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Wage and Employment of Japanese Subsidiaries in Asia: A survey on labour cost adjustments*

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Abstract

Japanese firms have long benefited from foreign direct investment (FDI) in Asia, relocating labour-intensive production to lower-wage countries. In the past decades, however, wages in many Asian host countries have risen rapidly, while wages in Japan have remained stagnant, narrowing the wage gap and increasing the cost of offshore production. This study examines how these shifting cost dynamics affect investment decisions, drawing on 20 years of administrative data and an original survey of Japanese FDI firms conducted in November 2024. The data reveal a sharp narrowing of wage differentials alongside slower new investment and rising exits. Survey evidence indicates that most firms either take no action or, at most, make intensive-margin adjustments on increasing labour costs. While rising labour costs are not the dominant reason for withdrawal, subsidiary wage growth is positively associated with exit due to labour cost increases, suggesting that continued wage convergence may contribute to a future downturn in Japanese FDI in Asia.

Keywords: FDI, multinational firms, labour cost
JEL classification: F21, F23, J30

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1 Introduction

Foreign direct investment (FDI) has been a key driver of global economic integration, enabling firms to expand operations beyond borders. In labour-intensive industries such as manufacturing, firms often engage in vertical FDI, relocating parts of the production process to countries with lower labour costs (Grossman and Rossi-Hansberg, 2008; Antràs and Yeaple, 2014). For host countries, such investment can generate employment, facilitate technology and knowledge transfer, and integrate domestic industries into global production networks, thereby contributing to industrial upgrading and economic growth (Verhoogen, 2023). To attract multinational enterprises (MNEs), many low- or middle-income countries establish special economic zones, sign trade agreements, and offer tax incentives, among other measures.

While MNEs from high-income countries have long leveraged wage differentials with host economies, wages in low-income countries have generally grown faster. Between 2016 and 2019, real wages increased by 3.5–4.5% annually in emerging G20 economies, compared with 0.4–0.9% in advanced G20 countries (ILO, 2021). Despite this trend, relatively little is known about how MNEs adapt to sustained wage growth in host countries and how a narrowing wage gap reshapes their investment strategies. The purpose of this study is to investigate how shifting labour cost dynamics influence MNE investment decisions, considering both the extensive margin (entry and exit) and the intensive margin (adjustments within existing foreign affiliates).

We focus on the case of Japanese FDI, with particular attention to subsidiaries in Asian countries. Japan is a major global investor, accounting for 11.8% of total global FDI outflows and ranking as the second-largest source of FDI after the United States (UNCTAD, 2024). Japanese FDI in Asia has expanded markedly over recent decades, contributing to the region's development through job creation and technology transfer. Japan also offers a unique case: while domestic wages have remained stagnant for decades, many of its key Asian destinations have experienced rapid wage growth. This divergence provides an opportunity to examine how narrowing wage differentials shape MNE investment strategies.

This paper analyses the relationship between labour cost dynamics and FDI through

two complementary approaches. First, using 20 years of administrative data, we construct a firm-level panel linking Japanese MNEs to their overseas subsidiaries. We document the geographical distribution of subsidiaries, sectoral composition, and employment characteristics, as well as the evolution of wage differentials between Japan and host countries.

The analysis of administrative data reveals that Japanese FDI is heavily concentrated in Asia, with manufacturing accounting for a large share of both subsidiary numbers and total sales. China remains a key destination, hosting about one-quarter of all Japanese foreign subsidiaries. Investment composition varies across countries, with manufacturing dominant in most destinations . Average subsidiary wages in Asia are generally below those in Japan, but with considerable variation: Singapore and Hong Kong/Macau exceed Japanese levels, while manufacturing wages in Southeast Asian countries average roughly one-third of their parent firms. Notably, the wage gap between Japan and its Asian hosts has narrowed sharply, coinciding with a slowdown in new investment and an increase in exits.

The second part of the study is based on an original survey conducted in November 2024, distributed to 8,000 firms with current or past FDI in Asia and yielding 1,388 responses. The survey investigates how Japanese MNEs respond to rising wages in their Asian subsidiaries, examining investment motives, wage-setting practices, and both intensive- and extensive-margin adjustments.

Results show that low labour costs remain a primary motivation for manufacturing investment, whereas non-manufacturing activities are more often driven by market access. Subsidiary wage-setting practices vary by occupation, while the wage levels of local domestic firms significantly affect wage levels of Japanese subsidiary wages. Nearly 90% of firms reported raising subsidiary wages in line with local market trends, yet about 30% took no adaptive measures. When adjustments occur, they are usually at the intensive margin — automation, adoption of robots, and reduced numbers of Japanese expatriates — while extensive margin changes, such as relocation or downsizing, are less common. As a result, many firms absorb higher labour costs, often experiencing stagnant or declining subsidiary profits. Nevertheless, a positive relationship is observed between wage growth in host countries and withdrawal due to rising labour costs. While rising labour costs are not the dominant reason for withdrawal, this finding suggests that continued wage

convergence could contribute to a future slowdown in Japanese FDI in Asia.

This study contributes to several strands of the literature on FDI. First, it relates to the extensive body of research examining the benefits of FDI for host countries. Prior studies highlight the role of MNEs in enhancing local employment and wages through both direct and indirect channels. The direct effect arises from job creation (Abebe et al., 2022; Mendola et al., 2024; Javorcik, 2015; Alfaro-Ureña et al., 2022), while the indirect effect stems from mechanisms such as knowledge and technology transfer (Jiang et al., 2018; Keller, 2021; Setzler and Tintelnot, 2021; Abebe et al., 2022), productivity spillovers (Javorcik, 2004, 2015), and the diffusion of improved managerial practices (Bloom et al., 2012), among others.[1] MNEs generally offer higher wages than domestic firms, offering wage premium to local employees (Hijzen et al., 2013; Javorcik, 2015; Hjort et al., 2025). Our paper contributes to this literature by questioning the sustainability of these benefits in a context where the wage gap between MNEs's home and host country is narrowing.

Second, the paper contributes to the literature on MNEs' incentives for engaging in vertical FDI and the determinants of subsidiary wages. A well-established finding is that low labour costs are a major driver of vertical FDI (Konings and Murphy, 2006; Disdier and Mayer, 2004; Harrison and McMillan, 2011); however, much less is known about the adaptation strategies of MNEs when wages in host countries rise. The study most closely related to ours is Muendler and Becker (2010), which find that MNEs adjust employment in lower-wage countries primarily at the intensive margin, with limited changes at the extensive margin. Our survey evidence is consistent with this result, but also offers a novel contribution by showing that wage growth is positively associated with the likelihood of exit due to rising labour costs.

The remainder of this paper is organised as follows: section 2 describes the administrative datasets and survey design. section 3 presents the characteristics of Japanese FDI using the administrative data, and section 4 shows the results of the original firm survey. The paper concludes with a discussion in section 5.

[1]The entry of MNEs does not always generate uniformly positive effects on local labour markets. For instance, Alfaro-Ureña et al. (2025) find that responsible sourcing standards increased earnings for some low-wage workers in supply chains, but most low-wage workers experienced losses due to indirect effects and price changes. Atkin et al. (2018) report regressive welfare effects.

2 Data

2.1 Administrative data

We primarily use two administrative datasets to describe the trends and characteristics of Japanese FDI.

Basic Survey on Overseas Business Activities (BSOBA) The BSOBA is a firm-level survey of Japanese MNEs and their foreign subsidiaries. The survey is conducted annually by the Ministry of Economy, Trade and Industry in Japan, and firms report overseas subsidiaries with at least 10% shareholdings. Second-tier subsidiaries are included if headquarters' shareholdings of a first-tier subsidiary as well as the first-tier subsidiary's shareholdings of a second-tier one exceeds 50%. The survey excludes the finance, insurance, and real estate sectors. The BSOBA dataset includes information on parent and subsidiary firms, such as their names, industrial sectors, years of establishment, and shareholding rates.

Basic Survey of Japanese Business Structure and Activities (BSJBSA) The BSJBSA is a firm-level survey of Japanese firms with more than 50 employees and capital exceeding 30 million Japanese yen (JPY). Conducted annually by the Ministry of Economy, Trade and Industry in Japan, the BSJBSA includes detailed information on firms' name, address, balance sheet items, etc. The BSJBSA can be merged with the BSOBA via a shared firm ID, with which we constructed a panel dataset that connects Japanese parent firms and their subsidiaries each year. This dataset is primarily used to analyse the labour market outcomes at Japanese headquarters, such as employment and wages.

2.2 Survey

As an additional component of the analysis, we conducted a survey of Japanese MNEs in November 2024. We sampled 8,000 FDI firms with current or previous investment histories in Asian countries, based on information from BSOBA and *Toyokeizai*[2]. The sample includes all 6,480 Japanese MNEs that had subsidiaries in Asia in 2022, along

[2] *Toyokeizai* is another dataset that covers Japanese firms' foreign direct investment activities.

with a randomly selected group of 1,520 firms with previous FDI activity in the region. In collaboration with a survey company, *Teikoku Databank*, we distributed a questionnaire to the headquarters of the sampled firms via postal mail. Survey responses were collected both online and by post for one month since the distribution. We received 1,388 valid responses (17.4%), of which 1,204 firms currently have subsidiaries in Asia, while 184 previously had subsidiaries in the region. While we primarily use 1,204 firms that have active subsidiaries in Asia, firms with previous experience of investment are analysed in their responses about withdrawal from destination countries.

