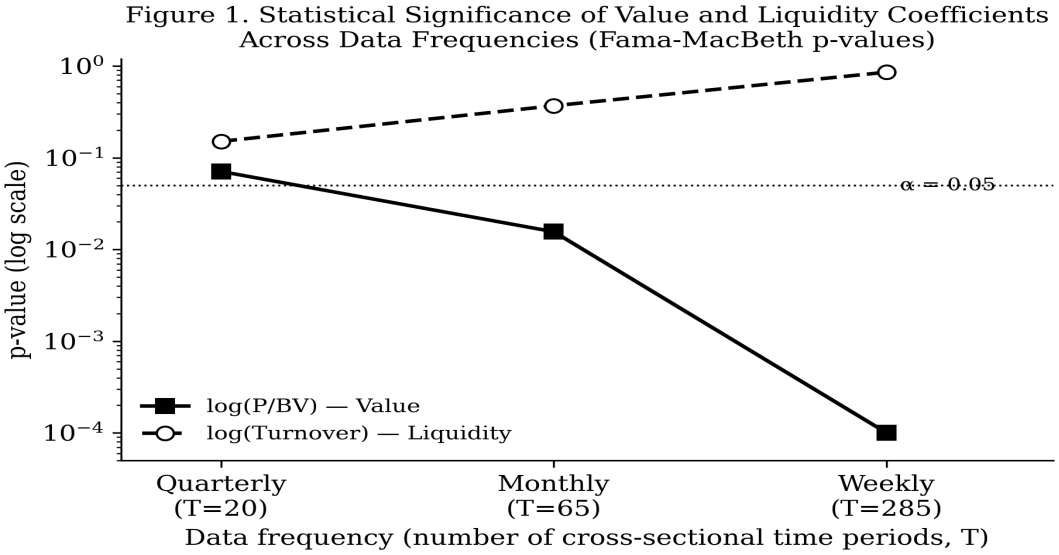


Figure.1 Statistical Significance of Value and Liquidity Coefficients Across Data Frequencies (Fama-MacBeth p-values, log scale)

The pattern in Figure 1 is consistent with a genuine cross-sectional relationship rather than a data-mining artifact: Fama-MacBeth power depends on the number of independent time-series periods, and the P/BV coefficient's significance improves monotonically as that power increases, while the turnover coefficient's significance instead deteriorates over the same range. Table 3 reports the full weekly-frequency results, used as the primary results for the remainder of this section given their maximal power.

Table 3 Fama-MacBeth Results at Weekly Frequency (285 Time Periods, N = 233,584)

Variable	Mean Coefficient	Std. Error	t-statistic	p-value
log(Turnover)	-0.00004	0.00020	-0.179	0.858
log(MarketCap)	0.00006	0.00020	0.303	0.762
log(P/BV)	-0.00113	0.00028	-3.989	0.00008

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Table 3 shows that the average coefficient on log(P/BV) is negative and highly statistically significant (mean coefficient = -0.00113, SE = 0.00028, t = -3.989, p = 0.00008). Because P/BV is inversely related to value status, this negative coefficient indicates that securities with lower price-to-book value ratios, value stocks, earn significantly higher one-week-forward returns than securities with higher price-to-book value ratios, confirming the presence of a value premium in the Thai stock market throughout the January 2021 to June 2026 study period.

Objective 2 The same Table 3 also tests the second objective. The average coefficient on log(Turnover) is small and statistically indistinguishable from zero (mean = -0.00004, SE = 0.00020, t = -0.179, p = 0.858). In Table 2, turnover's p-value moves opposite to P/BV as frequency increases, from p = 0.151 (quarterly) to 0.369 (monthly) to 0.858 (weekly) -- a stable null that becomes more precisely estimated, not less, as more data are added. Market capitalization is likewise insignificant at the weekly frequency (mean = 0.00006, SE = 0.00020, t = 0.303, p = 0.762), indicating no detectable size effect.

Objective 3 The results of the research were as follows. Table 4 reports the value-premium coefficient estimated separately for the consolidated (C) and company-only (U) subsamples.

