

What Drives Investment among Thai Domestic and Exporting Firms? Evidence from Thai Firm-Level Financial Statements

Wasawat Champoontha
Chompunuch Tengrangsarn

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Thai domestic firms may have greater investment potential than the aggregate numbers suggest. When business conditions and access to finance are comparable, their investment does not significantly differ from exporters.

Abstract

This study examines the determinants of investment among domestic and exporting firms using financial statements of all companies registered in Thailand, linked with customs records between 2017–2023. The results show that financial capacity is a key determinant of firm investment in Thailand and largely explains why exporting firms invest more on average. However, after controlling for firm characteristics including size, revenue growth, and capital structure, the investment gap between domestic and exporting firms becomes statistically insignificant, suggesting that domestic firms possess comparable investment potential when operating under similar conditions and given sufficient access to finance. Also, the results show that export firms' investment is more sensitive to financial conditions and business uncertainty.

1. Preface

Before the 2008 global financial crisis, private investment in Thailand grew by an average of approximately 7–8% per year. This expansion was driven by foreign direct investment, and capacity expansion by Thai businesses in response to rapidly growing demand. However, these investment engines have weakened. Following the COVID-19 crisis, private investment expanded by only around 2.2% per year on average, raising an important question: What are the key constraints holding back investment in Thailand?

Against this backdrop, this study examines firm-level investment behavior by comparing the determinants of investment between domestic-oriented and exporting firms, focusing on whether the two groups respond differently to financial conditions, business performance, market power, exchange-rate movements, and other factors influencing investment decisions.

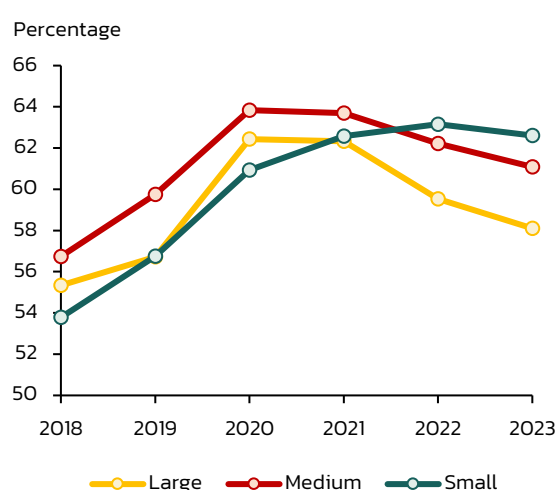
The analysis uses annual firm-level financial statements from the Corporate Profile and Financial Statement database (CPFS) with trade records from the Thai Customs Department, covering the period from 2017 to 2023. After merging, the final database contains information on more than 320,000 Thai legal entities per year. With this firm-level perspective, the analysis can move beyond aggregate investment figures and identify the underlying constraints on corporate investment.

2. Thailand's Investment Structure: Evidence from Firm-Level Financial Statements

2.1 Investment Levels Remain Low among Thai Firms, Particularly SMEs

More than 60% of Thai firms invest less than the depreciation of their fixed assets. In other words, most firms do not expand their capital stock, and only about 40% increase their investment in a given year. Firm-level financial statements indicate that firms with limited investment are concentrated among SMEs, particularly in service sectors such as hotels and restaurants, construction, and real estate. In the manufacturing sector, low-investment firms are commonly found in the food and beverage, rubber and plastics, metals, and textile industries. These firms tend to share two key characteristics: limited reliance on external financing, as reflected in their low leverage ratios, and low returns generated from their existing assets.

Figure 1: Share of Thai Firms Investing Less Than Depreciation, by Firm Size

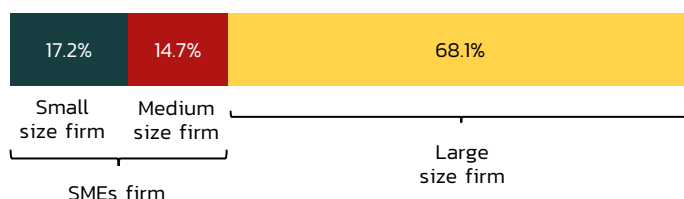


Source: Thailand Department of Business Development, and author's calculations.

2.2 Private investment is driven primarily by large firms

Large firms account for more than 65% of Thailand's total corporate investment each year. Across industries, they contribute approximately 65–70% of total investment, led by telecommunications, petroleum, information technology services, and professional services.