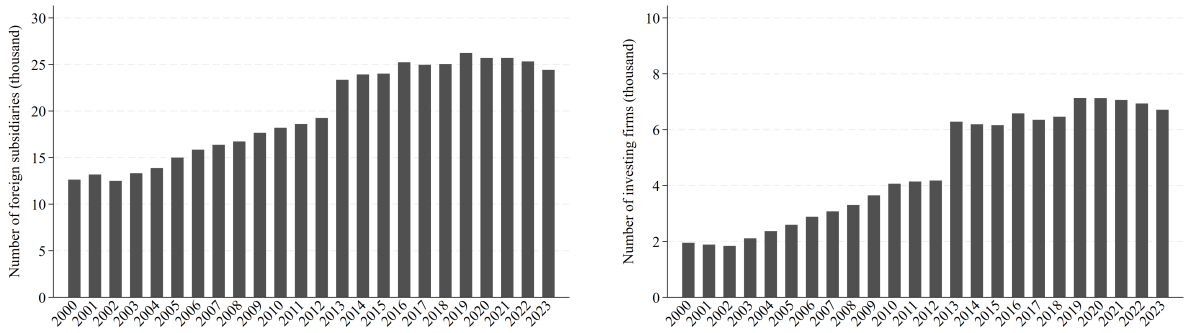
3 Overview of Japanese FDI

This section provides an overview of the characteristics of Japanese FDI using administrative data. As of 2023, Japanese firms operate 24,415 foreign subsidiaries owned by 6,711 investing parent firms[3]. Over the past two decades, Japanese FDI has expanded steadily, increasing from 12,632 subsidiaries and 1,950 parent firms in 2000. Figure 1 illustrates these trends in more detail: Panel (a) plots the number of foreign subsidiaries, and Panel (b) shows the number of investing parent firms. Both series display a generally upward trajectory, with a modest decline after 2020. The sharp rise observed in 2013 reflects a change in the BSOBA survey coverage, which expanded from 6,127 firms in 2012 to 8,662 firms in 2013.[4]

Asia's role as the leading destination for Japanese FDI has strengthened markedly over the past two decades. In 2023, 16,547 Japanese subsidiaries (67.8% of total) were located in Asia, followed by North America (12.6%), Europe (10.3%), and South America (5.5%). Among the 6,711 investing firms, 5,982 (89.1%) have at least one subsidiary in Asia, underscoring the region's importance as the primary destination for Japanese FDI. Figure 2 illustrates the regional distribution of Japanese firms' foreign subsidiaries from 2000 to 2023, highlighting substantial shifts in location patterns. The combined share of subsidiaries in Asia (China and other Asia) rose from 49.0% in 2000 to 67.8% in 2023. Within Asia, China's share expanded rapidly during the early 2000s, peaking around

[3]This figure is lower than that reported by Toyokeizai, which records 33,147 subsidiaries. Even after excluding the finance, insurance, and real estate sectors, Toyokeizai lists 31,375 subsidiaries in 2022.

[4]Data from alternative sources do not show this discontinuity.



(a) Number of subsidiaries (b) Number of investing firms

Figure 1: Number of subsidiaries and investing firms, 2000-2023

Source: Authors' calculation using the BSOBA (Ministry of Economy, Trade and Industry). Note: The numbers are firms/subsidiaries that are in operation at the time of survey in each year. Firms responded to the BSOBA and do not necessarily represent the total number of firms engaging in FDI.

2012–2013, before gradually declining, while the share of other Asia continued to rise steadily. By contrast, North America's share fell from 21.7% in 2000 to 12.6% in 2023, and Europe's share declined from 17.6% to 10.9%, reflecting a relative shift away from these Western markets.

In absolute terms, 2023 data show China as the largest host with 5,823 active Japanese subsidiaries, followed by the United States (2,856), Thailand (2,293), and Vietnam (1,233). When ranked by the number of investing firms, China remains first (3,501 firms), followed by Thailand (1,770), the United States (1,714), and Vietnam (1,054). Until 2005, however, the United States was the leading host country, indicating a significant geographic reorientation of Japanese FDI over the past two decades. Table A1 and Table A2 in the Appendix document changes in the top 10 host countries by number of investing firms and subsidiaries.

Another key characteristic of Japanese FDI is its strong concentration in manufacturing, a pattern closely linked to the large share of subsidiaries located in Asia. In 2023, 10,433 subsidiaries (42.7% of the total) operated in manufacturing, with the automotive industry, particularly vehicle production, playing a dominant role worldwide. Wholesale trade is the second-largest sector, accounting for 29.1% of all subsidiaries. Figure 3 presents the regional share of manufacturing, measured both by the number of subsidiaries and by total subsidiary sales. Asia stands out with the highest manufacturing intensity, where manufacturing accounts for 48.5% of subsidiaries and an even larger

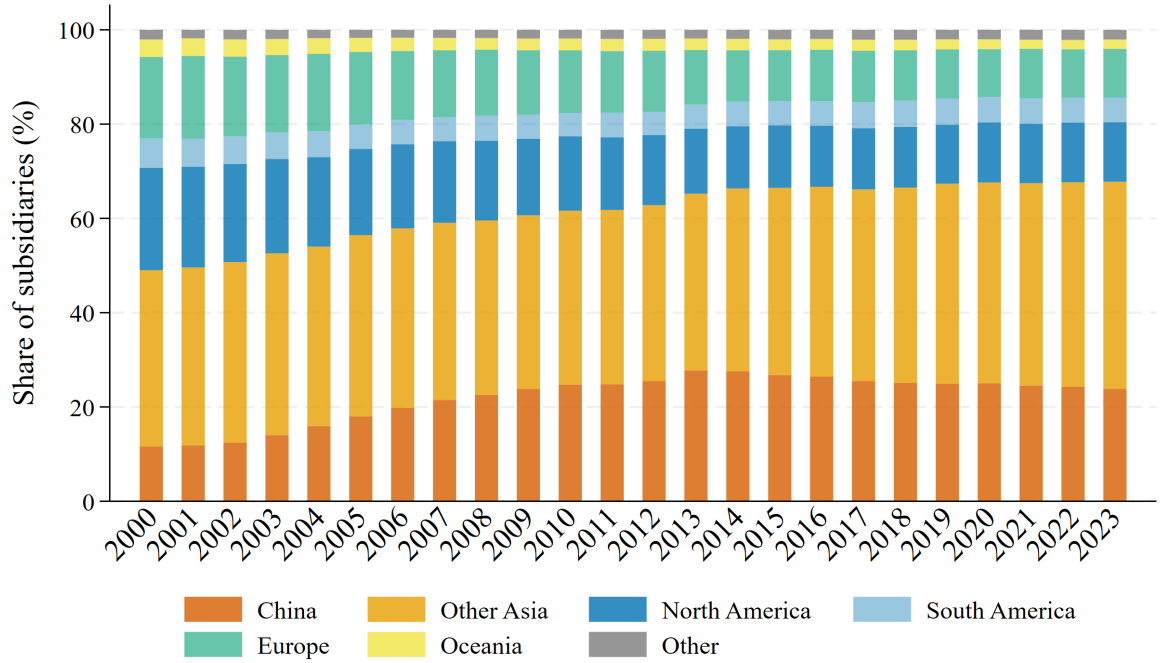


Figure 2: Share of subsidiaries by region, 2000-2023

Source: Authors' calculation using the BSOBA (Ministry of Economy, Trade and Industry). Note: "Other" includes South America & the Caribbean, Middle East, and Africa.

share (59.6%) of total sales. Other regions report lower manufacturing shares: 34.6% in North America, 30.2% in Europe, and 25.3% in the "Other" category. Overall, manufacturing contributed 51.5% of global subsidiary sales in 2023, suggesting its central role in Japanese FDI.

Although Asian countries dominate as destinations for Japanese foreign direct investment (FDI), substantial heterogeneity exists across host economies. Figure 4 compares major Asian destinations in terms of the number of subsidiaries and total subsidiary sales by industrial sector. China stands out as the largest host both in subsidiary count and sales volume. Manufacturing accounts for a high share of subsidiaries in China (57.6%), Indonesia (57.3%), Thailand (55.2%), and Vietnam (54.3%). In contrast, Hong Kong/Macau (16.6%) and Singapore (15.1%) have much lower manufacturing shares, with a larger concentration in wholesale and other services[5]. The ranking by sales differs

[5]Singapore and Hong Kong are hubs for the financial sector. Since the BSOBA excludes finance, real estate, and insurance, the actual share of non-manufacturing activities in these economies may be even higher.

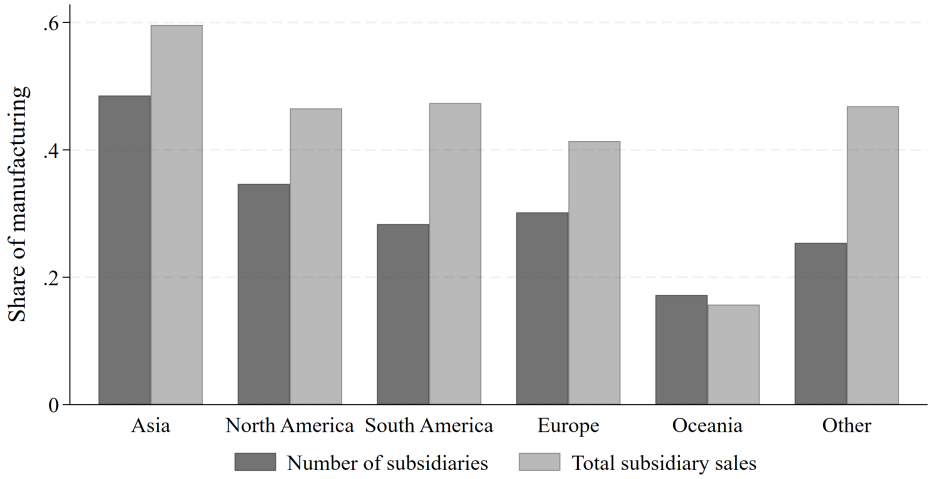


Figure 3: Share of manufacturing sector, 2023

Source: Authors' calculation using the BSOBA (Ministry of Economy, Trade and Industry). Note: Subsidiary sales were winzorised at 1st and 99th percentile by country of investment.

from that by subsidiary count. While China remains first in both measures, Singapore ranks second in sales despite hosting fewer subsidiaries, highlighting its role as a high-value wholesale and service hub. Conversely, manufacturing-intensive economies such as Vietnam and Indonesia generate a smaller share of total sales relative to their number of subsidiaries.

