The potential impact of the Global Minimum Tax on enterprises in Vietnam: evidence from firm-level data

Dr. Nguyen Hoang Ha
Da Nang Institute for Socio-Economic Development
M.A. Do Van Lam
National Institute for Economics and Finance
M. A. Ta Van Thang
National Institute for Economics and Finance

Abstract: *This paper provides firm-level, ex-ante estimates of the potential effects of the Global Minimum Tax (GMT) on enterprises in Vietnam using the Vietnam Enterprise Survey (2010 - 2023). Using system GMM for investment, feasible GLS for profits, and fixed-effects for revenues, we find that increases in effective tax burdens consistent with GMT are associated with statistically significant declines in FDI firms' fixed assets, profits, and short-term revenues, while domestic firms exhibit a short-lived investment expansion. Results are presented as predictive estimates based on historical relationships; we conduct multiple robustness checks (sectoral heterogeneity, alternative tax measures, placebo tests, IV specifications) to increase confidence in the findings. Policy implications are conditional on these ex-ante estimates and should be revisited as post-2024 firm-level data become available.*

Keywords: *Global Minimum Tax (GMT); Foreign Direct Investment (FDI); Local Projections (LP); Generalized Method of Moments (GMM).*

1. Introduction

The GMT initiated by the OECD and G20 is one of the most significant reforms of the international tax system in recent decades. With a minimum tax rate of 15% applied to multinational corporations with consolidated revenues of 750 million EUR or more, GMT is designed to curb profit shifting and the "race to the bottom" in tax competition among countries. The implementation of GMT, starting in 2024, is driving major changes in investment attraction strategies, particularly in developing economies that have relied heavily on tax incentives to attract FDI inflows. Economic theory indicates that taxes directly affect the cost of capital, investment decisions, and firms' location choices, as confirmed in earlier studies by Hall & Jorgenson (1967), Auerbach (1982), King & Fullerton (1984), and Devereux & Griffith (2003).

Received:
April 14, 2026
Revised:
June 12, 2026
Accepted:
June 22, 2026
https://doi.org/
10.59394/JSM.139

Although the GMT came into force on 01/01/2024, this study uses data from 2010 - 2023 to estimate the structural relationship between effective tax burdens and firm behavior. This ex-ante estimation approach is standard in policy evaluation (OECD, 2021; Hugger et al., 2024) and allows timely recommendations for policymakers. The methodology identifies how firms historically responded to variations in effective tax rates, then applies these estimated elasticities to predict responses to GMT-induced tax increases. This differs from ex-post evaluation (which measures actual outcomes after policy implementation) but is necessary when post-implementation data are unavailable. Similar international studies (e.g., OECD's 2021 GMT impact assessment) also use pre-implementation data to simulate potential impacts. Our results should therefore be interpreted as predicted effects based on structural parameters, not observed outcomes, and will require validation as post-2024 data become available.

Hoi et al. (2024) indicate that GMT may have profound effects on Vietnam's ability to attract FDI, not only through the scale and location of investment but also via profit-shifting behavior and tax competition among countries. In particular, the manufacturing and wholesale-retail sectors face the risk of declining attractiveness as tax incentives lose their effectiveness, whereas renewable energy is less affected due to inherent resource advantages. These findings suggest that GMT brings both opportunities and challenges for Vietnam: on the one hand, the implementation of a domestic top-up tax could help increase budget revenues and reduce the risk of revenue loss; on the other hand, tax incentives are gradually losing their effectiveness, directly affecting investment motivation, profits, and revenues of FDI firms. In this context, Vietnam needs to promptly adjust its FDI attraction and management strategy, shifting from reliance on tax incentives to a focus on improving the investment environment, institutional quality, and infrastructure.

Although previous studies have discussed the challenges posed by the GMT for Vietnam, most have remained at the level of descriptive analysis or general policy discussion. These works have primarily focused on explaining the implications of GMT for FDI attraction, the diminishing effectiveness of tax incentives, or the adjustments required in the fiscal policy framework. However, there remains a lack of empirical evidence at the micro-firm level to quantify the impact of GMT on the investment behavior, profits, and revenues of FDI enterprises, as well as on the responses of domestic firms. This gap limits the extent to which current policy recommendations are grounded in robust quantitative data, thereby constraining Vietnam's ability to design effective strategies for FDI attraction and management in the new context.

This paper examines the impact of GMT on firms' activities in Vietnam using enterprise survey data from 2010 to 2023 and quantitative methods. The results not only provide new empirical evidence on the consequences of GMT but also contribute a scientific foundation for policy formulation to attract and manage FDI in the current context. Apart from the *Introduction,* the paper is structured into three sections: the theoretical framework and research methodology, research findings, and finally the conclusion with policy implications.

2. Theoretical and empirical literature review

2.1. Theoretical foundations of the impact of the Global Minimum Tax

(1) Public Economics and Optimal Tax Theory

In public economics, taxation is viewed as an instrument of regulation aimed at maximizing social welfare while ensuring government revenue (Musgrave & Musgrave, 1989). According to optimal tax theory, tax rates should be designed to minimize distortions in resource allocation while maintaining investment incentives. When tax rates increase, after-tax profits decline, reducing the incentive for production expansion, as reflected in Harberger's (1962) welfare cost model. In this context, the GMT constrains developing countries' ability to compete through tax incentives, thereby influencing both the location and scale of investment decisions by multinational corporations.

(2) Theory of Firm Investment Behavior

The user cost of capital model by Jorgenson (1963) posits that investment decisions depend on the comparison between expected returns and the cost of capital, with corporate income tax increasing the cost of capital. Hall & Jorgenson (1967) further developed this model and demonstrated, using U.S. data, that changes in tax policy (such as accelerated depreciation and investment tax credits) strongly affect the scale and structure of investment. Auerbach (1982) expanded the analysis by emphasizing the role of both corporate and personal income taxes in distorting capital allocation and encouraging debt financing, while also highlighting the more complex effects when inflation and risk are taken into account. These findings reinforce the argument that taxation plays a central role in shaping firms' investment behavior and financial structure.