Table 4 Fama-MacBeth Results by Financial Statement Type (Weekly Frequency)

Group	N Firms	Mean Coefficient log(P/BV)	Std. Error	t-statistic	p-value
C (Consolidated)	777	-0.00108	0.00031	-3.494	0.00055
U (Company-only)	208	-0.00166	0.00045	-3.670	0.00029

Table 4 shows that the value premium is statistically significant in both subsamples: the coefficient on log(P/BV) is -0.00108 (t = -3.494, p = 0.00055) among the 777 firms in Group C and -0.00166 (t = -3.670, p = 0.00029) among the 208 firms in Group U, with the company-only subsample's coefficient roughly 54 percent larger in absolute magnitude. Table 5 reports the direct test of whether this numerical difference is statistically significant, using the pooled interaction specification described in the Research Methodology section.

Table 5 Interaction Term from Pooled Regression (Weekly Frequency)

Term	Mean Coefficient	Std. Error	t-statistic	p-value
log(P/BV) main effect (Group C baseline)	-0.00107	0.00030	-3.525	0.00049
log(P/BV) × is_U interaction	-0.00051	0.00046	-1.106	0.270

Table 5 shows, the interaction term between log(P/BV) and the company-only indicator is small and statistically insignificant (mean = -0.00051, SE = 0.00046, t = -1.106, p = 0.270). Notwithstanding the numerically larger point estimate for Group U in Table 4, the difference in value-premium magnitude between the two groups cannot be distinguished from zero at conventional significance. Together, these results give the SET its first frequency-robust, jointly estimated picture of how value, liquidity, and reporting-basis signals behave in the same panel -- a combination Thai portfolio managers have previously had to infer from separate, differently specified studies.

Discussions and Conclusion

The results for objective 1 show that stocks with lower price-to-book value ratios earned significantly higher one-week-forward returns (t = -3.989, p < 0.001), with the finding strengthening systematically as data frequency increased from quarterly to weekly. Economically,

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Thai investors who buy relatively inexpensive securities have historically been compensated with higher subsequent returns, consistent with a genuine, tradable value effect. This is compatible with both the risk-based account of Fama and French (1993), under which low-P/BV firms carry a systematic distress-related risk, and the behavioral account of Lakonishok, Shleifer and Vishny (1994), in which investors persistently overprice glamour stocks. The result is broadly consistent with wider emerging-market and Asian evidence (Fama & French, 2012; Cakici, Fabozzi & Tan, 2013), and extends the Thai-specific findings of Perez (2017b) and Kitkanasiri et al. (2025) by showing the value premium strengthens materially once tested at adequate statistical power.

The results for objective 2 show that trading turnover carries no significant relationship with forward returns at any frequency tested ($p = 0.858$ weekly), and this null result becomes more precisely estimated, not less, as statistical power increases. Turnover therefore does not function as a priced source of systematic risk in the Thai cross-section over this period. One plausible mechanism is that Thai turnover fails to capture the covariance-based liquidity risk emphasized by Pástor and Stambaugh (2003); an equally plausible one, following Rouwenhorst's (1999) emerging-market evidence, is that turnover's information overlaps with the size and value characteristics already in the regression, leaving no independent explanatory power once those are controlled for. This contrasts with the illiquidity premia documented using price-impact and spread-based measures (Amihud, 2002; Lam & Tam, 2011), suggesting the choice of liquidity proxy, rather than an absence of liquidity pricing, explains the null result.

The results for objective 3 show that while the value premium is significant within both subsamples, the interaction term testing whether its magnitude differs between them is not significant ($p = 0.270$). This test may have limited power given the unequal group sizes -- 208 firms in the company-only group against 777 in the consolidated group, mechanically less able to detect a real but moderate difference of the kind implied by the larger point estimate in Table 4. With that caveat, the information uncertainty hypothesis of Zhang (2006) does not receive clear support here: financial statement type cannot be shown to moderate the value premium's strength in the Thai market at conventional significance. This is more cautious than international evidence, where consolidation status carries genuine information content for investors in India (Balachandran, Kuntluru, Manchiraju & Rajput, 2026) and correlates with earnings quality differences in Poland (Comporek, 2023); it is possible the Thai value premium is priced in a manner sufficiently unconditional on reporting format that any transparency-related mispricing is too small, given the sample's group sizes, to detect.

