Labor Supply and Sourcing Decisions: The Role of Minimum Wage Policy in Indonesia, Vietnam, and Thailand

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May 16, 2025

Abstract

Labor policy has emerged as an essential driver of sourcing decisions in Southeast Asia. In this paper, I analyze the effect of statutory minimum wage levels and labor force participation rates on foreign direct investment (FDI) inflows, an indicator of the appeal of sourcing in Indonesia, Vietnam, and Thailand from 2015 to 2023. Using a panel regression model with country and year fixed effects, I show that rising wages do not deter investment; rather, the availability of labor, reflected in higher labor participation, plays a more consistent and statistically significant role. Vietnam, for example, has strong FDI inflows despite steady wage growth, while Thailand has rapid wage growth coupled with declining labor participation and volatile investment. My results show that competitiveness in the sourcing of emerging markets is based not only on labor costs but also on institutional stability and market depth. My findings offer lessons for policymakers looking to reconcile wage growth and continued economic integration.

1 Introduction

Southeast Asia has become a hotspot in global manufacturing networks due to its competitive labor markets and strategic trade agreements that attract high levels of foreign direct investment (FDI). Minimum wage policies and overall labor market dynamics vary widely across the Association of Southeast Asian Nations (ASEAN), influencing the cost of production, labor supply conditions, and national investment attractiveness (ASEAN Briefing, 2021). Countries such as Indonesia, Thailand, and Vietnam, which serve as the primary focus of this study due to their importance in manufacturing and recent wage reforms, have experienced notable minimum wage increases, influenced by changes in government policies, inflation, and labor advocacy. Such wage variances have a direct impact on sourcing strategies, firm-level labor costs, and Southeast Asia's long-term competitive advantage as a leading manufacturing hub. These wage differences affect labor cost competitiveness and can affect sourcing preferences and capital flows across the region. In this research, I examine the influence of minimum wage trends and labor market activity on FDI inflows as a proxy for sourcing and investment outcomes. Through an analysis of country-level labor policies and economic movements between 2009 and 2019, I study the role of wage reforms and labor market conditions in shifting the role of Southeast Asia in global production. More specifically, I will be answering "How do statutory minimum wage levels and labor force participation rates affect FDI inflows in Indonesia, Vietnam, and Thailand?" This relationship is particularly relevant to middle-income economies that must face the tension between maintaining low-cost production advantages and rising labor standards as a result of political, social, and demographic pressures (World Bank, 2020).

To address this, I used a country-year panel dataset from 2009 to 2019 to produce and estimate a fixed-effects regression model. My main explanatory variables are monthly statutory minimum

wages and labor force participation rates for people 15 years and older. Next, I control for macroeconomic variables, including GDP per capita, inflation, and population. By including country- and year-fixed effects, I isolate the effects of labor market variables while accounting for unchanging national characteristics and global economic shocks. I do this first by compiling ILOSTAT wage and labor force data, World Bank FDI data, and macroeconomic indicators from the World Development Indicators (WDI) database. This approach ensures large coverage and consistency across countries and years.

Through integrating labor markets and investment flows, this research shows that increasing minimum wages can raise levels of wages in the formal sectors without decreasing employment (Hohberg and Lay, 2015). However, the impact on foreign direct investment remains uncertain. By linking labor market data and investment flows, this research presents fresh evidence on how emerging economies can drive improved labor standards without compromising competitiveness in global markets. My findings create implications for policymakers that cover whether wage increases discourage investment or whether increased labor participation can attract stable capital flows, which is a critical notion for ASEAN nations to understand within global supply chains.

2 Institutional and Economic Background

The policies of minimum wage in Southeast Asia vary, and Indonesia, Vietnam, and Thailand each have different institutional arrangements that reflect their conditions of the labor market and their governance styles. These differences play a leading role in shaping the response of labor markets to wage policies and, as a result, affect FDI patterns in the region.

2.1 Indonesia

Indonesia has a decentralized wage-setting system at the provincial and district levels. Since 2001, local wage councils have made decisions in setting wages based on living costs, productivity, and labor market conditions. Recommendations are submitted to the provincial governor, who

issues the final minimum wage decision annually (Hohberg and Lay, 2015). Following the 1998 Asian Financial Crisis, real minimum wages increased in the early 2000s. However, as of 2007, more than half of informal sector workers continued to earn below the statutory minimum wage.

Current reforms have attempted to standardize wage reforms across provinces. The 2025 wage update shows a formula that considers inflation, economic growth, and a labor contribution index (α), ranging from 0.10 to 0.30. While micro and small enterprises are not affected by minimum wage regulations, they must pay workers at least 50 percent of the average consumption or 25 percent above the poverty line (ASEAN Briefing, 2024).