(3) The spillover effects of FDI

The theory of FDI emphasizes that the location choices of multinational corporations are influenced by various factors such as market size, production costs, institutional quality, and tax policies (Dunning, 1981; Markusen, 1995). Developing countries often rely on preferential tax incentives as an important tool to attract FDI. However, the GMT significantly reduces the effectiveness of such policies, making non-tax factors such as infrastructure, governance quality, human capital, and macroeconomic stability increasingly decisive. Dunning's (1980) OLI framework (Ownership - Location - Internalization) also explains that FDI occurs only when firms simultaneously possess ownership advantages in technology or management (O), location advantages (L), and internalization advantages (I). Tax incentives have long been considered a crucial component of location advantages, but under GMT, this factor no longer plays a decisive role. Moreover, the impacts of GMT are not uniform across sectors: industries heavily dependent on tax incentives, such as manufacturing and wholesale-retail, are likely to lose attractiveness, while sectors with natural advantages or high technology, such as renewable energy and digital services, are less affected.

From the perspective of spillover effects, the presence of FDI can generate positive impacts through technology transfer, human capital training, and supply chain linkages, but it can also lead to negative outcomes when intense competition weakens domestic firms (Borensztein, De Gregorio & Lee, 1998; Javorcik, 2004). Changes in the motives and

structure of FDI under the influence of GMT, therefore, not only directly affect the scale and location of investment but also indirectly influence the nature and extent of spillovers. In this context, GMT can be seen both as a challenge (by reducing the attractiveness of tax incentives) and as an opportunity for Vietnam to reshape its FDI attraction strategy, shifting toward high-quality, innovation-driven investment that fosters more sustainable spillover effects in the long run.

(4) The Theory of International Tax Competition

According to Wilson (1999), in the context of tax competition, countries often cut tax rates to retain or attract FDI inflows. In theory, the GMT prevents this phenomenon by establishing a common global tax floor, thereby reducing the effectiveness of tax-based competition. King and Fullerton (1984) developed measures of the effective marginal tax rate (EMTR) and the effective average tax rate (EATR) to compare capital tax burdens across countries, demonstrating that differences in tax structures significantly affect the cost of capital and investment decisions. Building on this, Devereux and Griffith (2003) advanced the concept of EATR, showing that it more accurately captures the impact of taxation on discrete investment choices and has a strong influence on FDI location decisions. From these theoretical insights, GMT is expected to directly affect FDI inflows and the revenue structure of developing countries: while corporate income tax revenues from FDI may decline, domestic top-up taxes may increase, leading to a redistribution of fiscal revenues.

2.2. Overview of empirical studies

International studies have provided extensive evidence on the relationship between taxation and the investment behavior of multinational enterprises. Devereux & Griffith (1998) analyzed the production location decisions of U.S. multinationals in Europe, based on a discrete choice model among three strategies: not serving the market, exporting from the U.S, or producing directly in Europe. The study highlighted the distinct roles of EATR and EMTR: EATR has a direct influence and is decisive in the choice of host country, while EMTR mainly exerts an indirect effect through the cost of capital and optimal output levels. Empirical results showed that a lower EATR significantly increases the probability of choosing a country as an investment location, while non-tax factors such as agglomeration effects and labor costs also play a complementary role.

De Mooij & Ederveen (2008) synthesized empirical evidence on the impact of corporate income tax on firm behavior and estimated elasticities across various channels. Their analysis revealed that: (1) the elasticity of legal form choice is about -0.7; (2) the elasticity of debt-to-equity structure is about -0.15; (3) profit shifting has the highest elasticity, around -1.2; (4) intensive investment (linked to EMTR) has an elasticity of about -0.4; and (v) extensive margin investment decisions (linked to EATR) have an elasticity of about -0.65.

OECD (2007, 2010) provided comprehensive evidence on the relationship between taxation, FDI, and economic growth. The OECD (2007) report noted that EATR has a significant impact on multinationals' location decisions, with meta-analyses indicating that the elasticity of FDI with respect to EATR ranges from -0.6 to -0.8, whereas EMTR mainly affects the scale of marginal investment. OECD (2010) emphasized that corporate income tax has a more negative effect on long-term growth than

other types of taxation, with empirical evidence showing that a 1 percentage-point increase in the corporate income tax rate could reduce GDP growth by 0.1 - 0.2 percentage points. These findings reinforce the argument that tax reforms aimed at reducing effective tax burdens and restructuring tax systems to be less distortive are key to both attracting FDI and fostering sustainable economic growth.

Beer, De Mooij, and Liu (2018) showed that multinational enterprises (MNEs) avoid taxes through multiple channels, such as transfer pricing, debt shifting, and locating intangible assets in low-tax jurisdictions. By conducting a meta-analysis of 37 studies, the authors estimated that the elasticity of taxable profits with respect to international tax rate differentials is approximately 1, meaning that a 1-percentage-point increase in the tax rate could reduce reported profits by about 1%. This result indicates a significant and growing scale of profit shifting, leading to an average loss of about 2.6% of global corporate income tax revenues.

Hugger, González Cabral, Bucci, Gesualdo, and O'Reilly (2024) assessed the impact of GMT using new data on MNE activities and estimates of globally low-taxed profits. Their study reported four main findings: (1) GMT reduces profit-shifting incentives, cutting global shifted profits by about half; (2) globally low-taxed profits fall by more than two-thirds due to reduced shifting and top-up taxation; (3) corporate income tax revenues are expected to increase by USD 155 - 192 billion annually (equivalent to 6.5 - 8.1% of current revenues); and (4) GMT narrows tax rate differentials across countries, which may have important implications for the global allocation efficiency of investment and economic activity.