Stability and Robustness of the Findings

Regarding stability, the frequency-robustness test for objective 1 provides the strongest evidence against a data-mining explanation: rather than appearing under one arbitrarily chosen specification, the value premium's significance strengthens monotonically as independent time-series observations increase from 20 to 285. The corresponding weakening of the turnover coefficient's significance over the same range offers a parallel validation for the null illiquidity finding, since sampling noise would be expected to fluctuate rather than move consistently in one direction. The value premium's consistency across both financial-statement-type subsamples, despite their different sizes (777 versus 208 firms), further supports that the effect is not confined to a particular subset of the market.

Conclusion

In conclusion, this study provides robust evidence that a value premium exists in the Stock Exchange of Thailand, that trading turnover and market capitalization do not carry a detectable independent pricing relationship with forward returns over the study period, and that the strength of the value premium does not differ significantly according to whether a firm reports on a consolidated or company-only basis. These conclusions are drawn from a large panel of 1,045 firms and 233,584 firm-week observations spanning more than five years, using

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a frequency-robust implementation of the Fama-MacBeth (1973) cross-sectional regression methodology, and they contribute new, Thailand-specific evidence to a literature that has, until now, tested these three questions largely in isolation from one another and predominantly outside the Southeast Asian context.

Recommendation

For institutional investors and fund managers operating in the Thai market, the findings lend empirical support to value-based security selection strategies built around the price-to-book value ratio, given that the premium documented here is both statistically robust and consistent across financial-statement-reporting groups. Translated into an annual horizon using the weekly Fama-MacBeth coefficient reported in Table 3, a one-standard-deviation difference in log(P/BV) (SD = 0.8344, Table 1) corresponds to a weekly return difference of 0.8344 × 0.00113 ≈ 0.094 percent; scaled linearly across the 52 weeks in a typical year (0.094% × 52), this yields an estimated 4.9 percent difference in annualized return between relatively cheaper and relatively more expensive stocks -- a magnitude that is modest week to week but economically meaningful when compounded over a typical multi-year holding period and weighed against transaction costs. Consistent with the broader emerging-market evidence reviewed above (Cakici, Fabozzi & Tan, 2013; Cakici, Tang & Yan, 2016), portfolio construction rules that systematically tilt toward lower-P/BV securities appear to carry genuine empirical justification in the Thai context, rather than reflecting a pattern specific to developed markets alone.

For market participants using trading turnover as a timing or selection signal, the results counsel caution: turnover showed no significant relationship with forward returns at any frequency tested, and its explanatory power weakened rather than strengthened as more data were added. Practitioners seeking a liquidity premium in the Thai market may find price-impact or bid-ask-spread measures, as used by Amihud (2002) and Lam and Tam (2011) in Hong Kong, more informative than turnover alone.

For accounting standard-setters and regulators, the absence of a significant interaction between financial statement type and the value premium suggests that this particular reporting distinction does not create an economically detectable information asymmetry that investors currently fail to price. This does not diminish the broader case for consolidation-related disclosure, documented elsewhere by Balachandran, Kuntluru, Manchiraju and Rajput (2026) and Comporek (2023), but suggests transparency-focused policy attention in the Thai equity market may be better directed toward other information channels.

For listed companies, the findings carry a further implication. In the short run, because the market prices P/BV but not financial statement type, a company-only reporter cannot expect its value-premium exposure to be priced differently from a consolidated peer simply because of its reporting basis, so management attention devoted purely to reporting-format choice is unlikely to move the firm's cost of capital through the channel tested here. In the long run, however, firms trading at persistently low P/BV should recognize the documented premium as a return investors demand for holding the stock -- whether compensating for genuine distress risk or a market slow to re-rate the firm -- worth investigating through the firm's own capital-allocation and investor-communication strategy, since the discount persists systematically rather than resolving within a single week.