Figure 2: Average Share of Corporate Investment by Firm Size, 2017–2023

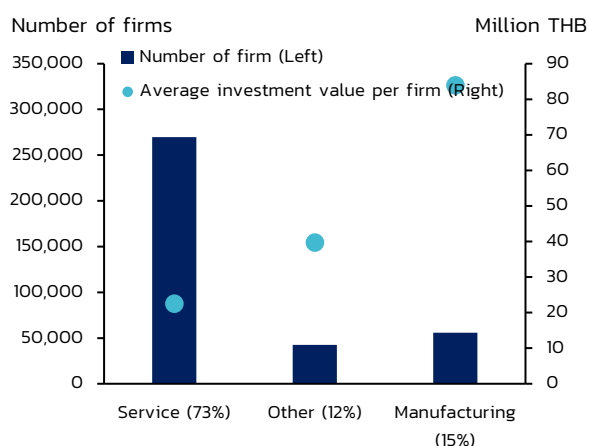


Source: Thailand Department of Business Development, and author's calculations.

2.3 Thailand has relatively few manufacturing firms, but they invest substantially more

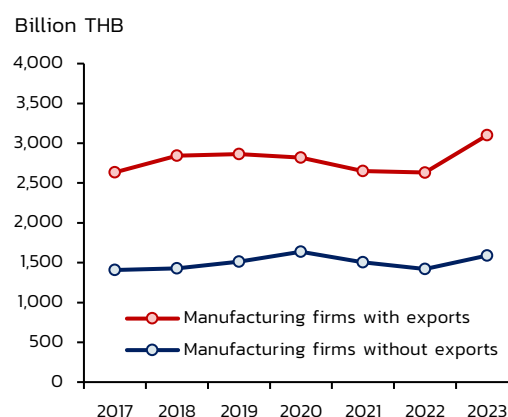
Manufacturing firms account for only around 15% of all Thai companies, roughly one-fifth of the number of firms operating in the service sector. Nevertheless, their average investment per manufacturing firm is approximately three times higher than that of service-sector firms. Export manufacturers represent an even smaller group. At around 16,000 firms per year, they account for only about 3% of all companies, yet their average investment is approximately ten times that of manufacturers serving only the domestic market. As a result, exporters contribute more than half of total investment in the manufacturing sector, particularly in electrical appliances and electronics, rubber and plastics, and automotive industries.

Figure 3. Number of Firms and Average Investment Value in Thailand, by Industry



Source: Thailand Department of Business Development, Customs Department, and author's calculations.

Figure 4. Investment Value of Manufacturing Firms, by Export Status

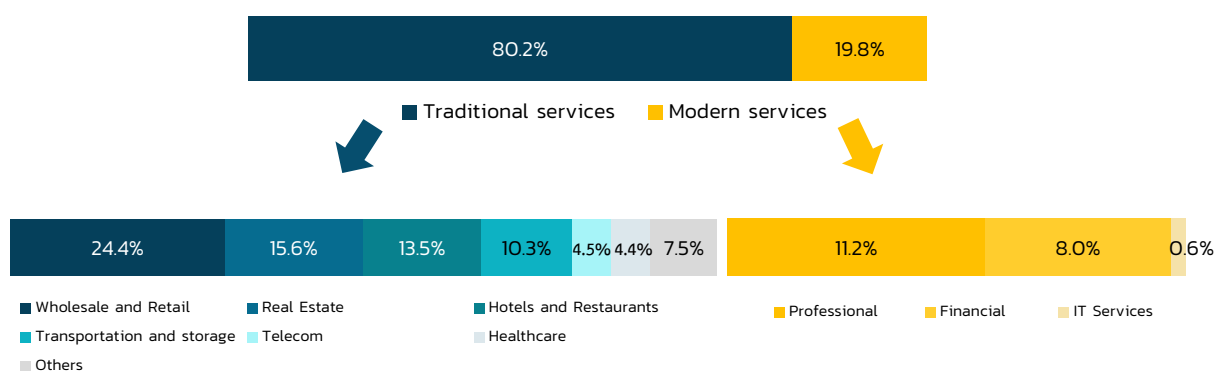


Source: Thailand Department of Business Development, Customs Department, and author's calculations.

2.4 Investment in Thailand's service sector remains concentrated in traditional services

Investment in the service sector remains concentrated in traditional activities, particularly wholesale and retail trade, real estate, and hotels and restaurants. Together, these sectors account for around 80% of total service-sector investment. Meanwhile, modern services, including professional services, information services, and financial services, account for only about 20%. Although their share remains relatively small, investment in these activities has continued to expand, particularly in IT services related to data management and processing. This suggests that modern services are gradually emerging as a new source of investment growth, even though traditional services continue to dominate the overall structure.

Figure 5. Distribution of Investment Value among Service-Sector Firms in Thailand, 2023



Source: Thailand Department of Business Development, and author's calculations.

3. Determinants of Investment among Domestic and Export Firms

The preceding analysis shows that export firms invest substantially more than firms serving only the domestic market. Therefore, to identify the factors underlying this gap, the study examines whether the drivers of investment differ between domestic and export firms.