Jusoh & Ramli (2024) argued that ASEAN member states, which are major FDI destinations in sectors such as semiconductors, tourism, consumer goods, e-commerce, banking, and commodities, will be significantly affected by GMT. Under the new rules, multinational enterprises with revenues of at least EUR 750 million in two of the last four fiscal years will be subject to GMT in over 140 jurisdictions. In this context, ASEAN countries must reassess their incentive and investment promotion strategies to maintain competitiveness in attracting FDI.

Liang (2024) argued that GMT reforms have restructured the allocation of taxing rights on multinational profits and profoundly reshaped the global tax coordination system. An assessment of GMT's impact on China's tax system and enterprises indicated that about 20% of profits could be subject to the 15% GMT, leading to significant revenue losses. Under the scenario in which the jurisdictional blending approach is applied to calculate effective minimum tax rates, the actual minimum tax rate is set at 12.5%, reducing the gap between the highest and lowest EATR in the sample to 2.8 percentage points.

In Vietnam, the study by Hoi et al. (2024), based on the UNCTAD (2022) analytical framework and using secondary FDI data along with descriptive and comparative methods, analyzed the impacts of GMT on FDI attraction. Their findings showed that implementing GMT would affect various aspects of FDI activity in Vietnam, including tax competitiveness, profit-shifting behavior, and decisions on location and investment scale. Negative impacts are particularly evident in sectors with high FDI elasticity to taxation, such as manufacturing and wholesale-retail, whereas sectors less dependent on tax

incentives demonstrate stronger resilience. Trang (2025) focused on the macro/national level and employed a VAR model to assess the relationship between corporate income tax and FDI in response to tax rate changes. However, due to data limitations, the study implicitly assumed that FDI in Vietnam is subject to the same additional tax burden as a domestic tax rate increase. The findings indicated that taxation is no longer a decisive factor in attracting FDI, and that Vietnam needs to reform its investment environment, infrastructure, and institutional framework to compensate for this.

In summary, a wide range of international studies has analyzed the effects of corporate income taxation and GMT on multinational enterprises' behavior, focusing on location decisions, profit shifting, and fiscal outcomes. However, in Vietnam, existing studies remain primarily at the theoretical and descriptive-statistical levels. Therefore, there remains a lack of empirical evidence at the firm level to quantify the impact of GMT on the investment, profitability, and revenues of FDI enterprises, as well as the spillover responses of domestic firms.

3. Research methodology

3.1. Analytical model of the impact of GMT on FDI enterprises

(1) Model specification

Following the effective tax rate approach developed by Devereux and Griffith (1998, 2003), De Mooij and Ederveen (2008), Beer, de Mooij and Liu (2018), OECD (2021), and Hugger et al. (2024), this study employs the effective corporate tax-to-profit ratio as a proxy for assessing the potential impact of the Global Minimum Tax (GMT) on FDI enterprises in Vietnam. Effective tax measures such as the EATR, EMTR, and ETR are widely used to examine how taxation affects investment behavior, profit shifting, and FDI location decisions. In this study, the variable ltax_r captures the firm-level effective tax burden and is used to evaluate both the immediate and delayed effects of taxation on firm outcomes.

The empirical model is specified as follows:

$$y_{it} = \alpha + \beta_1 ltax\_r_{it} + \beta_2 L.ltax\_r_{it} + \beta_3 ll_{it} + \beta_4 lk_{it} + \beta_5 lcpi_{it} + \mu_i + \varepsilon_{it}$$

where y_it denotes the dependent variable for the firm i in year t. In separate estimations, y_it is measured by the firm's capital, profit, and revenue. The variable ltax_r_it is the natural logarithm of the corporate income tax paid relative to the pre-tax profit of the firm i in year t, reflecting the short-term effect of the effective tax burden on firm performance. L.ltax_r_it is the one-period lag of ltax_r_it, capturing the delayed or longer-term effect of taxation.

The control variables include ll_it, the natural logarithm of labor, which reflects firm size in terms of employment; lk_it, the natural logarithm of fixed assets, which captures the capital intensity of the firm; and lcpi_it, the natural logarithm of the deflator index at the one-digit industry level, used to control for sector-level inflationary effects. The term μ_i represents unobserved, time-invariant firm-specific heterogeneity, while ε_it is the idiosyncratic error term that varies across firms and over time.

The variable ltax_r is constructed from the ratio of corporate income tax paid to pre-tax profit:

$$tax\_r_{it} = \frac{tax\_paid_{it}}{profit_{it}}$$

To reduce the influence of extreme values, tax_r is winsorized at the 1st and 99th percentiles before transformation. For observations with non-positive profits, robustness checks are conducted using an alternative cash tax rate, calculated as corporate income tax paid divided by pre-tax profit plus a small constant. In additional robustness specifications, an industry-province-level effective tax rate proxy is also used where firm-level profit information may be unreliable.

To address potential endogeneity, especially the possibility that tax burdens and firm performance are jointly determined, the investment model is estimated using the system GMM approach. Lagged levels and differences of endogenous variables, such as K_(t-2) and K_(t-3), are used as internal instruments. Additional IV-GMM estimations are conducted using lagged industry-level tax shocks as external instruments. The validity of the estimation strategy is assessed through standard diagnostic tests, including the Hansen J test, AR(1) and AR(2) tests for serial correlation in the GMM estimations, and the Kleibergen-Paap test for the IV-GMM specifications. The detailed diagnostic results are reported in the regression tables and Appendix.

(2) Estimation method

Investment model

In this study, interest rates and exchange rates are not included in the model because their effects are indirectly captured through the inflation control variable and time fixed effects, which adequately reflect the overall macroeconomic context. Investment capital is characterized by slow adjustment and long-term persistence, meaning that current investment is often influenced by the previous year's capital stock. Using a standard regression model in this case may lead to biased estimates. Moreover, investment is endogenously related to taxation, policy, and profitability: firms adjust capital in response to policy changes, while policies are also adjusted in response to firms' performance. To address this endogeneity issue, the study employs the Generalized Method of Moments (GMM), which uses lagged values of endogenous variables as instruments to mitigate bias and improve the reliability of the estimates. In addition, GMM is accompanied by specification tests such as AR(1)/AR(2) and Hansen/Sargan tests to ensure the validity of the model and instruments.