This study has three notable limitations. First, trading turnover was the only liquidity proxy available through SETSMART; price-impact measures such as the Amihud (2002) ratio or bid-ask spreads were not accessible for the full sample and may capture liquidity risk that turnover does not. Second, the sample period spans the COVID-19 aftermath, and the analysis does not explicitly model whether the value premium's strength varies across macroeconomic

regimes within this window. Third, the sample retains financial-sector firms, departing from the common practice of excluding banks, insurers, and securities firms when testing a book-to-market signal; since leverage and book equity carry a different meaning for financial institutions, their inclusion may attenuate or distort the estimated coefficient, and a non-financial robustness check is a natural extension for future work.

Future research could extend this study in three directions. First, replicating the analysis with price-impact-based illiquidity measures would clarify whether the null turnover result reflects a genuine absence of liquidity pricing or simply turnover's limitations as a proxy. Second, incorporating momentum and profitability factors alongside value and liquidity would permit a fuller multifactor characterization of the Thai cross-section, in the spirit of Fama and French (2015). Third, testing whether the value premium's magnitude varies conditionally across macroeconomic or volatility regimes would extend the frequency-robustness approach used here to a regime-conditional setting. These directions would help clarify which developed-market anomalies translate, in full or in part, to Southeast Asia's largest equity market.

New Knowledge

The empirical model developed in this study contributes an integrated, frequency-robust test of three cross-sectional pricing channels within a single Southeast Asian market, summarized conceptually in Figure 2. Within the SET, a value signal derived from P/BV is priced into forward returns in a manner that strengthens as statistical power increases and operates uniformly regardless of a firm's financial statement reporting basis, while a turnover-based liquidity signal shows no comparable pricing relationship at any frequency tested. This pattern suggests risk- or mispricing-based compensation for relative valuation operates independently of, rather than jointly with, trading-based liquidity proxies or financial-reporting transparency. Asset-pricing tests in Thailand, and plausibly in other emerging Southeast Asian markets with similar disclosure regimes, should therefore treat value, liquidity, and information-transparency channels as separable rather than mutually reinforcing -- a structural characterization not previously documented for the Thai market, with the direct practical implication that a single composite score blending these three signals is unlikely to outperform a model built on value alone.

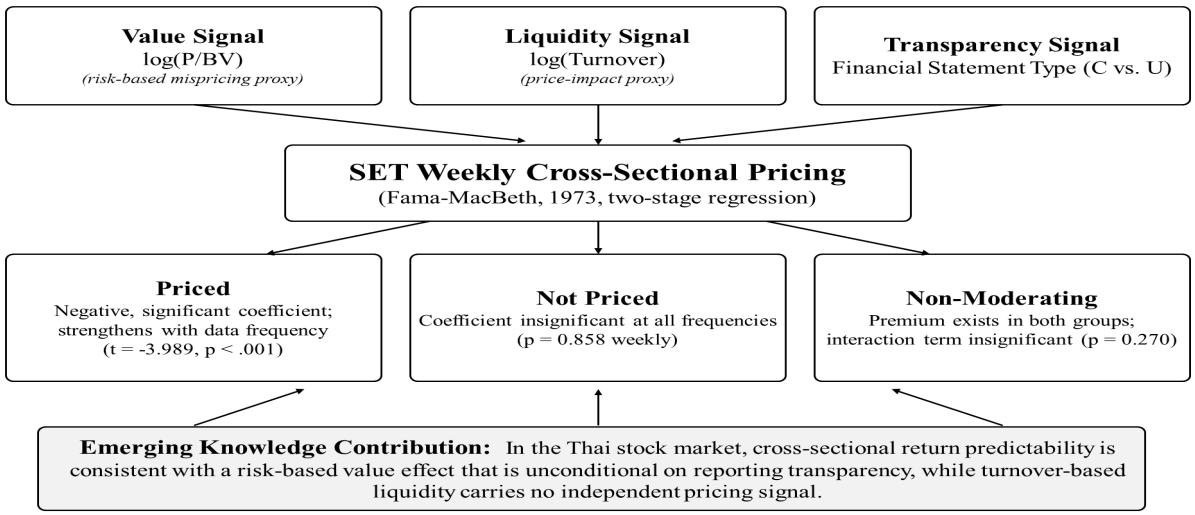


Figure.2 Conceptual Model: Three Cross-Sectional Signals and Their Empirical Status in the Thai Stock Market

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