The empirical analysis uses a firm-level panel model with firm fixed effects, based on annual data for 179,723¹ firms from 2017 to 2023, comprising 1,078,344 observations. The fixed-effects specification controls unobserved firm characteristics that do not change over time, such as managerial capability, business culture, and persistent differences in access to finance.

¹ The analysis uses a balanced panel and therefore includes only firms with complete data throughout the study period. The results should consequently be interpreted as conditional on surviving firms only and cannot be interpreted as representative of the full population of firms.

The empirical model is specified as follows:

$$\begin{aligned} \text{Investment growth}_{i,t} = & \beta_0 + \beta_1 \text{Return on asset}_{i,t} + \beta_2 \text{Revenue growth}_{i,t} + \beta_3 \text{Cash flow growth}_{i,t} \\ & + \beta_4 \text{Debt growth}_{i,t} + \beta_5 \text{Equity growth}_{i,t} \\ & + \beta_6 \text{Effective Interest rate}_{i,t} + \beta_7 \text{Effective tax rate}_{i,t} \\ & + \beta_8 \text{Exchange rate}_{i,t} + \beta_9 \text{BOI}_{i,t} + x_{it} + \text{Export term}_{it} + \epsilon_{it} \end{aligned}$$

Where:

- **Investment growth** = the growth rate of the firm's fixed assets, used as a proxy for investment
- **Return on assets (ROA)** = the firm's return on total assets measured as percentage
- **Revenue growth** = the growth rate of the firm's revenue
- **Cash flow growth** = the growth rate of the firm's cash holdings or cash flow
- **Debt growth** = the growth rate of the firm's total liabilities
- **Equity growth** = the growth rate of the firm's shareholders' equity
- **Effective interest rate** = the firm's effective interest rate calculated as firm's annual interest rate expense divided by firm's total debt
- **Effective tax rate** = the firm's effective tax rate, calculated as firm's total tax expense divided by firm's taxable income
- **Exchange rate growth** = the growth rate of the bilateral exchange rate against the US dollar, where an increase indicates a depreciation of the Thai baht.
- **BOI tax exemption** = a dummy variable equal to 1 if the firm receives investment-promotion privileges from Thailand's Board of Investment, and 0 otherwise
- **x** = a vector of additional control variables, including firm age, firm size, and the effects of the COVID-19 pandemic
- **Export term** = Exporter dummy and its interaction terms with the aforementioned explanatory variables to examine heterogeneity effects.
- ϵ = the error term for firm *i* in year *t*

And:

- **(i)** = firm
- **(t)** = year

4. Results

The determinants of investment across domestic and exporting firms are summarized in Table 1 (Panel Regression Analysis).

Table 1: Determinants of Investment among Domestic and Export Firms

Investment growth	Domestic firm (	Export firm Interaction effect	Domestic firm Contribution	Export firm Contribution	Contribution Difference (Export – Domestic)
Return on asset	0.002*** (–0.001)	0.000 (–0.002)	0.28	0.18	–0.11
Revenue growth	0.021*** (–0.002)	0.025 (0.015)	0.05	0.21	0.17
Cashflow growth	–0.018*** (–0.002)	–0.023*** (–0.005)	–0.03	–0.17	–0.15
Debt growth	0.175*** (–0.004)	0.136*** (0.008)	1.04	1.73	0.69
Equity growth	0.218*** (0.012)	0.201*** (–0.023)	1.37	2.66	1.29
Interest rate expense	0.000 (0.000)	–0.003 (0.006)	0.00	0.00	–0.00
Exchange rate growth	–0.784*** (–0.041)	–0.254*** (0.089)	–0.56	–0.61	–0.05
Effective tax rate	0.000 (0.000)	0.000 (0.000)	0.00	0.00	0.00
BOI tax exemption (1 = Yes)	4.896** (–2.198)	1.637 (1.971)	0.03	0.46	0.43
Firm age	–0.505*** (–0.121)	–0.736*** (0.153)	–4.57	–5.26	–0.69
Dummy covid	–3.554*** (–0.323)	–5.389*** (0.887)	–0.97	–2.52	–1.55
Dummy size medium	6.311*** (–0.943)	–			
Dummy size large	6.824*** (–1.497)	–			
Dummy export firm (1 = Yes)	1.778 (–1.160)	–			
Constant	543.7*** (–133.800)	–			
Observations	1,078,344				
Number of firm ID	179,724				
R-squared	0.0765				

Notes: Robust standard errors are reported below coefficient estimates. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.
() = standard error

3.1 Investment is driven by an expected range of firm fundamentals and business factors

Overall, the results in Table 1 show that Thai firms' investment are determined by business performance, financing capacity, and policy support, which consistent with many existing literatures. Stronger profitability and revenue growth are associated with higher investment, as firms with better performance and stronger demand have greater incentives to expand production capacity. Also, financing capacity plays an important role as increases in both debt and shareholders' equity are significantly associated with higher investment, suggesting that the ability to mobilize external funding helps firms to translate business opportunities into actual investment. BOI investment incentives are also positively associated with investment. In addition, the model also indicates that exchange rate depreciation is associated with lower investment, given profit (ROA) and sale growth remain unchanged. This finding is in line with the import price effects affecting investment. Nevertheless, the result suggests that firms' interest burden does not have a statistically significant impact on investment, suggesting that the availability of financing may matter more for investment decisions than variations in financing costs within the sample.