FDI is typically undertaken by larger firms, and Japanese FDI is no exception. FDI firms are, on average, substantially larger than non-FDI firms, with a mean size of 2,431.7 employees and a median of 501, compared to 382.9 and 115, respectively, for firms in the BSJBSA overall. Firm size, however, varies considerably by host region. Figure 5 shows the distribution of investing firms by employment size across regions. Firms investing in Asia are generally smaller: 68.8% have fewer than 1,000 employees, including relatively high shares of small (1–99 employees) and medium-sized (100–299 employees) firms. North America also attracts many small and medium-sized investors, suggesting lower barriers to entry or broader opportunities for these firms. In contrast, investment in Europe, Oceania, South America, and other regions is dominated by very large firms (1,000+ employees), which account for over half, and in some cases nearly two-thirds, of parent firms in those destinations. These patterns indicate that while smaller Japanese firms can participate in FDI, especially in Asia and North America,

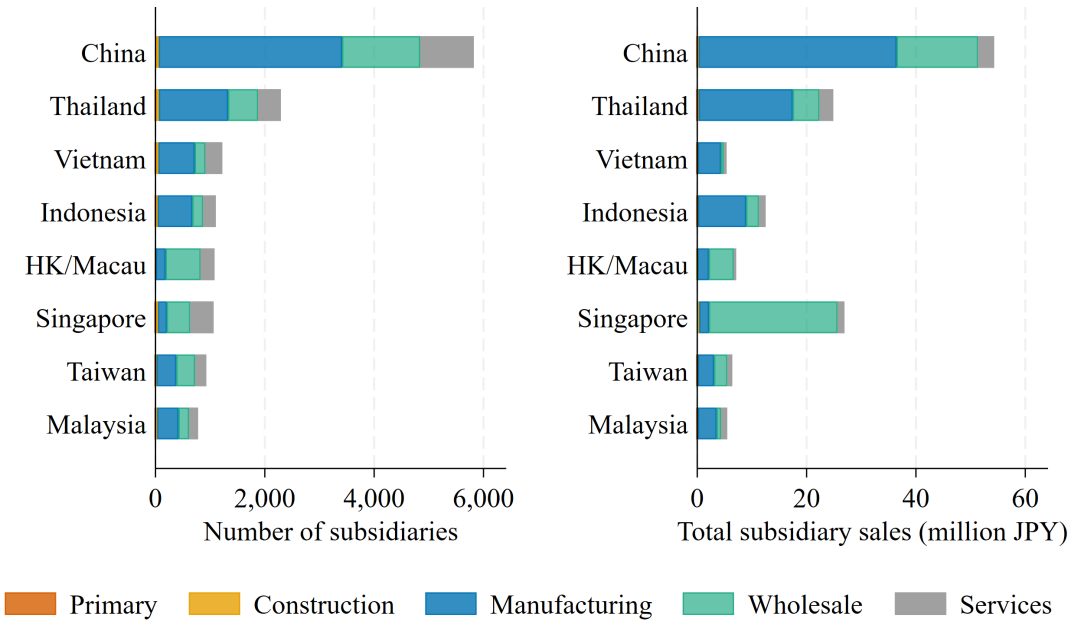


Figure 4: Number of subsidiaries and subsidiary sales by top Asian countries, 2023

Source: Authors' calculation using the BSOBA (Ministry of Economy, Trade and Industry). Note: Subsidiary sales were winzorised at 1st and 99th percentile by country of investment.

other regions remain primarily the domain of the largest firms.

One motivation for vertical FDI is to take advantage of wage differentials between home and host countries. Figure 6 shows average subsidiary wages by region, distinguishing between manufacturing and non-manufacturing activities. The dashed line marks the average wage for all Japanese FDI subsidiaries in 2023 (6.82 million JPY)[6]. Across all regions, manufacturing subsidiaries consistently pay lower wages than non-manufacturing subsidiaries, reflecting differences in skill intensity and occupational composition. Regional patterns reveal stark contrasts. North America, Europe, and Oceania record average wages well above the average of Japanese FDI firms, with especially high non-manufacturing wages. In contrast, Asia and South America have significantly lower wage levels. The wage gap between parent firms and their subsidiaries is particularly pronounced in Asia, where manufacturing subsidiaries pay an average of 2.20 million JPY, roughly one-third of the wage standard of Japanese parent firms, highlighting the cost advantages that underpin vertical FDI strategies in the region.

[6]The average wage for all firms in BSJBSA, including non-FDI firms, is 4.50 million JPY.

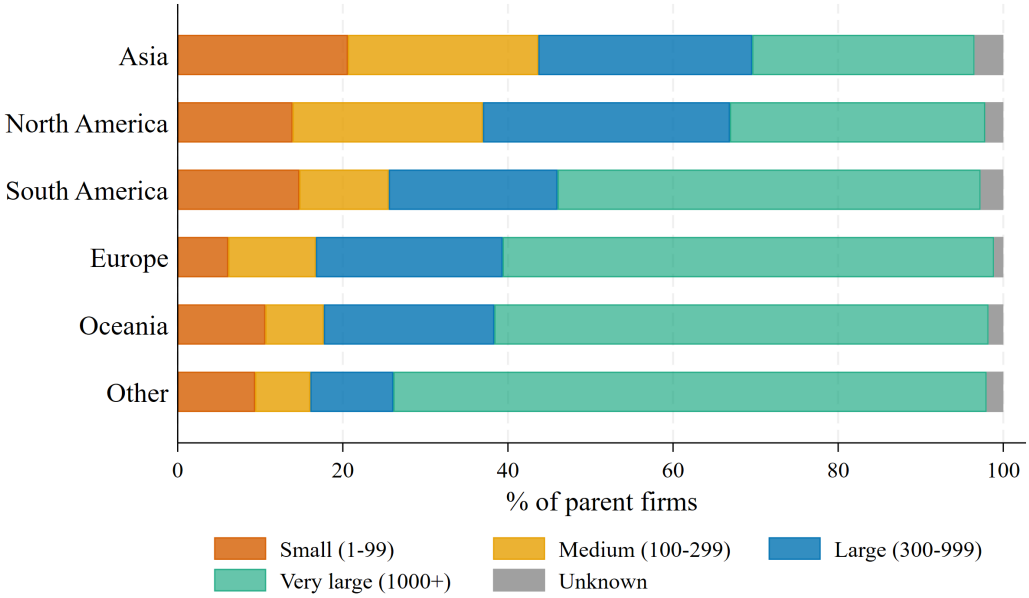


Figure 5: Share of investing firms by size, 2023

Source: Authors' calculation using the BSOBA and the BSJBSA (Ministry of Economy, Trade and Industry).

Figure 7 focuses on average wages in major Asian host countries, again distinguishing manufacturing from non-manufacturing subsidiaries. As in the regional comparison, manufacturing wages are lower than non-manufacturing across all countries. Wages are highest in Singapore and Hong Kong/Macau, where both manufacturing and non-manufacturing pay levels exceed those of Japanese parent firms. In contrast, most other Asian destinations maintain significantly lower wage levels than parent firms. The lowest manufacturing wages are found in Vietnam (0.98 million JPY), Indonesia (1.32 million JPY), and Malaysia (1.68 million JPY), underscoring their role as low-cost production bases in regional supply chains. China and Thailand fall between these extremes, offering wages above Southeast Asia's lowest levels but still well below Japan's, which may help explain their sustained attractiveness for manufacturing investment.

Although many Asian countries still maintain lower wage standards than Japanese parent firms, the wage gap has narrowed considerably over time. Figure 8 shows the change in average wages for Japanese parent firms and their subsidiaries in major Asian host countries between 2010 and 2023. Wages are reported in JPY, meaning that exchange rate fluctuations are embedded in the values and reflect the labour costs as per-

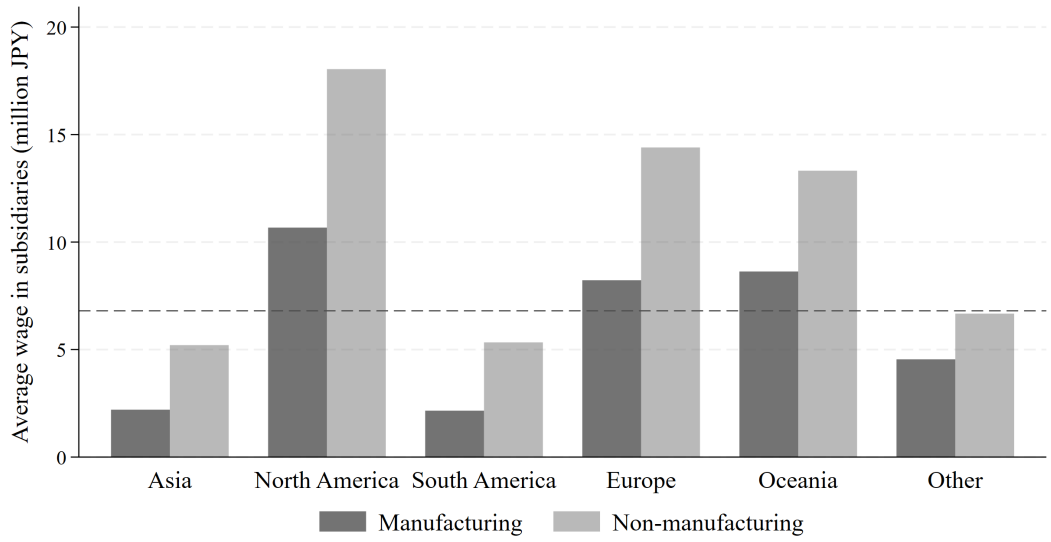


Figure 6: Average wages of subsidiaries by region, 2023

Source: Authors' calculation using the BSOBA and BSJBSA (Ministry of Economy, Trade and Industry). Note: Average wages are winzorised at 1st and 99th percentile by year and country. The dashed line shows the average wage of parent firms (6.81 million JPY), which was calculated from the BSJBSA for merged firms.

ceived by parent firms. While the wage standard in Japan has remained largely stagnant over the past decade, wages in most Asian host countries have risen sharply. China recorded the sharpest rise, with average wages tripling from 1.06 million JPY in 2010 to 3.28 million JPY in 2023. Indonesia and Vietnam also experienced rapid growth, with wages increasing more than 2.5 times over the same period. Thailand and Hong Kong/-Macau saw wages roughly double. In every country shown, wage growth in subsidiaries outpaced that of Japanese parent firms.

A simple country-year average, however, may mask compositional changes, such as shifts in the types of firms operating in each location. To address this, Figure A1 in the Appendix shows results for a balanced panel of firms present in both 2010 and 2023. The patterns are consistent with Figure 8, with wage levels of parent firms being stagnant and subsidiary wages growing rapidly. These confirm that the narrowing wage gap reflects genuine increases in wages within host countries rather than changes in the composition of investing firms.