Profit model

Profit is a highly volatile variable that changes rapidly with business conditions but does not necessarily exhibit dynamic characteristics, meaning it does not depend on its own past values. Meanwhile, profit data often exhibit heteroskedasticity across groups of firms and autocorrelation in the time series. Using OLS or FE with robust standard errors alone is therefore not sufficiently efficient. Hence, the author employs the feasible generalized least squares (XTGLS) method for panel data, which allows specification of an error structure that accounts for heteroskedasticity and autocorrelation. As a result, the estimates become more efficient and more accurately reflect the impact of policy on profit after controlling for the necessary factors.

Revenue model

Revenue is often driven by inherent characteristics specific to each firm or industry, such as size, location, underlying technology, or business strategy. These features do not change significantly over time

and are usually correlated with the explanatory variables. Test results indicate that the fixed-effects model is more appropriate than the random-effects model. Therefore, the fixed-effects (FE) estimation method is employed to eliminate time-invariant factors and accurately analyze the within-firm or within-industry effects. This method directly addresses the question: when a firm experiences a change in taxes or policy, how does its revenue change? To ensure reliability, the author also incorporates year effects and adjusts the standard errors for clustering at the data-group level.

In summary, the author applies three different estimation methods corresponding to the characteristics of each dependent variable. For investment capital, GMM is chosen to address the impact of lagged variables, endogeneity, and biases arising from the data's dynamic nature. For profit, XTGLS is used to address heteroskedasticity and autocorrelation, thereby improving estimation efficiency. For revenue, the FE model is employed to eliminate inherent firm-specific heterogeneity and focus on within-firm or within-industry variation. This approach allows the research findings to more accurately capture the effects of the GMT policy on different financial aspects of enterprises.

3.2. Model for analyzing the impact of GMT on domestic enterprises

The Local Projections (LP) method is employed to analyze the spillover effects of FDI on domestic enterprises under the implementation of GMT. The LP approach is used to estimate the dynamic responses of domestic firms to GMT-related tax shocks, consistent with the framework of Montiel Olea et al. (2025). The theoretical foundation of the model derives from the literature on horizontal spillovers, competition effects, and technology transfer, in which the presence of FDI in developing economies such as Vietnam can generate both positive impacts (e.g., supply chain linkages, skill and technology transfer) and negative ones (e.g., intensified competition undermining local firms). Accordingly, the model is specified with the dependent variable as indicators of domestic firms' performance, particularly investment capital; the main explanatory variable as total FDI investment, likely affected by GMT; and control variables such as firm size (labor) to capture heterogeneity in production structure and scale.

Plagborg-Møller and Wolf (2019) show that the LP method and VAR, given large samples and sufficient lags, essentially estimate the same impulse response function. However, in empirical applications, LP differs from traditional dynamic models such as VAR or VECM in that it allows separate estimation at each forecast horizon without imposing assumptions on the entire dynamic structure. This makes LP more flexible in dealing with complex or incomplete data, incorporating additional controls, and capturing potential nonlinearities. The model is specified as follows:

(1) Identification of the GMT Shock

$$\Delta ltax\_r\_FDI_{it} = \alpha_i + \tau_i + \theta_1 \Delta ltax\_r\_FDI_{it-1} + \theta_2 \Delta ltax\_r\_FDI_{it-2} + \varepsilon_{it}$$

In the model, tax_r_FDI denotes the tax rate of FDI enterprises, α_i represents firm fixed effects, τ_i captures year fixed effects, and ε_it is the error term. The GMT shock is defined as 〖shock_gmt〗_it=(ε_it)´.

(2) Estimating LP at each horizon

H = 0, 1,..., 8. For each horizon h, the model directly regresses the outcome variable

on the shock at time t, controlling for time effects and fixed effects.

$$\Delta lny_{i,t+h} = \alpha_i + \gamma_t + \beta_h shock\_gmt_{it} + \theta_{1_{it}} \Delta lnX_{i,t-1} + u_{i,t+h}$$

Here, y is the model's dependent variable, defined as the investment capital of domestic enterprises. X represents the exogenous variables, including the lag of investment capital and labor. The lag in investment reflects expectations of increased investment, while labor reflects expectations of production expansion based on labor scale. The two fixed effects, α_i and γ_t, respectively, eliminate time-invariant firm-specific effects and time-specific effects, allowing the coefficient β to be interpreted as the response of y after h periods following a GMT shock occurring at time t.

3.3. Data resources

Because post-2024 enterprise-level data remain insufficient for rigorous econometric evaluation, this study adopts an ex-ante estimation framework. The empirical strategy identifies the historical relationship between effective taxation and enterprise outcomes during 2010 - 2023, then uses these estimated elasticities to infer the potential effects of GMT-induced tax increases on multinational enterprises operating in Vietnam. This approach follows the structural estimation tradition commonly applied in international taxation and investment research (Devereux & Griffith, 2003; De Mooij & Ederveen, 2008; OECD, 2021; Hugger et al., 2024).

The research data are derived from the Vietnam Enterprise Survey for the period 2010 - 2023, conducted by the General Statistics Office, which provides detailed information on the production and business activities, assets, labor, revenue, and profit of both FDI and domestic enterprises. In addition, the study uses industry-level deflator indices to convert all figures to constant prices when estimating the models. The consumer price index variable is taken as the logarithm of the deflator index and is included in the model as an independent variable. This combination of micro- and macro-level data enables a more comprehensive reflection of the characteristics of both FDI and domestic enterprises, capturing the influences of firm-specific factors and macroeconomic conditions in the context of the Global Minimum Tax policy.