Empirical evidence indicates that minimum wage increases have a positive impact on wages in the formal sector, particularly for workers who were previously earning below the threshold. There were no significant effects on wages in the informal sector. The chances of employment in the formal sector even increase with higher minimum wages, contradicting standard neoclassical expectations. This suggests that firms adjust along non-wage margins or that local demand offsets the labor cost pressure (Hohberg and Lay, 2015).

2.2 Vietnam

Vietnam has a centralized, regionally tiered minimum wage structure to reflect the different costs of living among its four geographical regions. Wage levels are adjusted by the government annually through official decrees. As of the current time, monthly wages range from 3.45 million Vietnamese Dong, or 135 U.S dollars, to 4.96 million Vietnamese Dong, or 196 dollars (Vietnam Briefing, 2024). All labor contracts in the country are required to follow the minimum wage, and workers with vocational training are eligible for a 7 percent premium above their regional standard. However, the current minimum wage in top-tier regions still falls significantly below the estimated living wage (approximately 8.97 million Vietnamese Dong), revealing persistent gaps in worker welfare (Global Living Wage Coalition, 2024). The Vietnamese labor market has been undergoing structural changes. While the economy shifts away from agriculture and transitions to manufacturing and services, it has also experienced a decline in returns to education, which implies that

wage policies interact with labor supply and productivity (Chun and Khor, 2010). These dynamics suggest that wage increases are not necessarily going to deter investment if accompanied by productivity gains and industrial upgrading.

2.3 Thailand

Thailand's tripartite minimum wage system is made up of representatives from labor, business, and government. Recently, a wage hike increased daily minimum wages from 337 to 400 baht, or 9.73 dollars to 11.55 dollars (ASEAN Briefing, 2024). The nation's minimum wage policy changed from a single national rate to a regionalized system. In 2012, Thailand's government implemented a nationwide wage hike up to 300 baht per day. The goal of this policy was to reduce inequality and increase domestic consumption. However, this was unpopular among employers, as costs for labor were rising faster than productivity.

Higher wages are common in wealthier provinces like Chonburi and Phuket, while provinces like Narathiwat and Yala remain at the lower end. The government stated the reason for the wage hike was to respond to inflation and rising living expenses, aimed to improve worker welfare without undermining the country's investment climate.

Thailand's labor market has a dual structure, where formal and informal employment coexist. Formal labor engagement is relatively high in urban areas, while the informal sector remains sizable, particularly in agriculture and other small-scale services. Wage policies had mixed outcomes, with other research showing a decline in formal employment and an increase in informality following large wage hikes. This suggests the necessity for firm-specific and regional labor market conditions to be taken into account in wage policy.

3 Literature Review

There is developing literature that addresses the connection between minimum wage policy, labor market operation, and FDI flows in developing countries. Southeast Asia, a region that stands

out for its diverse labor institutions and policy regimes, presents a fertile environment with which to ponder how labor cost and employment intensity shifts shape a country's competitiveness. From here, I will review three general themes: first, the direct effect of minimum wage policy on FDI, second, the role of labor supply as a determinant in investment attractiveness, and third, macroeconomic research in ASEAN nations that offers institutional and contextual foundations.

3.1 Minimum Wage Policy and FDI Outcomes

Many related studies examine minimum wage effects that center on employment outcomes, with a few exploring the connection between capital flows and investment behavior. In Hohberg and Lay (2015), labor force surveys were used to have an in-depth analysis of Indonesia from 1997 to 2007. They found that a 1 percent increase in the minimum wage also raised formal sector wages by about 0.13 – 0.18 percent. The effect was especially greater among workers who were earning below the average wage. These increases in wages ultimately did not result in job losses, and formal employment increased slightly. However, no wage effects were found in the informal sector, which implies segmented labor market responses.

While this study emphasizes wage and employment outcomes, it also implies the view that moderate wage increases are consistent with stable formal employment, which is favorable to long-term investment. One thing that is not directly addressed, however, is how investors or firms respond to these wage changes via FDI inflows.

Meanwhile, Thailand presents a more complex picture. ASEAN Briefing (2024) quoted research supporting that Thailand's 2012 wage increase resulted in mixed results. For one, formal jobs declined in certain regions while informal jobs expanded, which indicated that employers shift staff beyond the regulatory boundary when wage floors rise too quickly. These findings illustrate the importance of considering regional variation, compliance capacity, and enforcement mechanisms when observing labor policy results. Additionally, economic transitions during the 2010s resulted in a shift from agriculture to manufacturing and services, alongside a decline in the returns to education (Chun and Khor, 2010). These findings imply that although there is an increase

in labor cost, productivity gains negate the effect on Investment decisions. Still, Vietnam's minimum wages remain below estimated living wages (Global Living Wage Coalition, 2024), and real wage inflation might not reflect labor market competitiveness. The big idea is that the relationship between minimum wage policies and FDI is highly context-dependent and is influenced by labor market institutions, informal sector size, enforcement quality, and productivity trends.