Trends in entries and exits offer additional insight into the evolution of Japanese subsidiaries abroad. Figure 9 presents annual counts of entries and exits in major Asian

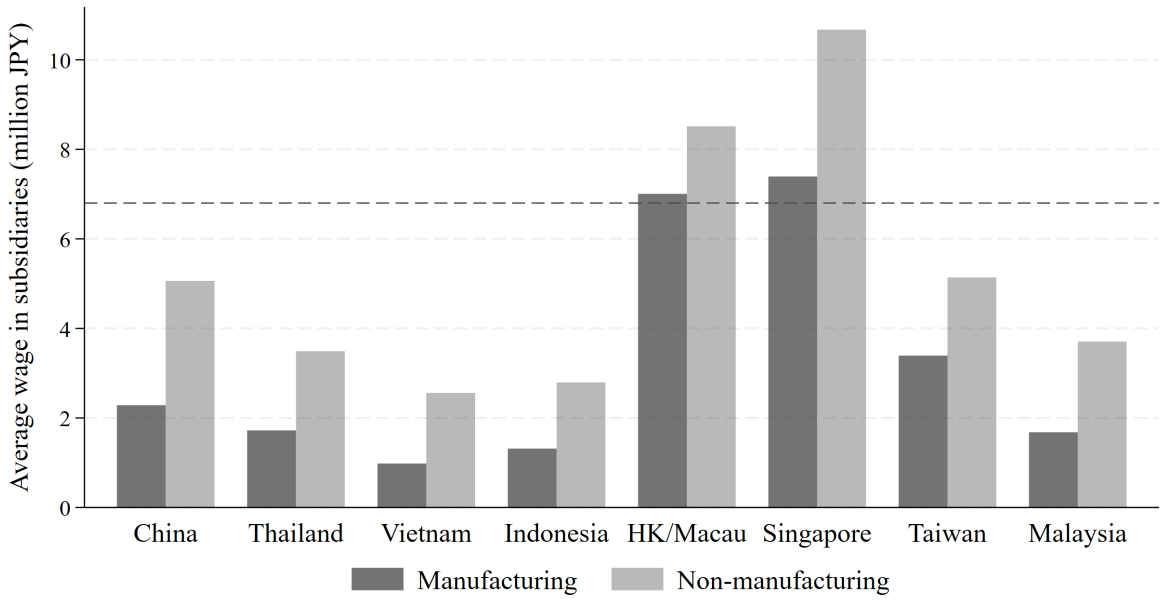


Figure 7: Average wages of subsidiaries in Asian countries, 2023

Source: Authors' calculation using the BSOBA and BSJBSA (Ministry of Economy, Trade and Industry). Note: Average wages are winzorised at 1st and 99th percentile by year and country. The dashed line shows the average wage of parent firms (6.81 million JPY), which was calculated from the BSJBSA for merged firms.

host countries from 2010 to 2023. Entry activity surged in the early 2010s, peaking in 2012, before declining steadily. China saw the largest inflow during this period, with over 600 new subsidiaries established in 2012, but entries fell sharply thereafter. Thailand, Vietnam, and Indonesia display similar though less pronounced patterns, with entries tapering after 2013.

Exit patterns differ markedly. China consistently recorded the highest number of withdrawals, with a noticeable increase from the mid-2010s onward. In other destinations, exits stayed relatively low until the late 2010s but then rose modestly, particularly in Thailand and Hong Kong/Macau. A key turning point occurred when exits exceeded entries: in China, this shift happened in 2014, marking the start of a net decline in Japanese subsidiaries; in other countries, it became pronounced around 2020. These developments point to a broader slowdown in new investment in Asia, coupled with rising withdrawals, with China leading and other countries following with a lag.

In summary, Japanese FDI exhibits several distinctive patterns. First, investment is heavily concentrated in Asia, with manufacturing accounting for a large share of both

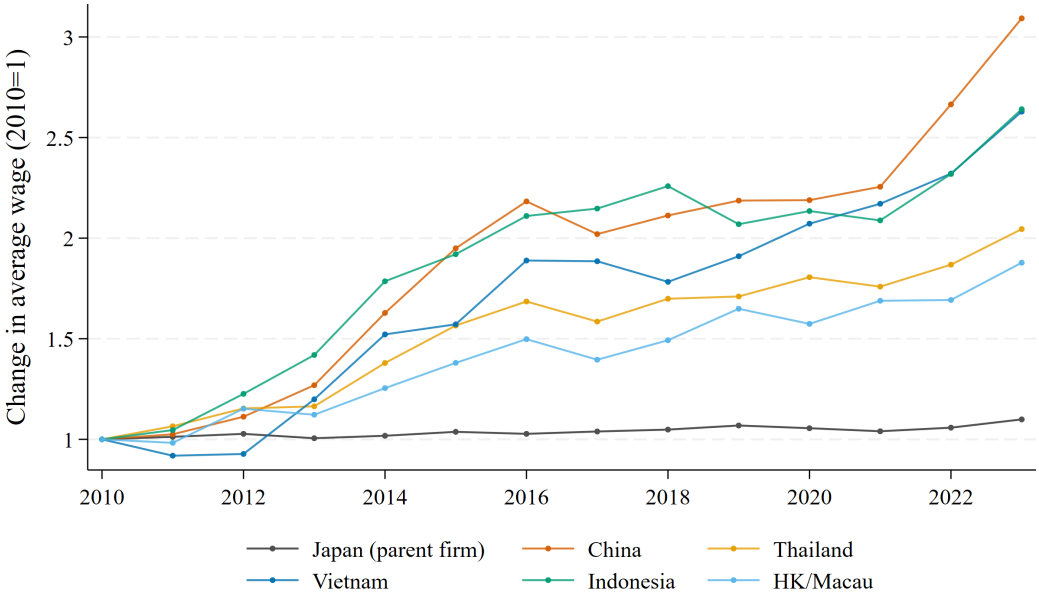


Figure 8: Average wage of Japanese parent firms and Asian subsidiaries

Source: Authors' calculation using the BSOBA and BSJBSA (Ministry of Economy, Trade and Industry). Note: Average wages are winzorised at 1st and 99th percentile by year and country. Average wages for parent firms are calculated only for firms with foreign subsidiaries.

subsidiary counts and total sales. China remains particularly prominent, hosting about one-quarter of all Japanese foreign subsidiaries. Second, investment composition varies considerably across Asian destinations: manufacturing dominates in most countries, while wholesale activities are more prominent in Singapore and Hong Kong/Macau. Third, average wages in Asia are generally lower than in other regions, though variation across countries is substantial — with Singapore and Hong Kong/Macau exceeding Japanese levels and Southeast Asian economies averaging about one-third of Japan's. Finally, the wage gap between Japan and Asian host countries has narrowed sharply, coinciding with a slowdown in new investment and an increase in exits.

This raises a key policy question: if lower labour costs are a primary driver of FDI, does rising wages in host countries be reducing incentives for Japanese firms to invest there? In other words, does the declining trend in FDI in Asia a result of shrinking wage gaps? While the available data cannot definitively answer this[7], understanding

[7]Although the BSOBA asks firms to report reasons for withdrawal, "labour cost" is not an explicit option. Moreover, only about half of withdrawing firms respond to this question, limiting the ability to form a complete picture.

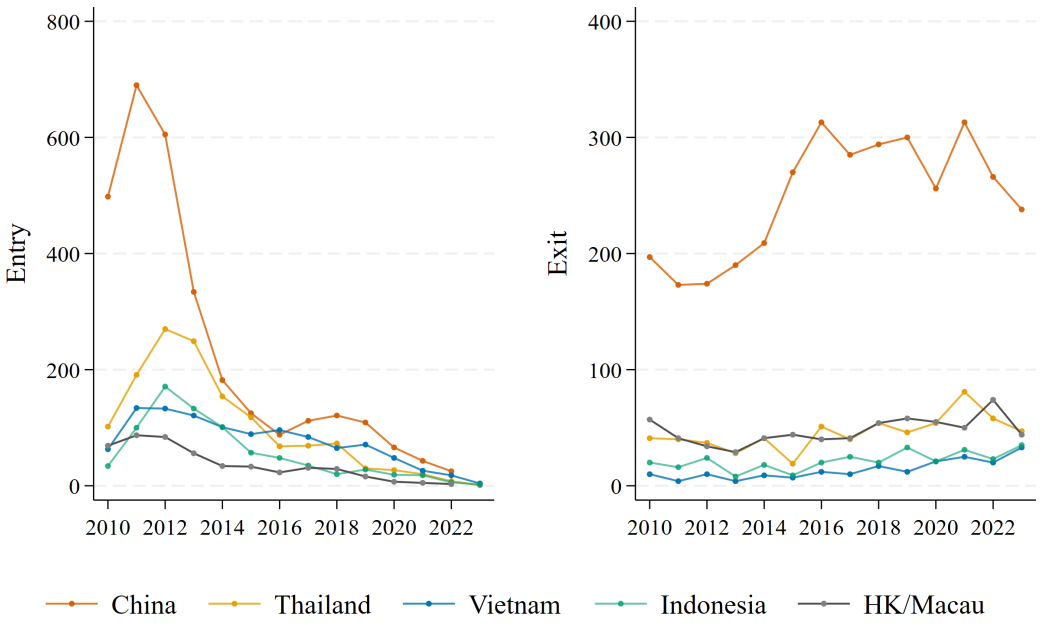


Figure 9: Entry and exit of subsidiaries in major destinations in Asia

Source: Authors' calculation using the BSOBA (Ministry of Economy, Trade and Industry). Note: We calculated the entry year from the start year of business operation of subsidiaries, reported by parent firms. A subsidiary is defined as exited in a year when a parent firms reports withdrawal or reduction of shareholdings below 10%.

the relationship between wage dynamics and investment decisions is essential for shaping future FDI policy. The central aim of conducting the original survey is to understand how rising wages in destination countries affect investment decisions and future trajectories of Japanese FDI.

4 Survey Results

How multinational enterprises (MNEs) adjust to rising wage levels in host countries, and the extent to which such adjustments influence their long-term investment strategies, remains an important question for understanding the dynamics of foreign direct investment. To investigate these issues, we conducted an original survey in November 2024. This section presents the main results of the survey. The English translation of the questionnaire is provided in the Appendix. Table 1 summarises the number of responding firms by destination country. In line with the patterns observed in the BSOBA, China, Thailand, Vietnam, and Indonesia constitute the principal host economies. The

proportion of firms with manufacturing establishments differs substantially across destinations, with the lowest shares recorded in Hong Kong/Macau and Singapore. This is also consistent with the patterns observed in the BSOBA.

It is important to note that the surveyed firms may not fully represent all FDI firms. Table A3 presents summary statistics comparing the 1,388 surveyed firms with the remaining non-surveyed firms. Responding firms tend to have fewer employees, and their average sales volumes are approximately half those of non-surveyed firms. Additionally, Figure A2 and Figure A3 in the Appendix compare the firm-size distribution in the administrative data with that of the survey respondents by country, indicating an underrepresentation of large firms in the latter. This potential sample selection bias requires caution in interpreting the results. Nevertheless, we present the findings disaggregated by firm size to highlight potential systematic differences in how firms of varying scales respond to wage increases in host countries.

Table 1: Number of Firms Surveyed

	# firms	of which manufacturing	Share of manufacturing
China	730	455	(62.3)
Thailand	435	239	(54.9)
Vietnam	303	152	(50.2)
Indonesia	207	112	(54.1)
HK/Macau	171	6	(3.5)
Singapore	151	14	(9.3)
Taiwan	148	52	(35.1)
Malaysia	143	58	(40.6)
India	109	55	(50.5)
South Korea	106	45	(42.5)
Philippines	96	51	(53.1)
Myanmar	40	12	(30.0)
Cambodia	24	6	(25.0)
Bangladesh	19	9	(47.4)
Laos	17	4	(23.5)
Sri Lanka	16	5	(31.3)
Pakistan	11	3	(27.3)
Other Asia	8	1	(12.5)
Total	1,388	798	(57.5)

The survey first inquired about the primary reasons for investment in both manufacturing and non-manufacturing foreign establishments. The results by country, presented in Figure A4 in the Appendix, reveal notable differences between the two sectors. In the manufacturing sector, a substantially larger share of firms cited low labour costs as a key motivation for investment, whereas this factor was far less significant for non-manufacturing subsidiaries. For non-manufacturing operations, the most frequently cited reasons were "access to markets" and "accompanying business partners", reflecting a greater emphasis on market-oriented or network-based incentives. To further assess the role of low labour costs as a driver of manufacturing investment, Figure 10 plots the relationship between average subsidiary wages in manufacturing, calculated from the BSOBA, and the share of firms identifying cheap labour as a primary investment motive for manufacturing. The results indicate a strong negative correlation: countries with significantly lower manufacturing wages, such as Vietnam and the Philippines, exhibit a markedly higher proportion of firms prioritizing low labour costs as an investment rationale.