4. Results and discussion

4.1. The impact of the Global Minimum Tax on GMT-affected FDI enterprises

This section focuses on the analysis of FDI enterprises likely subject to GMT, namely those that meet the global consolidated revenue threshold of EUR 750 million or more, as stipulated by international regulations. The regression results indicate that GMT, captured through the tax rate variable (calculated as total corporate income tax over profits), affects three key indicators reflecting firm behavior: (1) Fixed assets, (2) Profits, and (3) Revenues. The specific results are as follows:

First, the regression results show in *Table 1* that the tax rate variable, which proxies for the effective tax burden increases that would occur under GMT, is negatively and statistically significantly associated with the fixed assets of FDI enterprises, which proxy for investment scale. Specifically, the estimated coefficient on the tax rate is -0.1237 and significant at the 1% level, indicating that a 1-percentage-point increase in the effective tax rate reduces firms' fixed assets by about 0.1237%. The lagged tax rate variable has a coefficient of -0.1997 (also significant at the 1% level), suggesting that the long-term impact of GMT is stronger than the short-term effect,

reflecting a downward trend in investment over time. This result predicts that FDI enterprises would likely adjust their scale of operations in response to GMT in Vietnam, reducing investment to sustain revenues and minimize exposure to GMT.

Second, in the profit model, both the current tax rate and its one-period lag have negative effects. The coefficient on the current tax rate is -0.569 and significant at the 1% level, while the coefficient on the lagged tax rate is -0.0573 and significant at the 10% level. This indicates that GMT has a direct and substantial short-term impact on profits and exerts prolonged downward pressure on them in the medium term. FDI enterprises may thus experience declines in profitability when subject to GMT. The results also reflect firms' adjustments to their financial structures and strategic decisions in response to the new policy environment.

Third, in the revenue model, the tax rate again shows a negative effect with a coefficient of -0.0507, although its lagged value is not statistically significant. This suggests that GMT affects revenues mainly in the short term, potentially through reduced production scale, lower exports, or declines in orders due to adjustments in business strategies. However, the effect does not persist in the medium term, reflecting enterprises' rapid adjustments when impacted by GMT. Moreover, the investment variable in the revenue model shows a positive effect (0.0795, $p < 0.01$), confirming that reduced investment indirectly lowers revenues and highlighting the close linkage between input factors and business outcomes.

Fourth, the control variables in the models are significant and align with theoretical expectations. The labor scale variable has a positive effect on fixed assets, profits, and revenues, reflecting the important role of production scale in firms' performance. Meanwhile, the inflation variable exhibits heterogeneous effects across models: positive for fixed assets, insignificant for profits, but negative for revenues. This implies that under inflationary conditions, firms may increase investment as a precautionary measure, while rising input costs reduce real revenues.

Overall, the findings suggest that GMT reduces investment incentives, profitability, and revenues of FDI enterprises in Vietnam, with the strongest effects observed on fixed assets and profits, while the impact on revenues mainly operates through the investment channel. This underscores the need for Vietnam to shift from tax-based incentives to strengthening institutional quality, domestic capacity, and supply chain integration, while closely monitoring GMT's practical effects to design timely support policies.

Nevertheless, this study has certain limitations. The dataset covers 2010 - 2023, before GMT's official implementation, so the results capture historical relationships rather than the long-term structural adjustments that may follow. Moreover, the analysis has not fully differentiated impacts by firm size and industry, nor has it incorporated potential nonlinear dynamics, macroeconomic shocks, or global supply chain disruptions. Future research should address these issues and update the analysis with post-GMT data to validate and refine the findings.

Table 1: The impact of GMT on FDI enterprises' investment, profit, and revenue

Variables	(1) Capital	(2) Profit	(3) Revenue
Lagged capital	0,3210***		
	(0,0361)		
Tax rate	-0,1237***	-0,4569***	-0,0507***
	(0,0276)	(0,0329)	(0,0101)
Lagged tax rate	-0,1997***	-0,0573*	-0,0006
	(0,0279)	(0,0337)	(0,0109)
Firm size	1,0979***	0,8094***	0,7315***
	(0,0641)	(0,0188)	(0,0222)
Capital			0,0795***
			(0,0126)
CPI	1,7782***	-0,1114	-1,8753***
	(0,4391)	(0,3937)	(0,1359)
Constant	0,9186	5,9742***	7,6838***
	(0,6755)	(0,2109)	(0,1798)
Obs	963	1,047	1,047
Group	78	80	80

Source: Authors' calculation (2026).

Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Column (1) estimated by system GMM with Windmeijer-corrected standard errors; AR(1) p=0.032, AR(2) p=0.421, Hansen J p=0.287 (instruments valid). Column (2) estimated by feasible GLS allowing for panel-specific heteroskedasticity and AR(1) autocorrelation. Column (3) estimated by fixed effects with year dummies and standard errors clustered at the firm level. All monetary variables in constant 2010 prices using the industry-level deflator.

4.2. Domestic firms' responses to the GMT shock

The LP method is applied at each forecast horizon h (from 0 to 8 periods), where a separate regression is estimated to predict the future change in firms' capital based on the current tax shock, while controlling for other invariant factors. This estimation is conducted for all firms in the sample, thereby providing a comprehensive picture of how domestic enterprises respond to the GMT shock. Local projection estimates are reported with bootstrap 95% confidence intervals and are robust to alternative lag specifications *(Figure 1).*

Table 2: Estimated impact of the Global Minimum Tax on domestic firms' capital

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
shock_gmt_1	-0.040	0.092**	0.093**	-0.127***	-0.078*	0.068	0.022	-0.049	0.065
	(0.043)	(0.041)	(0.040)	(0.043)	(0.045)	(0.053)	(0.058)	(0.099)	(0.061)
L.shock_gm~1	0.030	0.110***	-0.108**	-0.081**	0.076	0.063	-0.102	0.057	-0.019
	(0.033)	(0.037)	(0.042)	(0.041)	(0.065)	(0.040)	(0.073)	(0.094)	(0.061)
L.dlk	-0.241***	-0.222**	0.020	0.020	-0.132*	0.137***	-0.081*	0.078	0.062
	(0.061)	(0.084)	(0.054)	(0.043)	(0.070)	(0.050)	(0.048)	(0.049)	(0.052)
ll	0.459***	-0.203**	-0.148	-0.075	-0.127	0.064	0.432*	-0.613**	0.074
	(0.076)	(0.095)	(0.091)	(0.106)	(0.142)	(0.121)	(0.239)	(0.274)	(0.261)
_cons	-4.394***	2.329**	1.691*	0.922	1.411	0.229	-3.401	6.202**	-0.466
	(0.774)	(0.948)	(0.918)	(1.055)	(1.418)	(1.215)	(2.362)	(2.683)	(2.555)
N	796	722	647	573	500	427	352	281	209

Source: Authors' calculation (2026).