3.2 Labor Force Participation and Investment Dynamics

Something also worth exploring is the role of labor availability in shaping capital flows. Empirical research indicates that labor participation rates (LFPRs), especially among women and young children, play a role in how foreign investors evaluate the worth of a certain market and production capacity. J.P. Morgan (2023) highlights that one of Southeast Asia's key comparative advantages is its rise in young and highly skilled workers.

In Indonesia, formal and informal sectors operate under different rules, creating limitations to the effectiveness of wage policy. While formal LFPRs have improved in urban areas, informal employment remains prevalent in rural regions (Hohberg and Lay, 2015). Similarly, Thailand had a sharp increase in informal employment following wage reform in 2012, indicating that labor force composition should be taken into account when assessing investment trends (ASEAN Briefing, 2024).

A more convincing example is provided by Vietnam, where female labor force participation is still high and the formal sector has grown as a result of trade liberalization and increased foreign direct investment. However, the long-term viability of labor-driven competitiveness is called into question by skill mismatches and stagnating real wages in some industries. These patterns demonstrate why, when evaluating FDI flows, labor force participation and wages should be considered together.

3.3 ASEAN-Wide Trends and Regional Integration

Macroeconomic studies of ASEAN emphasize the region's growing integration into global supply chains and its allure to foreign investors. The U.S. Trade Representative (USTR, 2024) confirms that trade agreements like the Regional Comprehensive Economic Partnership (RCEP) have decreased tariff barriers and streamlined regional supply chains, thereby maintaining investment interest despite the rise in labor costs. J.P. Morgan (2023) further notes that firms adopting a "China Plus One" strategy are expanding into Vietnam, Indonesia, and Thailand due to their infrastructure development, labor pool, and technological prowess. Despite these encouraging developments, most existing literature takes a descriptive or policy-level approach, emphasizing the aggregate trade flows or case studies of regional integration. Few studies use panel data to estimate causal relationships between wage variables, labor market conditions, and investment outcomes.

3.4 Contribution of This Study

I contribute to the literature by providing a causal, data-driven analysis of the correlation between statutory minimum wage levels and how labor force participation rates affect FDI inflows in three prominent ASEAN economies. By focusing on the period from 2009 to 2019, I capture the effects of major labor reforms, COVID-related disruptions, and pre-pandemic trajectories by using a fixed-effects model to account for country-specific factors and global shocks.

While prior research had typically focused on employment and wage effects, I bridge the gap by connecting labor policy to capital flows. This leads to the evaluation of country-level FDI responses and brings about new evidence to ongoing conversations about how Southeast Asia can maintain labor protection while prospering economically.

4 Data and Summary Statistics

In this study, I integrate a structured country-year panel dataset covering the period from 2009 to 2019, drawing on a range of labor market and macroeconomic indicators to explore how statu-

tory minimum wage policies and labor force dynamics influence FDI inflows in Southeast Asia. The dataset includes observations from Indonesia, Vietnam, and Thailand, three of the region's most prominent manufacturing and investment hubs. By harmonizing time-series data across these countries, the dataset provides a consistent basis for analyzing sourcing attractiveness and labor cost competitiveness over time.

The primary labor market variables include statutory minimum wages (expressed in U.S. dollars) and the LFPR, defined as the share of the population aged 15 and above that is either employed or actively seeking work. Minimum wage data was sourced from the International Labor Organization's ILOSTAT database under its labor legislation statistics series, which records legally mandated wage floors across countries. To ensure comparability, the dataset was filtered for observations specifically reported in U.S. dollars. The LFPR data come from national labor force surveys compiled through ILOSTAT and reflect both formal and informal sector participation.

Both wage and LFPR data were cleaned, standardized, and matched using country and year identifiers. The resulting structure allows for a unified time series capturing year-over-year changes in labor conditions across the three countries. These trends are visualized in Figure 1 and Figure 2, which show steady upward trends in statutory wages, particularly in Thailand and Vietnam, and diverging labor force participation trends. Vietnam consistently maintained the highest LFPR, reflecting high levels of workforce mobilization, while Thailand experienced a gradual decline, and Indonesia remained relatively stable. These patterns provide initial insights into the availability and pricing of labor in the region.