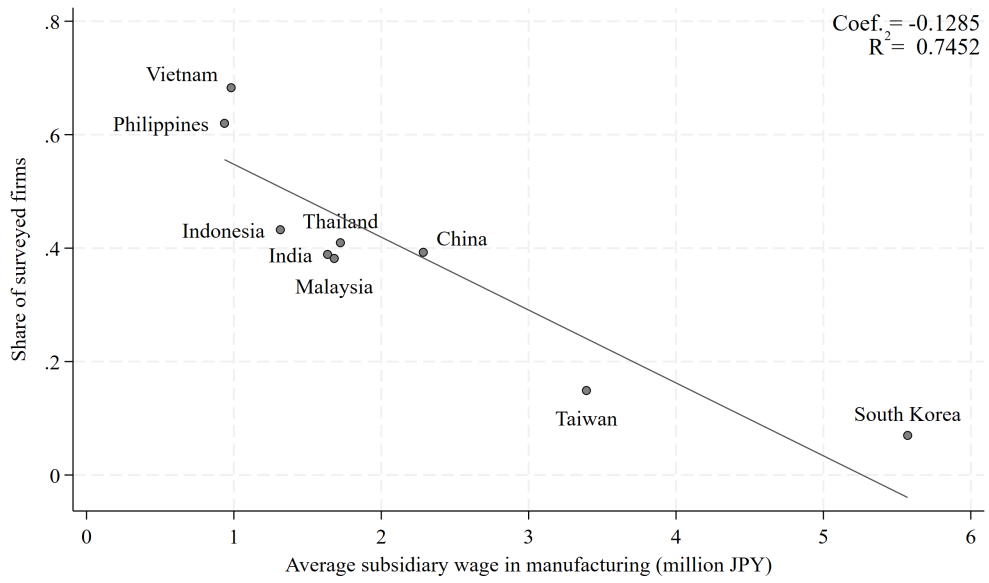


Figure 10: Relationship between wage levels and cheap labour as reason of investment

Note: X-axis shows the average subsidiary wages in manufacturing sector in 2023 (million JPY), calculated from the BSOBA (Ministry of Economy, Trade and Industry). Y-axis shows the share of surveyed firms that choose cheap labour as the reason of investment for their manufacturing subsidiaries. Only countries with more than 20 manufacturing subsidiaries are displayed. The fitted line shows the coefficient for the regression of average subsidiary wage on share of surveyed firms that cite cheap labour as key motivation, weighted by the number of firms in the sample.

The survey also reveals distinct patterns between manufacturing and non-manufacturing subsidiaries in terms of location choice within destination countries. For both sales offices and manufacturing plants, firms were asked to identify the most important criteria for selecting a location (see Figure 11). The responses show a clear divergence between the two types of establishments. Non-manufacturing subsidiaries, such as sales offices, tend to prioritise proximity to major business partners or markets, as well as access to urban centres. In contrast, manufacturing plants most frequently cited the presence of industrial parks as the primary consideration. Moreover, the proportion of firms emphasising low land or rental costs and the availability of cheap labour force is substantially higher in manufacturing compared to non-manufacturing. These results underscore that cost minimisation, particularly through access to affordable land and labour, remains a central objective for manufacturing-oriented FDI.

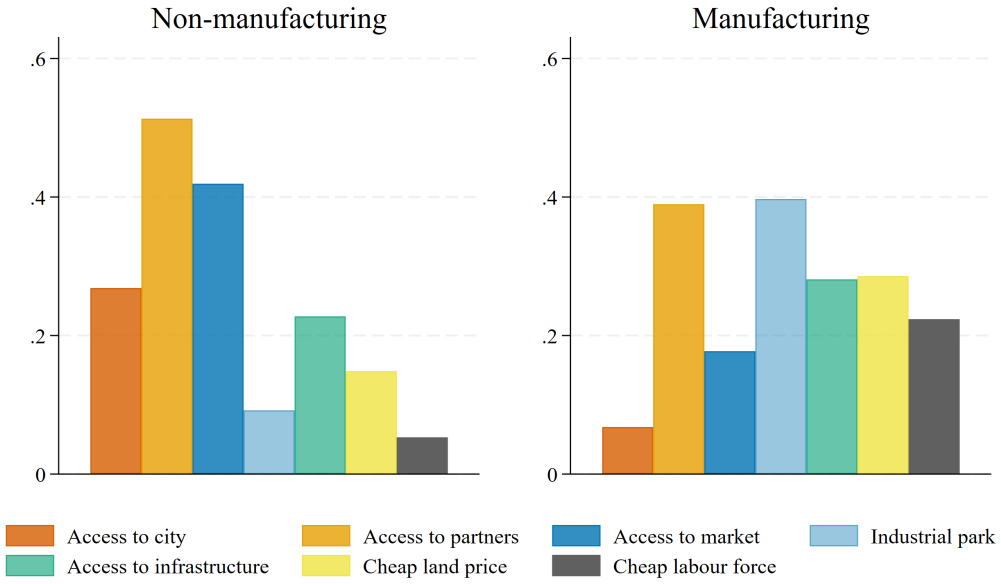


Figure 11: Determinants of investment location

Note: The question asks firms to select three most important criteria of selecting the locations for sales office and manufacturing plants within a destination country. The options include "proximity/access to city centre", "proximity/access to other Japanese companies", "proximity/access to major business partners", "access to markets and sales centres", "industrial parks", "access to transport infrastructure such as airports, railways and ports", "land prices/low rental prices of facilities", "Tax incentives/special economic zones", "Lower wage levels for local employees than in other regions", "Quality of life for expatriates (e.g. Japanese schools)", "Safety", and "Other".

To better understand subsidiary wage-setting practices, we asked manufacturing firms about the key criteria they consider when establishing new operations in Asia.

Specifically, we inquired about the determinants of wage-setting for line production workers, engineers, and managers. The results are summarised in Figure 12, presenting several key patterns. First, the prevailing wage levels of local domestic firms in the host country constitute the most important reference point for all three occupational categories. Second, minimum wages play a much more prominent role in determining the pay of line production workers compared to engineers and managers. Notably, 25.7% of firms reported using the minimum wage as a benchmark for line workers, while only 4.7% did so for engineers. Third, a substantial proportion of firms refer to the wage practices of other Japanese multinational enterprises operating in the same country, particularly when setting pay for engineers and managers. Overall, these findings highlight that the wage levels of domestic firms play a central role in shaping subsidiary wage structures.

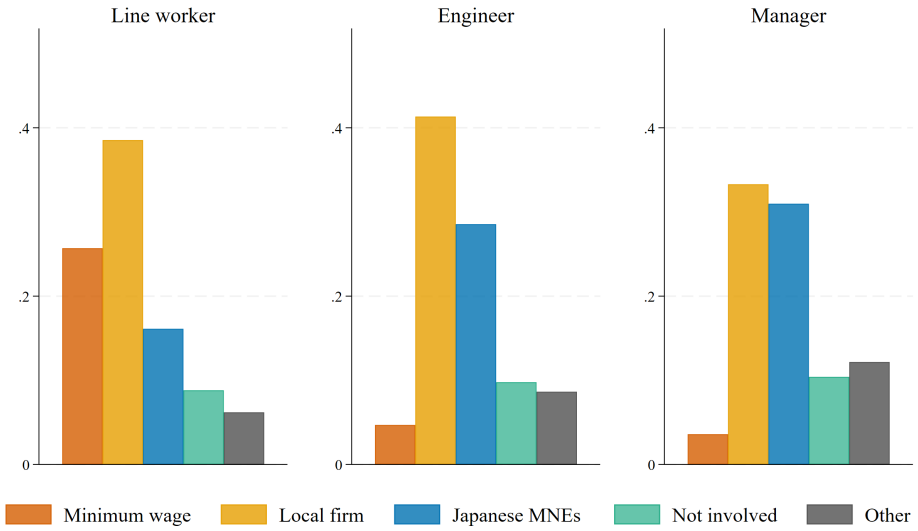


Figure 12: Determinants of subsidiary wage

Note: The question is only for firms that currently have manufacturing subsidiaries in Asia. Firms are asked to select one option for the determinant of wage levels upon opening a new establishments. The options include: "Minimum wages of destination countries", "Wage levels of local domestic firms in the destination countries", "Wage levels of Japanese firms in the destination countries", "Wage levels of third-country firms in the destination countries", "Consistency with headquarter wages", "Headquarters are not involved in wage settings", "Other", "Don't know".

We asked firms with manufacturing subsidiaries whether the wage levels in their overseas operations had increased over the past two to three years, disaggregated by host country. As anticipated, the majority of firms reported having raised the wages of local employees in their foreign establishments. The incidence of wage increases was

particularly high in Southeast Asia, with over 90% of firms reporting wage rises in the Philippines (94.0%), Indonesia (90.9%), and Vietnam (90.7%). The corresponding shares were slightly lower in East Asian economies, especially in South Korea (79.6%) and Taiwan (80.4%). For firms that did report wage increases, we further inquired about the underlying reasons. As shown in Figure A5 in the Appendix, more than 60% attributed the increases to wage adjustments made by local domestic firms in the host countries.

How do FDI firms adapt to increasing labour costs over the long term? Figure 13 presents the strategies employed by firms in response to rising wage levels in host countries, disaggregated by firm size. Notably, nearly 30% of firms reported making no adjustments, with this share being higher among smaller firms.

When adjustments are made, they tend to occur at the intensive margin rather than the extensive margin. In particular, a substantial proportion of firms have responded by reducing the number of Japanese expatriates and increasing the recruitment of local managers and executives, whereas reductions in local employee headcount are less common, particularly for large firms. Larger firms are more likely to adopt automation and robotics as a cost-mitigation strategy.