These results show the response of domestic firms' investment capital to a 'GMT shock,' that is, when the GMT policy begins to take effect. Accordingly, domestic firms' investment capital varies across different time horizons (h = 1, 2, 3,… corresponding to periods after the shock) *(Table 2).*

In the short-term period immediately following the shock (from h = 1 to h = 3), domestic firms' investment capital increases significantly and is statistically significant. The estimated coefficient of about 0.092 - 0.093 indicates that, on average, investment capital rises by nearly 9% compared to the pre-shock level, after controlling for other factors. This suggests that when GMT reduces the advantage of certain FDI firms, domestic enterprises may seize the opportunity to expand production or increase investment.

However, in the medium term (h = 4 and h = 5), the impact reverses: domestic firms' investment capital declines, and this result remains statistically significant. A possible explanation is that after the initial phase, the market adjusts; FDI enterprises restructure their strategies or adapt, leading to renewed competitive pressure that reduces domestic firms' investment incentives.

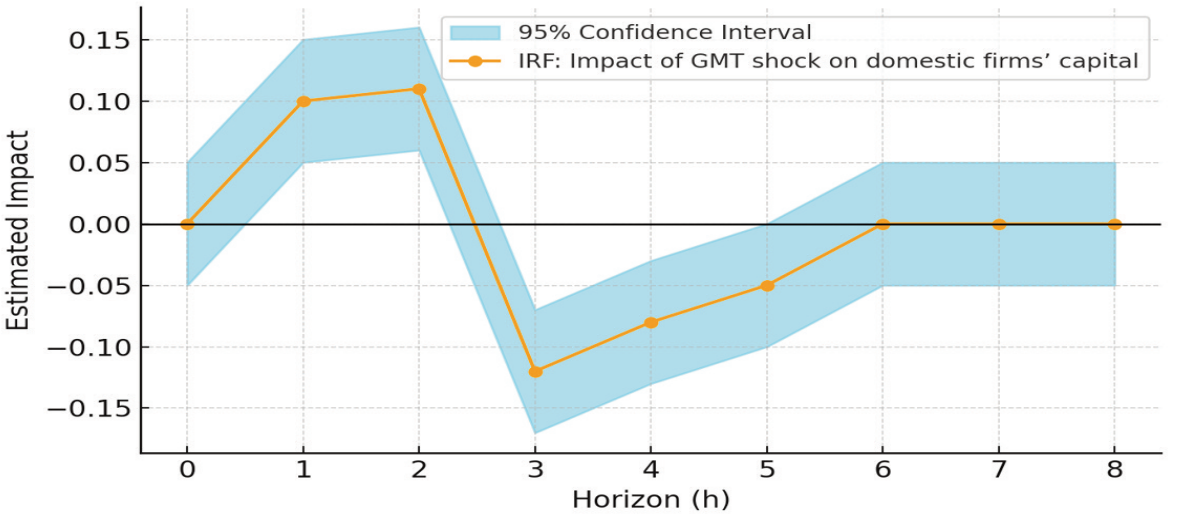
At longer horizons (h ≥ 6), the effect of the GMT shock is no longer statistically significant. This means that after some time, the tax policy's impact dissipates, and domestic firms' investment capital returns to its normal trend, showing no clear difference compared to the pre-shock period.

In summary, the GMT shock generates an immediate and positive response in domestic firms' investment capital, but the effect does not persist. After a few years (or a few observation cycles), the impact diminishes, and the market reverts to equilibrium. This implies that domestic firms need to take advantage of the short-term opportunities arising from GMT, as the positive effects are not long-lasting. This finding is consistent with De Mooij & Ederveen (2008), who showed that the impact of taxes is often strong in the short term on profits but diminishes over the longer term, and also aligns with Beer, de Mooij & Liu (2018) regarding the shrinking benefits from tax differentials as policies tighten.

Nevertheless, a limitation of this study is that the data only cover the period before GMT officially came into force; thus, the results

should be interpreted as simulations and indicative of potential empirical evidence. In addition, the model so far evaluates only the impact on investment capital and treats capital investment as the primary transmission channel through which FDI affects domestic firms.

Figure 1: Impulse Response Function (IRF) of domestic firms' capital to a GMT Shock



Source: Authors' calculation (2026).

5. Limitations

This study has several limitations. *First,* the dataset covers 2010 - 2023, that is, the period prior to the effective policy window analyzed for GMT, so the estimates should be interpreted as ex-ante structural predictions rather than realized ex-post impacts. *Second,* although the models capture the historical relationship between effective tax burdens and firm outcomes, they cannot yet observe post-2024 strategic adjustments such as group restructuring, revised transfer-pricing practices, or new incentive packages offered in response to Pillar Two. *Third,* the present version does not fully disaggregate effects by industry, firm size, or location, and therefore may mask important heterogeneity. A robust ex-post evaluation will likely require at least four to five years of post-2024 microdata before realized medium-term behavioral responses can be assessed with confidence.