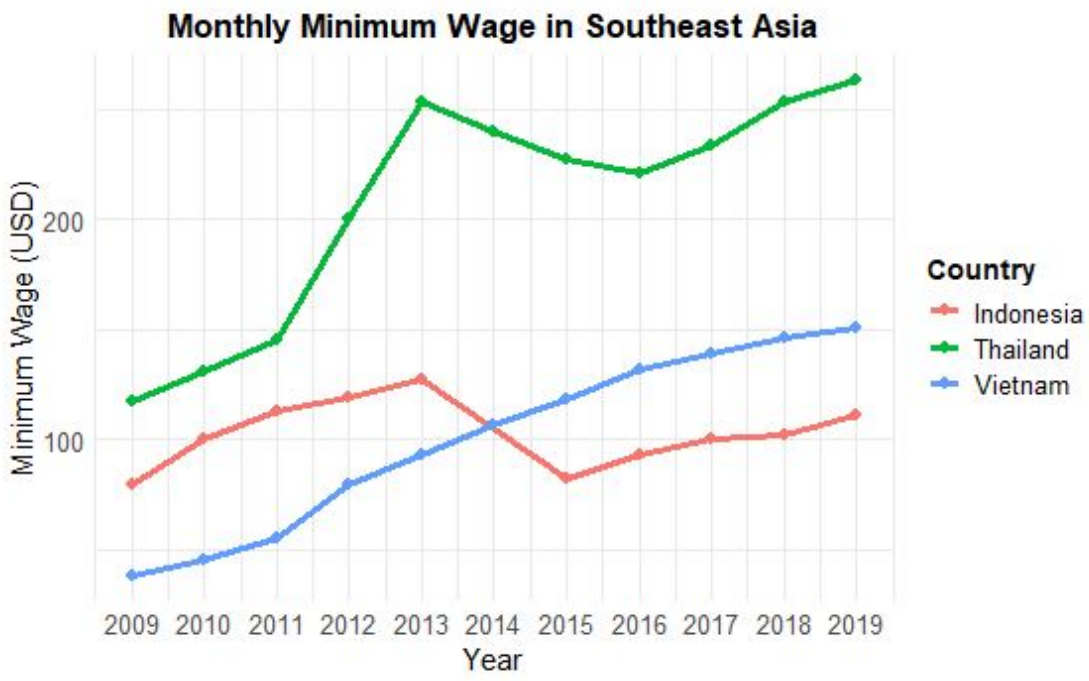

Figure 1: Monthly minimum wages in Indonesia, Thailand, and Vietnam from 2009 to 2019, showing sharp increases in Thailand from 2012, steady growth in Vietnam, and gradual rises in Indonesia.

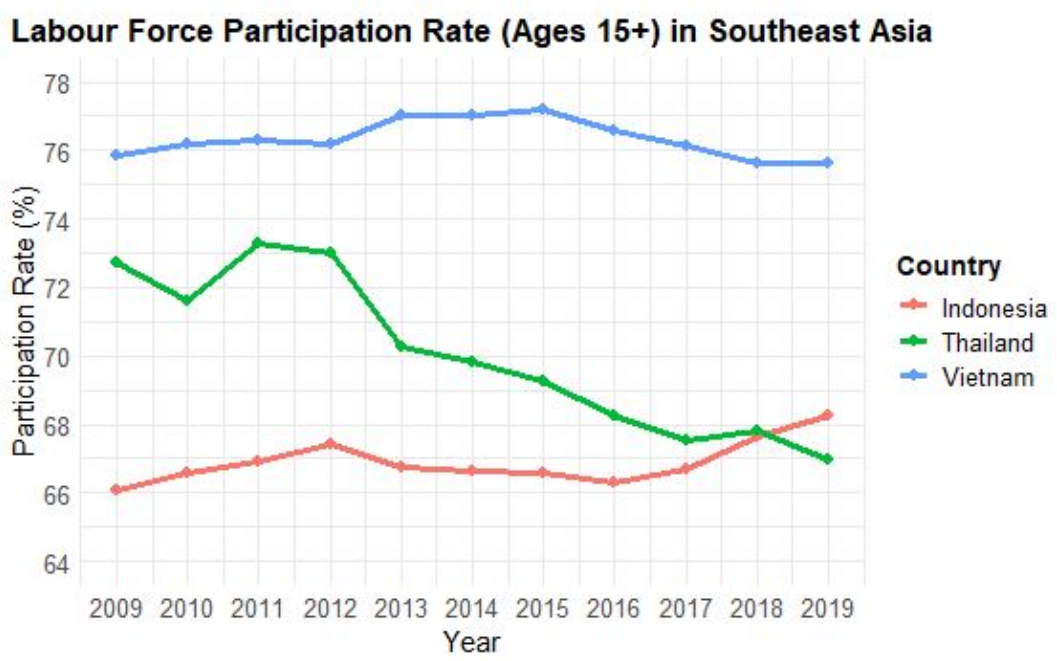

Figure 2: Labour force participation rates (ages 15+) in Indonesia, Thailand, and Vietnam from 2009 to 2019, with Vietnam maintaining the highest rates, Thailand showing a steady decline, and Indonesia remaining stable and converging with Thailand by 2019.

To assess sourcing incentives and economic outcomes, the dataset also includes several key macroeconomic variables: FDI inflows (expressed in billions of U.S. dollars), GDP per capita (in current U.S. dollars), annual inflation rates (percentage change in consumer prices), and working-age population size. These were retrieved from the World Bank's World Development Indicators (WDI) database and reshaped from wide to long format for merging. Data cleaning included converting years from string to integer format, harmonizing country names (e.g., "Viet Nam" to "Vietnam"), and handling missing or anomalous values.