3.2 Export firms do not invest significantly more than domestic firms once firm characteristics are controlled

Although the raw data show that export firms invest more than domestic firms, this difference is no longer statistically significant after controlling for various factors such as profitability, revenue growth, financing structure, firm size, age, and other firm characteristics. Note that the fixed-effect specification controls for unobservable time-invariant factors such as business culture and industry effects. This result implies that exporters invest more mainly because they tend to have stronger underlying characteristics and business conditions, rather than because of export status itself. In other words, if domestic firms have similar business conditions and access to finance, their investment levels are not significantly different from those of export firms.

3.3 Differences in firm fundamentals explain the investment gap between export and domestic firms

The contribution analysis evaluated at the mean of each variable, as shown in Table 1, helps explain the factors behind the investment gap between export and domestic firms. A large part of the gap comes from differences in financing capacity, particularly debt and equity financing, which make a larger contribution to investment among exporters. Revenue growth also contributes positively to the gap, as exporters tend to record stronger revenue growth than domestic firms. By contrast, cash flow growth contributes negatively to the gap, partly offsetting the positive contribution from financing capacity and revenue growth. Overall, the results suggest that the higher investment observed among exporters is mainly associated with differences in firm fundamentals rather than export status itself.

3.4 Export firms are more sensitive to financial conditions and business uncertainty

Although the overall level of investment does not differ significantly between export and domestic firm, the result found that export firm investment decisions are more sensitive to financial conditions and business uncertainty.

As shown in Table 1, the model that interacts export dummies with other variables reveals the following heterogeneity. First, increases in debt and equity financing are associated with a stronger investment response among exporters. This suggests that exporters are more likely to channel newly raised funds into capital investment. One explanation is that firms competing in international markets face greater pressure to invest in production capacity and technology in order to maintain their competitiveness. As a result, additional financing may translate into investment more strongly for exporters than for domestic firms.

Second, cash growth is also more negatively associated with investment for exporter firms. This pattern is consistent with exporters holding liquidity as a buffer against uncertainty in international operations. Exporters face a wider range of risks, including volatile foreign demand, supply-chain disruptions, and uncertainty in trading-partner economies. Therefore, when uncertainty rises, export firms may prefer to preserve cash as working capital or precautionary reserves rather than commit those funds to fixed assets.

Lastly, the results show that exchange-rate movements matter more for export firms. As mentioned earlier, the impact of exchange rate here captures the import price effects and therefore higher sensitivity on export firms is consistent with higher reliance of imported capital and imported goods among export firms. Thus, a weaker baht raises the domestic-currency cost of imported machinery, equipment, and intermediate input, making new investment more expensive.

Conclusion

This study finds that domestic firms do not invest significantly less than export firms once differences in firm characteristics and business conditions are taken into account. The higher average investment observed among exporters is therefore better explained by differences in firm fundamentals, particularly financing capacity, firm size, revenue growth, and capital structure—rather than export status itself. This suggests that domestic firms can also have comparable investment potential when they operate under similar conditions and have sufficient access to finance. At the same time, investment by export firms appears to be more sensitive to financial conditions and business uncertainty, especially liquidity needs and exchange-rate movements, reflecting their greater exposure to external risks and the more complex financing needs associated with operating in international markets.

At the same time, the relationship between financing capacity and investment should be interpreted with some caution, as firms with stronger business conditions are also more likely to gain access to credit, while the model may not fully capture information asymmetries and other frictions in financial markets. Nevertheless, this does not imply that there is no room for policy improvement. Policies can still help broaden access to financing, particularly for viable domestic firms that may face difficulties obtaining credit despite having investment potential. For export firms, which are more exposed to external uncertainty, policy support should focus on risk-management tools such as exchange-rate hedging, trade finance, and measures to reduce logistics costs, helping firms sustain investment during periods of heightened global volatility.

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Authors:



วสวัตตี้ ชัมพูนะ (Wasawat Champoontha): wasawatc@bot.or.th

Economist, Macroeconomic Department, Monetary Policy Group, with experience in private investment and macroeconomic analysis. Currently responsible for economic forecasting.



ชมพูนุช เต็งรังสรรค์ (Chompunuch Tengrangsarn):

Former intern at the Bank of Thailand's Macroeconomic Department and a student from Chulalongkorn University.

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