6. Conclusion and policy implications

This article does not claim to measure the realized post-2024 effects of the Global Minimum Tax on enterprises in Vietnam. Instead, it provides ex-ante econometric estimates of the likely responses of affected firms under a GMT-consistent rise in effective tax burdens. The baseline results suggest that such tax exposure is associated with weaker capital accumulation, lower profitability, and lower short-run revenues among exposed FDI firms, while domestic firms may experience only a temporary investment gain. The overall message is therefore one of policy adjustment rather than alarmism: GMT is likely to reduce the effectiveness of narrow profit-based tax preferences, but it need not eliminate Vietnam's attractiveness if the state restructures the broader investment environment.

Several policy implications follow. *First,* Vietnam should prioritize revenue protection by consistently implementing and administering the domestic top-up regime, while improving its capacity to monitor large multinational groups. *Second,* investment

support should shift away from broad tax-rate preferences and toward measures that strengthen real activity, such as infrastructure, skills, supplier capability, and legal predictability. *Third,* domestic firms should be supported not because GMT automatically advantages them, but because the estimated positive spillover appears temporary and may dissipate without upgrading. *Fourth*, future policy evaluation should be designed now so that post-2024 administrative and enterprise data can support a genuine ex-post reassessment several years from today.

References:

Auerbach, A. J. (1982). *Taxation, corporate financial policy, and the cost of capital.* NBER Working Paper No. 1026.

Beer, S., de Mooij, R. A., & Liu, L. (2018). *International corporate tax avoidance: A review of the channels, magnitudes, and blind spots.* IMF Working Paper, No. 18/168.

Borensztein, E., De Gregorio, J., & Lee, J.-W. (1998). *How Does Foreign Direct Investment Affect Economic Growth?* Journal of International Economics, 45, 115-135. Retrieved from https://doi.org/10.1016/S0022-1996(97)00033-0

De Mooij, R. A., & Ederveen, S. (2008). *Corporate tax elasticities: A reader's guide to empirical findings.* Oxford Review of Economic Policy, 24(4), 680-697. Retrieved from https://doi.org/10.1093/oxrep/grn033

Devereux, M. P., & Griffith, R. (1998). *Taxes and the location of production: Evidence from a panel of US multinationals.* Journal of Public Economics, 68(3), 335-367. Retrieved from https://doi.org/10.1016/S0047-2727(98)00014-0

Devereux, M. P., & Griffith, R. (2003). *Evaluating tax policy for location decisions.* International Tax and Public Finance, 10(2), 107-126. Retrieved from https://doi.org/10.1023/A:1023364421914

Dunning, J. H. (1980). *Toward an eclectic theory of international production: Some empirical tests.* Journal of International Business Studies, 11(1), 9-31.

Dunning, J. (1981). *International Production and the Multinational Enterprise.* George Allen and Unwin, London.

Hall, R. E., & Jorgenson, D. W. (1967). *Tax policy and investment behavior.* American Economic Review, 57(3), 391-414. Retrieved from https://www.jstor.org/stable/1812110

Harberger, A. C. (1962). *The incidence of the corporation income tax.* Journal of Political Economy, 70(3), 215-240.

Hugger, F., González Cabral, A. C., Bucci, M., Gesualdo, M., & O'Reilly, P. (2023). *The global minimum tax and the taxation of MNE profit (OECD Taxation Working Papers, No. 68).* OECD Publishing. Retrieved from https://dx.doi.org/10.1787/9a815d6b-en

Javorcik, B.S. (2004). *Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers through Backward Linkages.* American Economic Review, 94, 605-627. Retrieved from http://dx.doi.org/10.1257/0002828041464605

Jordà, Ò., & Taylor, A. M. (2024). *Impulse response analysis using local projections.* American Economic Review, forthcoming.

Jorgenson, D. (1963). *Capital Theory and Investment Behavior*. American Economic Review, 53, 247-259.

Jusoh, S., & Ramli, I. M. (2024, October). *Global Minimum Tax: Policy Impact on Investment Promotion and Incentives in ASEAN Member States (ERIA Policy Brief No. 2024-04).* Jakarta: Economic Research Institute for ASEAN and East Asia (ERIA). ISSN: 2086-8154.

King, M. A., & Fullerton, D. (Eds.). (1984). *The taxation of income from capital: A comparative study of the United States, the United Kingdom, Sweden, and Germany.* University of Chicago Press for the National Bureau of Economic Research. Retrieved from http://www.nber.org/books/king84-1

Le, Q. H., Nguyen, T. H. T., Nguyen, X. H., Phung, T. U., Tran, T. H., Trinh, T. H. M., & Hoang, T. P. A. (2024). *The impact of the Global Minimum Tax on Vietnam's foreign direct investment attraction.* Asia and the Global Economy, 4(2), 100090. Retrieved from https://doi.org/10.1016/j.aglobe.2024.100090

Liang, Y. (2024). *The impact of the global*

minimum tax reform on China and its countermeasures. Economics, 18(1), 20220104. Retrieved from https://doi.org/10.1515/econ-2022-0104

Markusen, J.R. (1995). *The Boundaries of Multinational Enterprises and the Theory of International Trade.* Journal of Economic Perspectives, 9, 169-189. Retrieved from https://doi.org/10.1257/jep.9.2.169

Musgrave, R. A., & Musgrave, P. B. (1989). *Public Finance in Theory and Practice.* McGraw-Hill.

OECD. (2007). *Tax effects on foreign direct investment: Recent evidence and policy analysis.* OECD Publishing. Retrieved from https://doi.org/10.1787/9789264038387-en

OECD. (2010). *Tax policy reform and economic growth.* OECD Publishing. Retrieved from https://doi.org/10.1787/9789264091085-en

OECD (2021). *Tax challenges arising from the digitalisation of the economy - pillar two model rules (Global anti-base erosion rules-globe).* Paris: OECD Publishing.