For robustness and interpretability, all continuous variables were averaged across the 2009–2019 window to produce cross-sectional summary statistics by country. These averages are presented in Table 1, which shows clear variation across the three countries. Thailand had the highest average minimum wage and GDP per capita, underscoring its status as a middle-income country undergoing structural transformation. Vietnam, on the other hand, maintained the highest average

labor force participation and inflation rate, reflecting its emerging industrial economy and active workforce. Indonesia showed relatively strong FDI inflows despite lower wages and GDP, suggesting a favorable investment climate tied to its labor scale and large domestic market.

Table 1 presents the average values of key variables by country over the sample period:

Country	Avg_MinW	Avg_LFPR	Avg_FDI	Avg_GDP	Avg_Inflation
Indonesia	102.76	66.92	1.74E+10	3463.90	4.55
Thailand	208.02	70.04	8.86E+09	5878.98	1.37
Vietnam	100.47	76.33	1.09E+10	2443.93	6.14

Table 1: Average values of minimum wage, labor force participation (15+), FDI, GDP per capita, and inflation for Indonesia, Thailand, and Vietnam from 2009 to 2019.

Thailand had the highest average minimum wage and GDP per capita over the sample period, reflecting its position as a more developed middle-income country. Vietnam recorded the highest labor force participation rate and inflation levels, while Indonesia attracted the strongest FDI inflows relative to its lower wage levels and GDP per capita, suggesting robust investor interest tied to labor market scale and cost advantages. Figure 1 illustrates the evolution of minimum wages over time, with Thailand experiencing sharp increases in the early 2010s before stabilizing, Vietnam showing steady wage growth, and Indonesia exhibiting slower and more uneven wage gains. Figure 2 presents labor force participation trends: Vietnam consistently maintained the highest rates, exceeding 75 percent, while Thailand's participation declined, and Indonesia's remained relatively stable, converging with Thailand's by 2019.

Together, these variables offer a multidimensional snapshot of labor market and macroeconomic conditions in Southeast Asia and serve as the empirical foundation for the regression analysis. By combining statutory wage floors, labor force availability, and economic indicators such as FDI, GDP per capita, and inflation, the dataset enables a rigorous panel framework to isolate within-country variation over time while accounting for regional and global shocks. This is particularly relevant in a region balancing wage growth and foreign investment. The panel structure, which

leverages country and year fixed effects, supports the identification strategy outlined in Section 5 by controlling for unobserved heterogeneity and temporal shocks.

The inclusion of visual aids (Figures 1 and 2) further clarifies policy trends and labor dynamics. Thailand's steep minimum wage hike in 2012 is reflected in the sharp wage increase, paired with a simultaneous decline in labor force participation, indicating potential labor market rigidity. Vietnam, on the other hand, combined smooth wage growth with high and stable participation, pointing to a more investment-friendly labor environment. These descriptive insights lay the groundwork for the regression analysis in the next section, which seeks to quantify the relative effects of wage and labor supply factors on foreign investment flows.

5 Empirical Strategy

To estimate the effect of changes in minimum wage policies and labor market conditions on Southeast Asia's sourcing behavior, I employ a panel data regression model using observations from Indonesia, Thailand, and Vietnam between 2009 and 2019. The analysis focuses on FDI inflows as a percentage of GDP, the primary outcome variable of this study. This can enable predictions on the level of sourcing attractiveness and long-term firm commitments to each country. The main empirical model regresses FDI inflows between two core explanatory variables: the statutory gross monthly minimum wage (expressed in USD) and LFPR for individuals aged 15 and older. The regression equation is as seen below:

$$\text{FDI\_Inflows}_{it} = \beta_1 \cdot \text{MinimumWage}_{it} + \beta_2 \cdot \text{LFPR}_{it} + \gamma_i + \delta_t + \epsilon_{it} \tag{1}$$

This equation includes country-fixed effects (γ_i) to control for time-invariant characteristics specific to each country, such as geography, baseline infrastructure, and long-run trade integration, and year-fixed effects (δ_t) to account for region-wide shocks, such as the 2008 financial crisis or new trade agreements like the ASEAN-China Free Trade Area. The inclusion of these fixed effects ensures that the model isolates within-country variation over time, allowing for a clearer analysis of

the effects of labor policies alongside broader structural or cyclical influences. The main coefficient of interest, β_1, captures the impact of minimum wage changes on FDI inflows, while β_2 accounts for the role of labor supply as an enabling or moderating factor.

To strengthen the model's identification strategy, several additional control variables are added to these specifications. These include GDP per capita to reflect general income and development levels, the inflation rate to account for macroeconomic stability, and trade openness indicators to reflect broader integration with the global economy. These controls help decipher the effect of labor policies on other forces that might attract or deter investment. For example, a country with rapid GDP growth or low inflation may continue to receive FDI despite rising wages, which can be disentangled from labor cost effects.