Only a small share of firms engage in long-term downsizing or relocation to lower-cost countries or locations. This limited shift to relocation may reflect the fact that, despite wage growth, labour costs in many Asian host countries remain below those in parent-firm home countries, enabling MNEs to continue benefiting from wage differentials. Another potential explanation is the presence of sunk costs — firms have already invested substantially in establishing their operations abroad —making relocation less attractive. Consequently, many MNEs opt to absorb the increased labour costs and maintain operations.

This finding of limited extensive-margin adjustment is consistent with firms' reported reasons for withdrawal. While the BSOBA does not provide a direct link between exit behaviour and wage increases, we asked firms about their experience of exiting from a country or downsizing investment over the past two decades. As shown in Figure A6 in the Appendix, rising labour costs were not the most frequently cited reason for withdrawal in most countries, with the notable exception of China, where it ranked as the most common reason. In many cases, "other" was most selected, indicating that idiosyn-

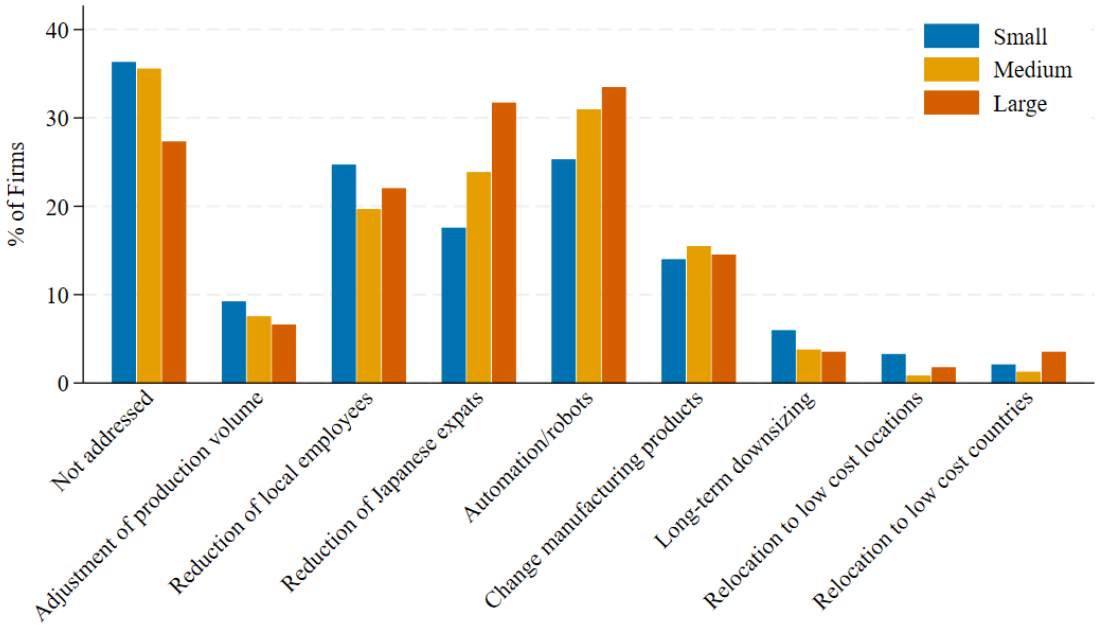


Figure 13: Strategy for long-term wage increase

Note: Small firms refer to employment size below 100, medium firms are size 100-299, and large firms are the size 300 and above. We asked firms whether their manufacturing establishments in Asia have been increasing in the mid- to long-term and if so, what kind of strategies headquarters are taking. Firms choose maximum three options from below: "No specific adjustments", "Adjustments in production volume", "Reduction in labour cost by cutting local employees", "Reduction in labour cost by decreasing Japanese expats and increase local managers", "Automation and introduction of industrial robots", "Change in manufacturing products", "Reduction in production volume in the long run", "Relocation to less costly areas within the host country", "Relocation to countries with lower labour costs", "No labour cost increase in the mid- or long- term", and "Other".

cratic factors, such as organisational restructuring or temporary investments, rather than sustained changes in cost structures, may have driven shifts in destination countries.

Nonetheless, Figure 14 illustrates the relationship between subsidiary average wage growth from 2014 to 2023, calculated from the BSOBA, and the share of surveyed firms that identified rising labour costs as a reason for withdrawal. Although the sample size is limited, the figure suggests a strong positive correlation between wage growth and the likelihood of citing labour costs as a withdrawal factor. In contrast, Figure A7 in the Appendix presents the relationship between wage levels and the share of firms citing labour costs, which shows no strong correlation. This contrast implies that it is not the absolute wage level but rather the rate of wage growth that influences firms' decisions to scale back or exit. This does not contradict our finding that extensive margin responses are limited: while rising labour costs are not the dominant reason for withdrawal, they

still play a meaningful role in driving some exits.

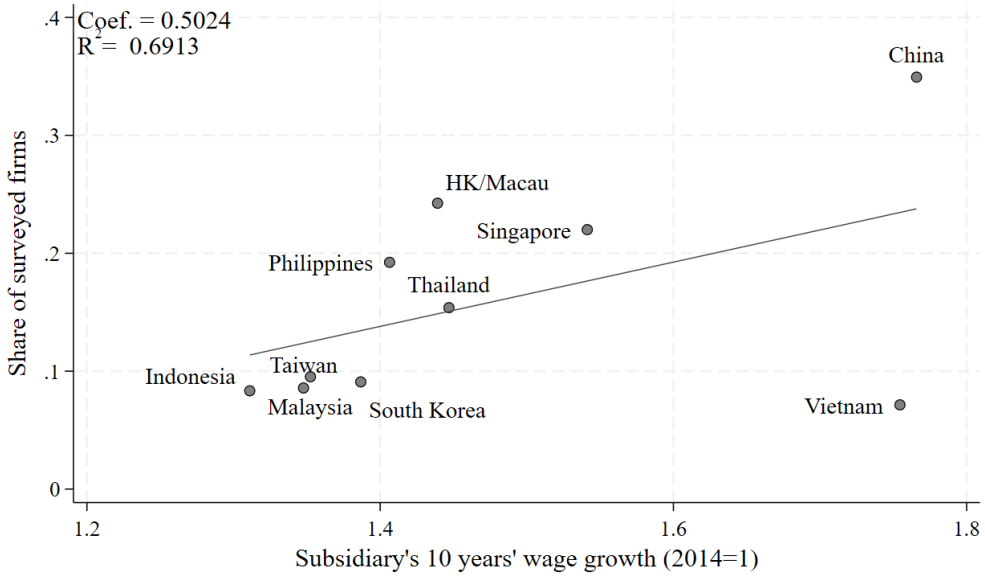


Figure 14: Share of firms exited from rising wages and subsidiary's average wage growth

Note: X-axis shows the growth of average subsidiary wages from 2014 to 2023, calculated from the BSOBA (Ministry of Economy, Trade and Industry). Y-axis shows the share of surveyed firms with experience of withdrawal/downsizing that chose rising labour cost as the main reason of exit. Only countries with more than 20 firms with withdrawal experience are displayed. The fitted line shows the coefficient for the regression of average subsidiary wage on share of surveyed firms that cite cheap labour as key motivation, weighted by the number of firms in the sample.

Finally, we asked firms how recent wage increases had affected the profitability of their subsidiaries. Figure 15 presents the results by employment size of the parent firms. Overall, 41.9% of firms reported a decline in profits, with the proportion being higher among smaller firms. Approximately one-third (33.3%) indicated that profits remained unchanged, most commonly due to the ability to charge higher prices or benefit from increased demand (reported by 20.5% of firms). A smaller proportion of firms reported that profits remained stable or even increased due to cost reductions. These findings further support the conclusion that MNEs tend not to engage extensively in cost-cutting measures in response to rising wages.

In summary, MNEs have adapted in various ways in response to rising wage levels in destination countries, with differing implications for their long-term investment strategies. A survey conducted in November 2024 indicates that many firms, particularly in the manufacturing sector, invest in low-wage regions, with cheap labour costs being a key motivation for their operations. However, MNEs are facing rapid wage growth in Asian

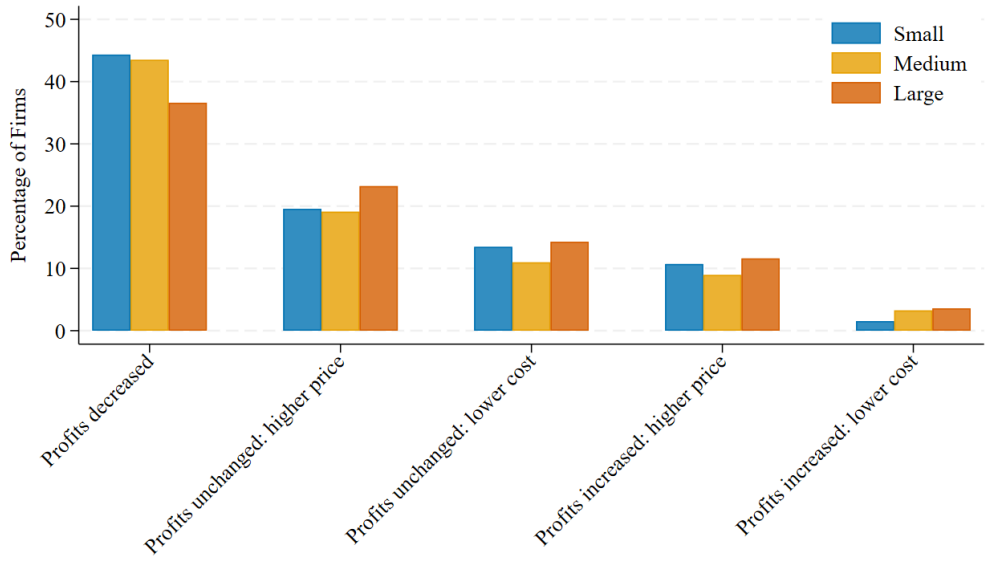


Figure 15: Consequence for long-term wage increase

Note: We asked firms to choose one option from below for the mid- to long-term performance of manufacturing establishments abroad: "Profit loss", "Profit has been unchanged due to increased sales price or higher demand", "Profit has been unchanged due to cost reduction, such as decreasing the number of employees or production scale", "Profit has increased due to increased sales price or higher demand", "Profit has been unchanged due to cost reduction, such as decreasing the number of employees or production scale", and "Other", "Don't know".

host countries. Most firms either take no action or implement labour cost adjustments primarily at the intensive margin. Automation and the introduction of robots have emerged as the main strategies for mitigating rising labour costs, alongside the reduction of Japanese expatriates. Despite wage increases, the overall impact on profits is mixed: many firms report either unchanged profits or declines, reflecting a tendency to absorb higher labour costs rather than undertake substantial cost-cutting measures. This finding aligns with the observation that rising wages are not frequently cited as the primary reason for withdrawal. However, we find that higher wage growth in destination countries is associated with a greater share of firms exiting due to increased labour costs. Thus, while many firms may continue to invest in Asia and benefit from wage levels that remain lower than in Japan, the recent trend of a narrowing wage gap could contribute to a future decline in Japanese FDI in the region.