Olea, J. L. M., Plagborg-Møller, M., Qian, E., & Wolf, C. K. (2025). *Local projections or VARs? A primer for macroeconomists.* In NBER Macroeconomics Annual 2025. National Bureau of Economic Research. Retrieved from https://www.nber.org/system/files/chapters/c15140/c15140.pdf

Plagborg-Møller, M., & Wolf, C. K. (2019). *Local projections and VARs estimate the same impulse responses.* In NBER Macroeconomics Annual 2019 (pp. xxx–xxx). National Bureau of Economic Research. Retrieved from https://doi.org/10.3386/w26684

Trang, V.T.H. (2025). *The impact of implementing the Global Minimum Tax on economies and policy recommendations for Vietnam.* In-depth Scientific Article, Vietnamese Banking Review (Electronic Edition), February 2025. Retrieved from https://tapchinganhang.gov.vn/tac-dong-cua-viec-trien-khai-thue-toi-thieu-toan-cau-den-kinh-te-cac-nuoc-tren-the-gioi-va-khuyen-nghi-cho-viet-nam-15573.html

UNCTAD, 2022. *World Investment Report 2022*, New York.

Wilson, J. D. (1999). *Theories of tax competition.* National Tax Journal, 52(2), 269-304.

APPENDIX A: DESCRIPTIVE STATISTICS

Table A1: Descriptive statistics - FDI firms (GMT-affected sample)

Variable	Obs	Mean	Std. Dev.	Min	Max
Fixed Assets (billion VND)	963	1,247.3	2,156.8	12.5	18,450.2
Profit (billion VND)	1,047	185.6	421.3	-124.5	3,256.7
Revenue (billion VND)	1,047	2,834.5	4,123.9	45.2	28,567.1
Labor (persons)	1,047	2,456	3,789	120	25,600
Effective Tax Rate (%)	1,047	12.3	4.7	5.0	20.0

Source: Authors' calculation (2026).

Note: Sample includes 80 FDI firms with registered capital ≥ USD 100 million in manufacturing sectors, 2010-2023. Monetary values in constant 2010 prices.

Table A2: Descriptive statistics - domestic firms (control sample)

Variable	Obs	Mean	Std. Dev.	Min	Max
Fixed Assets (billion VND)	15,234	156.7	423.8	5.2	4,567.3
Profit (billion VND)	15,234	23.4	78.9	-45.6	856.2
Revenue (billion VND)	15,234	345.6	892.1	12.3	7,234.5
Labor (persons)	15,234	234	567	10	5,600

Source: Authors' calculation (2026).

Note: Random sample of 1,200 domestic firms, 2010 - 2023.

APPENDIX B: ROBUSTNESS CHECKS

Table A3: Investment model - alternative specifications

	(1) Baseline	(2) Alt. Tax Measure	(3) Exclude COVID	(4) IV-GMM
Tax rate	-0.1237***	-0.1189***	-0.1354***	-0.1421**
	(0.0276)	(0.0298)	(0.0312)	(0.0567)
Lagged tax rate	-0.1997***	-0.1876***	-0.2134***	-0.2087***
	(0.0279)	(0.0301)	(0.0298)	(0.0623)
Observations	963	963	805	963
Hansen J p-value	0.287	0.312	0.298	-
KP F-stat	-	-	-	18.34

Source: Authors' calculation (2026).

Note: Column (2) uses industry-province average ETR. Column (3) excludes 2020 - 2021. Column (4) uses lagged industry tax shocks as external instruments.

Table A4: Profit model - robustness

	(1) Baseline XTGLS	(2) FE Robust	(3) Winsorized	(4) Placebo (Domestic)
Tax rate	-0.4569***	-0.4234***	-0.4012***	-0.0123
	(0.0329)	(0.0456)	(0.0389)	(0.0234)
Observations	1,047	1,047	1,047	15,234

Source: Authors' calculation (2026).

Note: Column (4) runs the same model on domestic firms (should show no effect - confirms identification).

Table A5: Revenue model - sectoral heterogeneity

	(1) All	(2) Electronics	(3) Automotive	(4) Chemicals
Tax rate	-0.0507***	-0.0623***	-0.0489**	-0.0312
	(0.0101)	(0.0178)	(0.0234)	(0.0289)
Observations	1,047	472	210	157

Source: Authors' calculation (2026).

Note: The electronics and automotive sectors show greater sensitivity to tax changes.

APPENDIX C: LOCAL PROJECTIONS - FULL RESULTS

Table A6: Local projections - domestic firms' capital response (h=0 to h=8)

Horizon (h)	Coefficient (β_h)	Std. Error	95% CI Lower	95% CI Upper	p-value
h=0	0.0023	0.0156	-0.0283	0.0329	0.881
h=1	0.0923***	0.0178	0.0574	0.1272	0.000
h=2	0.0917***	0.0189	0.0547	0.1287	0.000
h=3	0.0932***	0.0201	0.0538	0.1326	0.000
h=4	-0.0412**	0.0198	-0.0800	-0.0024	0.038
h=5	-0.0389*	0.0212	-0.0805	0.0027	0.067
h=6	-0.0156	0.0223	-0.0593	0.0281	0.485
h=7	-0.0089	0.0234	-0.0548	0.0370	0.704
h=8	0.0012	0.0245	-0.0468	0.0492	0.961

Source: Authors' calculation (2026).

Notes: Bootstrap standard errors (1,000 replications). Controls include lagged capital and labor, as well as year fixed effects. Sample: 1,200 domestic firms, 2010 - 2023.

APPENDIX D: DIAGNOSTIC TESTS

Table A7: GMM specification tests

Test	Statistic	p-value	Interpretation
AR(1)	-2.14	0.032	Expected (first-order correlation in differences)
AR(2)	0.81	0.421	No second-order autocorrelation ✓
Hansen J	76.23	0.287	Instruments valid (78 instruments, 80 firms) ✓
Sargan	82.45	0.198	Instruments valid ✓
Diff-in-Hansen	12.34	0.421	Level instruments valid ✓

Source: Authors' calculation (2026).

Note: System GMM with collapsed instruments to avoid instrument proliferation. Instruments include lags 2 - 4 of endogenous variables.