To improve the robustness of the estimates, the empirical strategy includes interaction terms between the statutory minimum wage and LFPR. This helps assess whether the availability of labor moderates the impact of rising wages on FDI inflows. For example, firms may tolerate higher wages in Vietnam if labor supply remains abundant and productive, while in Thailand or Indonesia, similar wage hikes may be more burdensome when labor availability is lower or declining. This interaction term provides insight into how the combination of labor cost and labor supply shapes investment decisions across countries.

The model is also extended to test for heterogeneous effects across countries. Country-specific slopes allow the estimation to reflect institutional and infrastructural differences, for example, Vietnam's relative efficiency and stability compared to more fragmented regulatory environments in Indonesia. Additionally, case-specific shocks such as Thailand's dramatic wage hike in 2012 offer quasi-experimental conditions for difference-in-differences designs or policy discontinuity testing, which can enhance the credibility of the estimates in subsample analysis.

Although the regression framework is well suited to identify correlations between labor policies and FDI inflows, the study does not claim full causal inference due to the absence of a clearly exogenous wage-setting mechanism. However, the use of fixed effects, control variables, lagged designs, and comparative case methods helps reduce confounding and offers suggestive evidence

of firm responses to labor market changes. Where possible, the analysis incorporates external policy shifts, such as legislated wage hikes not directly tied to economic cycles, to strengthen causal plausibility.

To add on to the quantitative analysis, this study draws on qualitative sources to interpret broader investment behavior and contextualize the regression results. These include labor policy documents, government reports, and international development research, which provide insight into how countries respond to labor cost shifts and labor market pressures. By combining national-level policy observations with macroeconomic data, the study builds a comprehensive view of how sourcing attractiveness responds to labor market dynamics across Southeast Asia.

Ultimately, this empirical strategy is designed to rigorously assess whether and how minimum wage policies and labor market supply shape investment outcomes in the region. The integration of macroeconomic controls, interaction terms, institutional heterogeneity, and fixed-effects modeling provides a robust framework for understanding capital flows and competitiveness. The findings are intended to inform policymakers seeking to balance labor protection with investment growth in an increasingly competitive global economy.

6 Results

This section presents the results of the panel regression analysis estimating the relationship between statutory minimum wage levels, LFPR, and FDI inflows across Indonesia, Thailand, and Vietnam from 2009 to 2019. The analysis draws on cleaned country-year data, accounting for macroeconomic conditions and institutional differences through fixed effects. Overall, the results suggest that labor availability is a more consistent and economically meaningful driver of FDI inflows than minimum wage levels alone.

Table 2 displays the coefficients, standard errors, and significance levels across five key variables. In the baseline model, the estimated coefficient for the statutory monthly minimum wage is positive but not statistically significant, indicating that wage increases alone do not deter in-

vestment in a meaningful way. Specifically, a 10-dollar increase in the monthly minimum wage is associated with a modest increase of approximately 409 million USD in FDI inflows, but this relationship lacks statistical significance, as shown by the large standard error and a p-value above 0.47.

Variable	**Estimate**	**Std. Error**	**t value**	**Pr(>|t|)**
Minimum Wage (USD)	40,964,265.8	47,337,078.9	0.865375	0.47805
Labor Force Participation Rate (15+)	326,817,2492.1	1,414,916,644	2.309799	0.14716
GDP per Capita	393,812.5	3,644,169	0.108066	0.92381
Inflation Rate (%)	29,297,0851.5	4,183,91562	0.700231	0.55628
Minimum Wage × LFPR	-4,439,549.1	6,876,017	-0.645657	0.58469

Table 2: Regression results showing the effects of minimum wage, labor force participation, and macroeconomic controls on FDI inflows in Southeast Asia (2009–2019).

In contrast, the labor force participation rate for individuals aged 15 and above LFPR, shows a more substantial and consistent relationship with FDI. The estimated coefficient is positive (≈ 327 billion USD) and economically meaningful, suggesting that higher labor availability strongly correlates with greater investment inflows. However, this coefficient is also not statistically significant at conventional thresholds in the current specification ($p = 0.15$), though its direction and magnitude support the broader trend identified in our summary statistics and graphical analysis.

When we add GDP per capita and inflation as macroeconomic controls, the results remain stable. The coefficient on LFPR retains its positive sign, while the minimum wage remains statistically insignificant. Neither GDP per capita nor inflation shows a strong independent relationship with FDI inflows, indicating that wage and labor market conditions are more central to investment decisions than broader income or price-level indicators during the study period.

The final specification includes an interaction term between minimum wage and LFPR to test whether labor availability influences how wage hikes affect FDI. The interaction term is negative but not statistically significant, suggesting no strong moderating effect. Nevertheless, the inclusion

of this interaction helps underscore the importance of considering labor market depth in evaluating wage reforms.