5 Conclusion

This paper has examined the key characteristics of Japanese FDI and its evolving relationship with wage growth. An analysis of both administrative data and an original survey reveals several notable findings. Japanese MNEs are heavily concentrated in Asian countries, particularly in the manufacturing sector. Historically, manufacturing investment in Asia has leveraged substantial wage differentials between Japan and host countries to reduce labour costs and outsource production at lower prices; however, this wage gap has narrowed rapidly in recent years. Despite this shift, relatively little is known about how such changing conditions influence MNEs' investment decisions. Our survey of Japanese FDI firms indicates that, although sourcing costs in Asian countries have increased, MNEs are generally reluctant to make significant adjustments, and when they do, these changes are primarily at the intensive margin. While rising wages are not the predominant reason for withdrawal in many host countries, we find a strong positive relationship between wage growth and the share of firms exiting due to higher labour costs. Overall, the findings suggest that although Japanese MNEs are likely to continue in Asian countries, the ongoing narrowing of the wage gap may lead to a further decline in Japanese investment in the region in the future.

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A Appendix

A.1 Additional figures and tables

Table A1: Top 10 Countries by Number of Investing Firms

	2000		2010		2023	
1	USA	1,052	China	2,355	China	3,501
2	China	638	USA	1,466	Thailand	1,770
3	Singapore	473	Thailand	1,003	USA	1,714
4	Thailand	473	Hong Kong	786	Hong Kong	1,054
5	Hong Kong	442	Singapore	632	Vietnam	940
6	Taiwan	441	Taiwan	619	Indonesia	835
7	Malaysia	348	Malaysia	471	Singapore	818
8	UK	330	South Korea	462	Taiwan	799
9	Indonesia	283	Indonesia	437	South Korea	631
10	Germany	282	Germany	373	Malaysia	617
Total		**2,568**		**5,088**		**7,371**

Source: Authors' calculation from the BSOBA (Ministry of Economy, Trade and Industry). The number only includes investing firms that have active subsidiaries abroad.

Table A2: Top 10 Countries by Number of Subsidiaries

	2000		2010		2023	
1	USA	2,508	China	4,500	China	5,823
2	China	1,470	USA	2,663	USA	2,856
3	Thailand	804	Thailand	1,387	Thailand	2,293
4	Singapore	737	Hong Kong	962	Vietnam	1,223
5	Hong Kong	697	Singapore	832	Hong Kong	1,104
6	UK	577	Taiwan	737	Indonesia	1,077
7	Taiwan	566	Malaysia	609	Singapore	1,063
8	Malaysia	551	Indonesia	582	Taiwan	930
9	Indonesia	489	UK	578	Malaysia	779
10	Germany	431	South Korea	555	South Korea	761
Total		**16,238**		**22,894**		**27,101**

Note: Source: Authors' calculation from the BSOBA (Ministry of Economy, Trade and Industry). The number only includes active subsidiaries abroad.

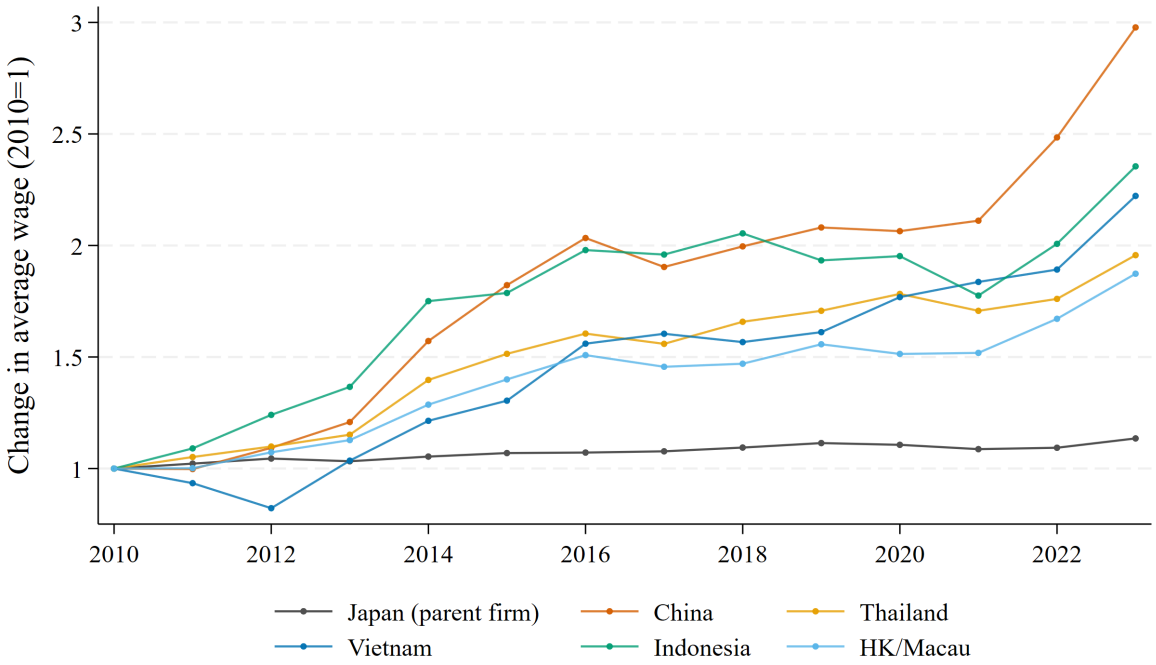


Figure A1: Average Wage of Japanese parent firms and Asian subsidiaries (no entry/exit)

Source: Authors' calculation using the BSOBA and BSJBSA (Ministry of Economy, Trade and Industry). Note: Average wages are winzorised at 1st and 99th percentile by year and country. Average wages for parent firms are calculated only for firms with foreign subsidiaries. The sample only includes firms that existed in data in 2010.

Table A3: Comparison of Surveyed and Sampled Firms

	Surveyed	Not surveyed	All sampled
Total employment	566.6	1030.2	929.6
Share of large firms (emp >300)	0.299	0.430	0.402
Total sales (million JPY)	35,909	73,173	65,524
#of subsidiaries in Asia	2.34	3.12	2.96
# of manufacturing subsidiaries in Asia	1.19	1.58	1.51
N	1,388	6,612	8,000

Source: Authors' calculation from the BSOBA (Ministry of Economy, Trade and Industry).