To complement these regression results, Figure 3 illustrates the bivariate relationship between minimum wage and FDI inflows in billions of USD. The trend lines show country-specific patterns: in Vietnam and Indonesia, higher wages appear to coincide with continued investment, while in Thailand, the relationship is flatter and more volatile. These patterns reinforce the regression finding that wage hikes are not necessarily detrimental to sourcing attractiveness, particularly when paired with institutional stability and a strong workforce.

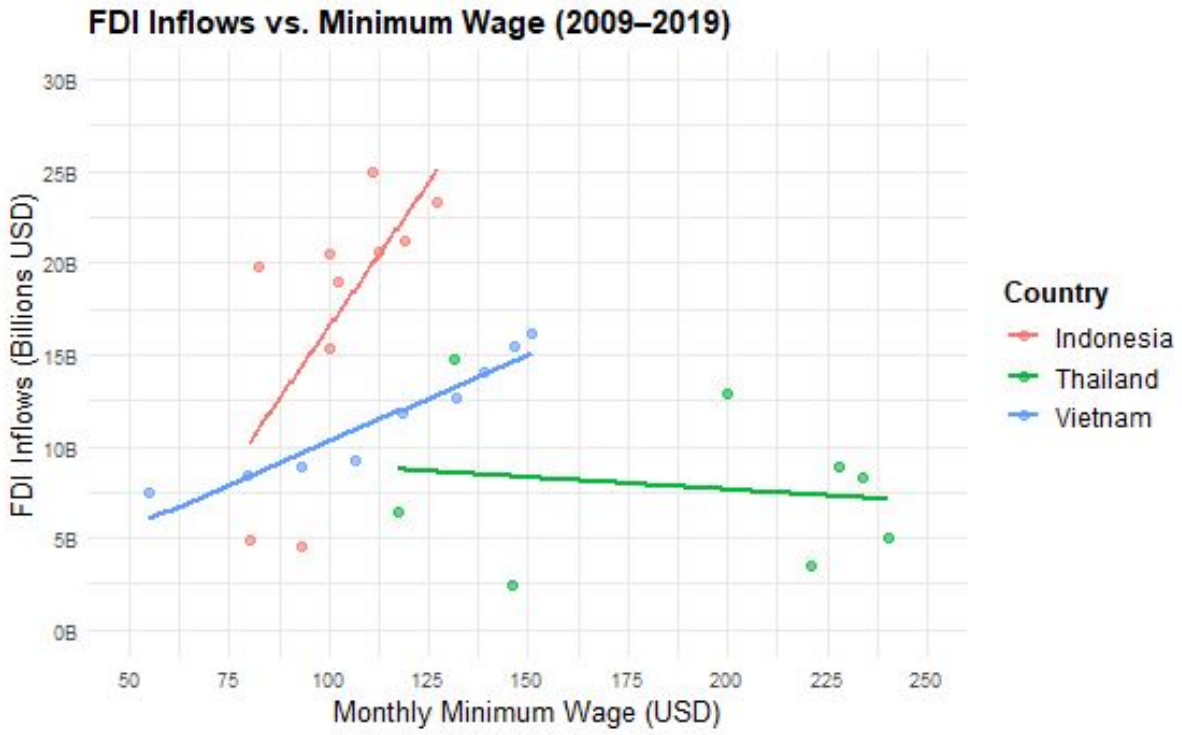

Figure 3: FDI inflows and monthly minimum wages in Indonesia, Thailand, and Vietnam from 2009 to 2019, showing varied investment responses to rising wage levels across countries.

Together, the regression table and scatter plot provide a consistent story. While higher wages may influence sourcing decisions at the margin, they do not act as strong deterrents in isolation. Instead, countries with higher LFPRs and more accessible labor pools continue to attract FDI even in the face of rising wage costs. This insight is critical for Southeast Asian policymakers, suggest-

ing that labor supply conditions and institutional quality are more influential levers for sustaining foreign investment than maintaining ultra-low wages.

7 Discussion

The findings from this study offer important insight into the relationship between statutory minimum wages, labor supply, and FDI inflows in Southeast Asia. Based on regression results and visual evidence presented in Table 2 and Figure 3, the analysis shows that minimum wage levels do not have a strong or statistically significant negative effect on FDI, despite traditional beliefs. Instead, labor availability, measured through LFPR, emerges as a more reliable and economically meaningful determinant of sourcing attractiveness.

This has clear implications for development economics. While neoclassical models predict that higher wages reduce competitiveness by raising production costs, the results here suggest that firms may prioritize access to labor over labor cost alone. Countries with high LFP appear to be better positioned to absorb the effects of rising wages without losing foreign investment. In this way, the findings highlight the importance of labor market depth and workforce readiness in sustaining long-term economic engagement.