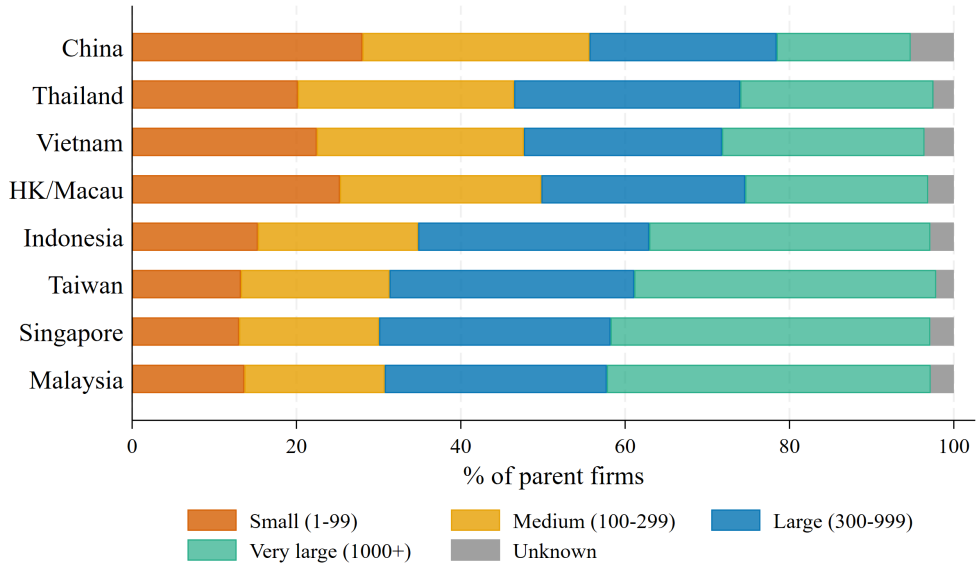


Figure A2: Distribution of investing firms in BSOBA

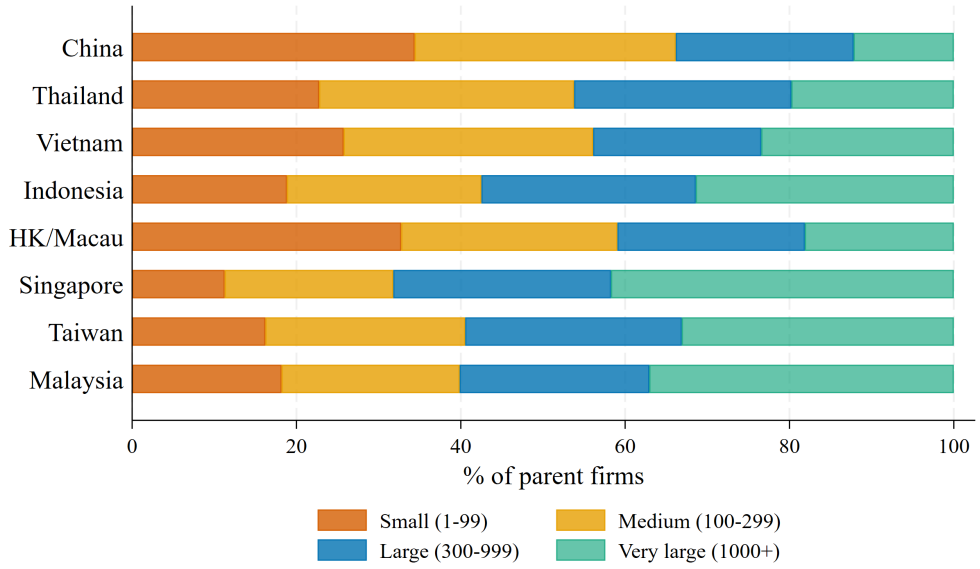
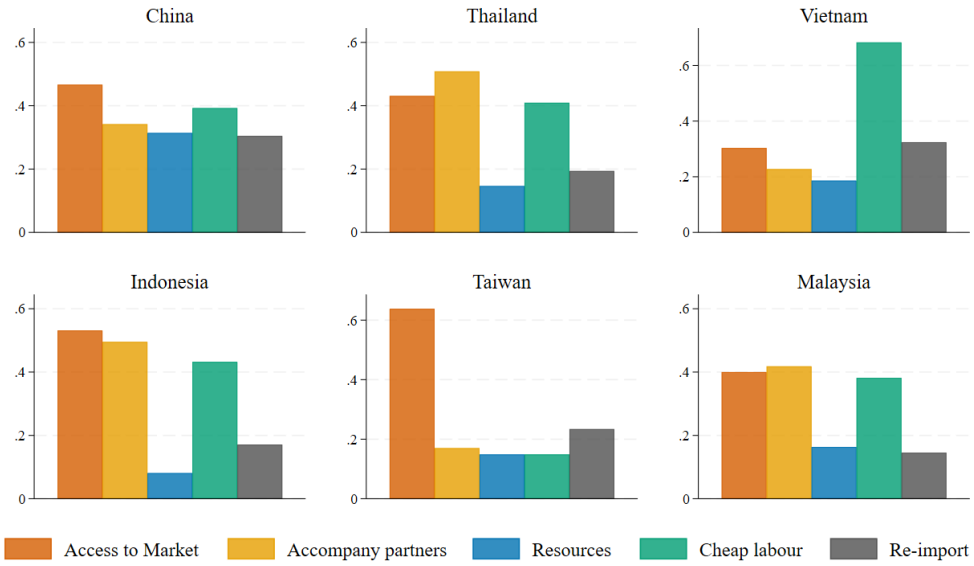
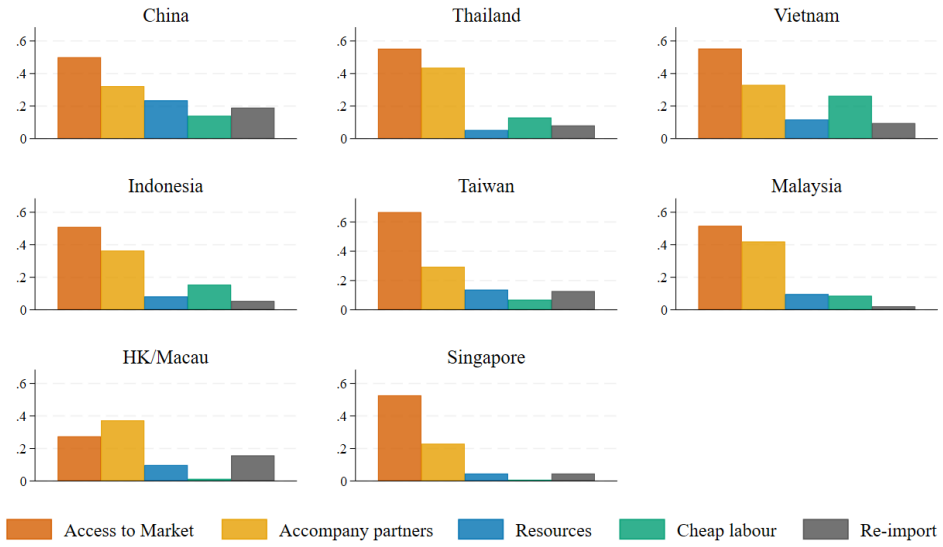


Figure A3: Distribution of investing firms in the survey



(a) Manufacturing



(b) Non-manufacturing

Figure A4: Reasons of investment by investing country

Note: The question asks firms to select maximum three important purposes of investment. The options include: "Resources, raw materials, parts, etc.", "Cheap labour", "Cheap local capital (land, facilities, etc.)", "Re-import to Japan", "Exports to third countries", "High demand for products / development of local markets", "International production and distribution networks", "Difficulty in securing human resources in Japan due to ageing population, etc.", "Excellent record of other Japanese companies", "Accompanying business partners", "Tax and financing incentives", and "Other". We only select five most popular reasons for display.

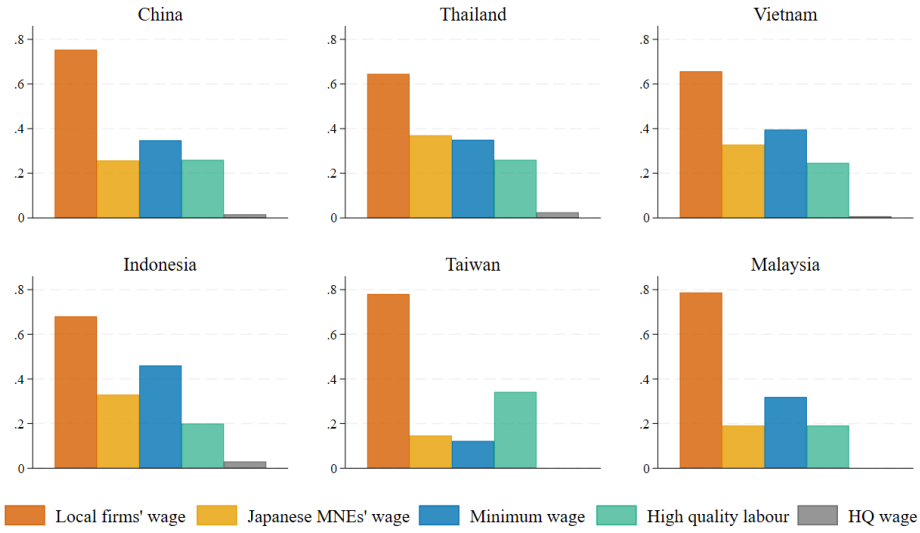


Figure A5: Reasons of increasing subsidiary wage

Note: For each investing country with manufacturing subsidiaries, we asked firms to choose maximum three reasons of increasing subsidiary wages if they answer "increased" for the wage levels in the past 2-3 years. The options include: "wage level of local companies in the host country has risen", "wage level of Japanese companies in the host country has risen", "Wage level of local subsidiaries of third country companies other than Japanese in the host country has risen", "increase in minimum wages by the local government", "strikes/negotiations with trade unions", "Securing high quality labour", "In line with wage increases on the Japanese side", "Other".

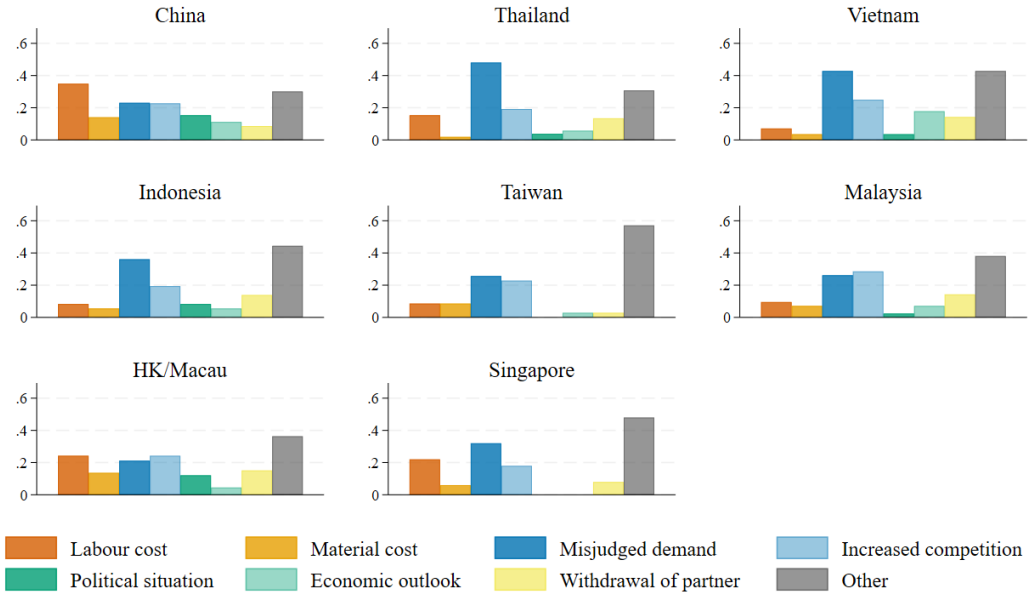


Figure A6: Reasons of withdrawal/downsizing

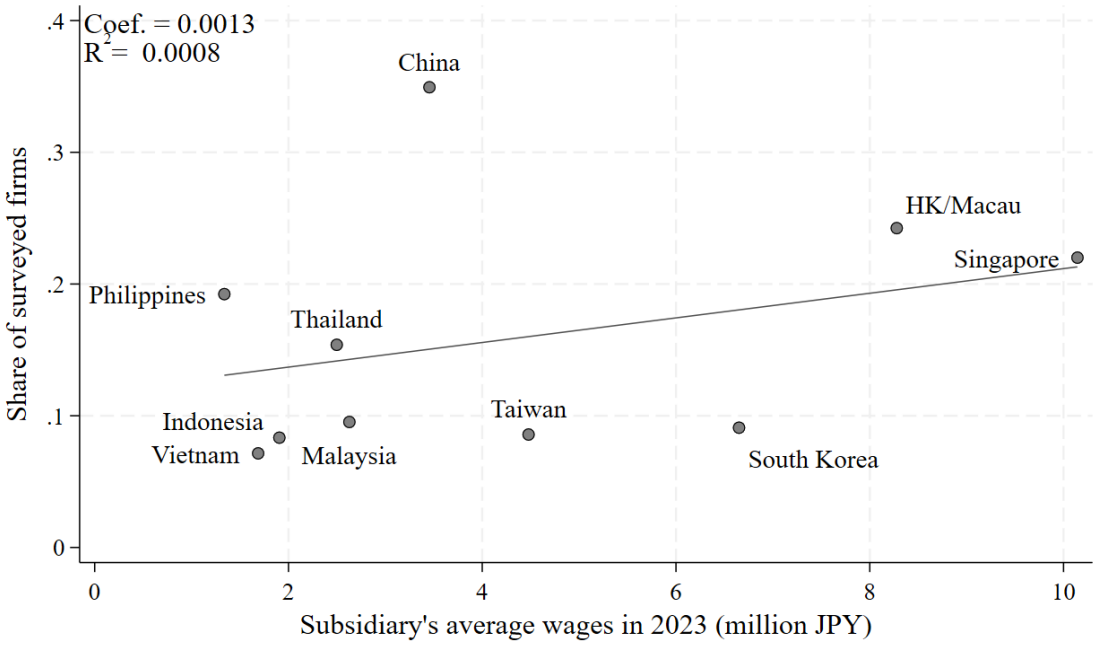


Figure A7: Strategy for long-term wage increase

Note: X-axis shows the average subsidiary wages (million JPY) in 2023, calculated from the BSOBA (Ministry of Economy, Trade and Industry). Y-axis shows the share of surveyed firms with experience of withdrawal/downsizing that chose rising labour cost as the main reason of exit. Only countries with more than 20 firms with withdrawal experience are displayed. The fitted line shows the coefficient for the regression of average subsidiary wage on share of surveyed firms that cite cheap labour as key motivation, weighted by the number of firms in the sample.