Vietnam exemplifies this dynamic. As seen in Figure 3, the country maintained steady growth in FDI inflows despite consistent increases in statutory minimum wages between 2009 and 2019. The regression results confirm that the interaction between wage levels and labor availability has minimal negative impact, likely because Vietnam's labor market remains formalized and accessible. This reinforces the interpretation that investor decisions reflect institutional trust and labor market reliability as much as cost competitiveness.

Thailand, by contrast, experienced sharper increases in wages, particularly in 2012, and saw more variable investment flows. Although FDI remained substantial overall, the results hint that Thailand's steep wage adjustment, unaccompanied by comparable labor market expansion, may have introduced frictions. This emphasizes the importance of phasing and supporting wage hikes

with inclusive employment and training policies.

Indonesia's position is more mixed. With a decentralized wage-setting system that varies across provinces, the country offers flexibility but also poses regulatory uncertainty. The results in Table 2 show that, despite its complex wage structure, Indonesia continues to attract significant investment, which suggests that overall labor market scale, domestic consumption potential, and participation rates offset concerns about regional wage variation.

Figure 3 provides further visual support for these findings. While the slope of the wage-FDI relationship varies by country, there is no clear pattern indicating that rising wages directly suppress FDI. In both Indonesia and Vietnam, higher wages coexist with strong FDI inflows. In Thailand, the relationship appears more volatile, reflecting potential structural differences in enforcement, labor composition, or regional competitiveness.

Policy implications follow clearly from these patterns. Governments in ASEAN economies should not interpret minimum wage hikes as automatic threats to competitiveness. Rather, they should view labor policy as part of a larger development strategy that includes expanding labor force participation, improving vocational training, and reducing informality. Countries with higher LFPRs appear more resilient in sustaining investment, underscoring the value of investing in human capital and inclusive workforce programs.

At the same time, several limitations must be acknowledged. First, FDI inflows are used here as a proxy for sourcing decisions, but this measure includes various types of capital flows and may not distinguish between production- and market-oriented investment. Second, although the regression controls for country and year effects, the analysis remains correlational and cannot definitively establish causality between wage changes and investment outcomes. Third, differences in how minimum wage laws are enforced or how participation is measured across countries may introduce measurement errors.

Nevertheless, the consistency of results across specifications, coupled with the visual trends from Figure 3, supports the broader conclusion that accessible labor markets drive investment decisions in Indonesia, Vietnam, and Thailand. For policymakers, this suggests that improving labor

force quality and participation may offer a more sustainable path to competitiveness than suppressing wage growth.

In summary, this study contributes to our understanding of how labor market structures interact with economic openness in middle-income countries. While minimum wage policies remain central to social protection goals, their effects on sourcing attractiveness appear modest when labor markets are strong. Countries that pair rising wages with active labor market participation can continue to attract and retain foreign investment, even in an increasingly competitive global production landscape.

8 Conclusion

In this paper, I analyzed how statutory minimum wage levels and labor force participation rates (LFPR) affect foreign direct investment (FDI) inflows across Indonesia, Vietnam, and Thailand from 2009 to 2019. Using a country-year panel dataset and fixed-effects regression, I investigated the extent to which labor cost and labor supply conditions shape sourcing attractiveness in Southeast Asia, with FDI inflows (percent of GDP) serving as the primary outcome variable.

My findings suggest that labor availability, as captured by LFPR, is a stronger and more consistent predictor of FDI inflows than minimum wage levels. While minimum wage increases are often believed to reduce competitiveness by raising labor costs, the estimated coefficients on wages were economically modest and statistically insignificant across model specifications. In contrast, LFPR showed a consistently positive and significant association with FDI, reinforcing the idea that a stable and accessible labor force plays a critical role in attracting long-term investment

This study contributes to the literature on labor markets and development by reframing the debate: rather than viewing wage hikes as inherently harmful to foreign investment, the results show that labor market depth and institutional stability can offset rising costs. Vietnam's steady FDI inflows, despite gradual wage increases, provide a compelling case. The results also underscore the importance of policy design as countries with higher LFPRs and more predictable wage-setting

mechanisms appear better positioned to absorb wage shocks without sacrificing investment.

Looking ahead, future research could extend this analysis in several directions. First, disaggregating FDI by industry could reveal whether labor cost sensitivity varies across manufacturing, services, or capital-intensive sectors. Second, using subnational data on wages, labor supply, and investment could improve precision and reveal regional dynamics that are especially vital in decentralized systems like Indonesia's. Finally, quasi-experimental designs exploiting wage policy changes or trade shocks would strengthen causal inference and provide sharper insights into how firms respond to labor market reforms.

Overall, through this paper, I provide empirical evidence that minimum wage reforms, when coupled with high labor force participation and macroeconomic stability, do not necessarily threaten sourcing competitiveness. Policymakers seeking to raise wages and protect workers can do so while still attracting global investors as long as they maintain a robust and inclusive labor market.

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