RIETI Discussion Paper Series 25-E-046

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RIETI Discussion Paper Series 25-E-046
May 2025

The Structure of Supply Chains and the Impacts of Trump 1.0 Tariffs: Evidence from Japanese firms' sales to North America[1]

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Abstract

This study empirically investigates how the US–China trade war affected sales to North America (i.e., Canada and the US) by Japanese manufacturing firms and their overseas affiliates between 2014 and 2021. Our findings are summarized as follows. All major sales channels to North America—except for sales by affiliates in Mexico, who enjoyed a positive trade diversion effect—were not significantly affected by US tariffs against China, on average. This includes sales by affiliates in the US and China. However, these effects are heterogeneous, depending on whether affiliates served as the main production bases for the North American market in their respective firms. We found such heterogeneity in affiliates in the US, ASEAN, and Mexico, as well as in firms located in Japan. For example, affiliates in ASEAN experienced a positive trade diversion effect when they were the main production bases. Our results suggest that Japanese manufacturing firms did not respond significantly to tariff changes during the Trump 1.0 period, with only minor quantitative changes and heterogeneous effects on sales to North America.

Keywords: Tariffs; Tariffs; Multinationals; Supply chains; Japan; the US; China
JEL classification: F15; F53

[1]This study is conducted as a part of the project "Structural Changes in the World Economy and Responses from Japanese Firms and the Government" undertaken at the Research Institute of Economy, Trade and Industry (RIETI). This work was also supported by JSPS KAKENHI Grant Numbers 22H00063 and 24H00014. This study utilizes the micro data of the questionnaire information based on "the Basic Survey on Overseas Business Activities" and "the Basic Survey of Japanese Business Structure and Activities" that are conducted by the Ministry of Economy, Trade and Industry (METI). The authors are grateful for helpful comments and suggestions by Toshiyuki Matsuura (Keio Univ.), Keiko Ito (Chiba Univ.), and other participants of the project as well as Yasuyuki Todo (Waseda Univ.), Eiichi Tomiura (RIETI), and other participants of the RIETI Discussion Paper Seminar.

1. Introduction

In the globalized era, firms have established international production and distribution networks. Some sell their products by exporting them from their home countries, while others establish production factories abroad and sell their products locally. The latter is known as horizontal foreign direct investment (FDI). When selling to a foreign country, some firms also export from third countries; this is known as export platform FDI. In other words, firms differ in how they access markets. The location of a firm's production and distribution networks plays a crucial role in how external shocks affect performance. For example, when selling to the US market, the consequences of the US–China tariff war differ significantly between firms producing in the US and those producing in China. Sudden economic shocks create heterogeneous impacts across firms according to the specific structures of their production and distribution networks.

This study empirically explores how Japanese firms respond to the US–China tariff war, given their production and distribution networks.[1] Specifically, we investigate its effect on Japanese firms' sales in the North American market, that is, Canada and the US. While our dataset cannot differentiate between sales in Canada and the US, we can identify three types of sales channels in the North American market: (direct) exporting from Japan, horizontal FDI, and export platform FDI. The natural expectation is that the rise in US tariffs against China would increase local sales by US-based Japanese affiliates and decrease exports to the US from China-based Japanese affiliates. It may also increase exports to the US from Japanese affiliates based in third countries. Our data enable us to investigate the effect of US tariffs against China on these sales separately.

In particular, we examine how the effects of US tariffs against China differ according to firms' main sales channels. Exploiting the comprehensive nature of our firm-level sales data, we identify the channel with the highest sales among the affiliates within a firm. Firms may sell their products to North America through multiple channels (e.g., exports from Japan and sales by Japanese affiliates in the US). However, these channels do not necessarily respond equally to US tariffs. Exports from China-based affiliates may remain largely unchanged if a firm's main sales channel to the North American market is horizontal FDI, that is, local production and sales within the US. In such cases, these firms may change their sales in the main channel—that is, sales by Japanese affiliates in the US—more dramatically. Indeed, since the US–Japan trade friction of the 1980s and 1990s, Japanese firms have increased horizontal FDI in the US to avoid potential trade barriers. Additionally, it is not

[1] Additional tariffs imposed by the US on imports from China began in 2018 and 2019. Specifically, 25 percent was applied to the first group of commodities in July 2018 and to the second group in August 2018. A 10 percent tariff was imposed on the third group in September 2018, which was later raised to 25 percent in May 2019. A 15 percent tariff was applied to the fourth group in September 2019. As a result, the simple average of US tariffs against China rapidly rose to around 25 percent by the end of 2019, compared to less than 5 percent in 2017.

common for Japanese firms to use production bases in China as an export platform to the US. Instead, they have adopted a "China plus one," strategy—separating operations in China from those in other countries and diversifying their business operations to avoid potential risks within China. Against this backdrop, we investigate how the impacts of additional US tariffs on China differ according to the structure of firms' production and distribution networks.[2]

Our study contributes to the literature on the US–China tariff war.[3] Many studies have examined the effects of additional tariffs on US imports (e.g., Amiti et al., 2019; Amiti et al., 2020; Fajgelbaum et al., 2020; Cavallo et al., 2021; Handley et al., 2024; Jiang et al., 2023) and on China's imports (e.g., Ma et al., 2021). Some studies have investigated the trade effects on third economies—that is, countries other than the US and China (e.g., Fajgelbaum et al., 2024; Hayakawa et al., 2024; Utar et al., 2023; Yang and Hayakawa, 2023). We also examine the trade effects on third-country firms, specifically, Japanese firms. Unlike most of the studies mentioned, we use firm-level data that can identify exports by destination, specifically exports to North America. In our empirical analyses, we control for firm/affiliate fixed effects and investigate how the effect of additional US tariffs on various exports differs by firm characteristics, especially firms' main sales channels into the North American market.

Since we also investigate Japanese overseas affiliates' exports to or sales in the North American market, our study is related to the growing literature on the effects of the US–China trade war on FDI (Fan et al., 2023; Banh et al., 2024; Jung and Park, 2024; Vortherms and Zhang, 2024; Zhen and Kim, 2025; Xue, 2025). Xue (2025) developed a multi-country general equilibrium model that captures the link between trade and FDI, and performed a quantitative analysis of the welfare effects of the Trump tariffs. Jung and Park (2024) and Banh et al. (2024) studied the effects of the US–China trade dispute on multinational investment patterns in China and Southeast Asia. Vortherms and Zhang (2024) examined their effects on divestment in China. Fan et al. (2023) and Zeng and Kim (2025) investigated the effects of the trade war on Chinese firms' outward FDI. Most studies have used data collected by commercial companies, including the fDi Markets dataset or the Orbis Crossborder Investment Database, to investigate the "extensive margin" of FDI. In contrast, we mainly focus on the "intensive margin," i.e., sales or export values.

Two studies have examined the effects of the US–China trade war on Japanese firms' sales, as we do in this study. Sun et al. (2019) investigated its impact on sales by Japanese affiliates in China using quarterly data on Japanese overseas affiliates. They found that those with high exposure to trade with North America experienced a decline in sales, especially

[2] Indeed, Hayakawa et al. (2024) showed that Taiwan experienced more dramatic effects from the US's additional tariffs against China than Japan and South Korea, as Taiwanese firms had established their export platforms in China. This finding suggests that the location of a firm's main export base plays a critical role in determining the effect of the US–China trade war.

[3] See Fajgelbaum and Khandelwal (2022) for a review of this literature.

to third countries. We also investigated sales by Japanese affiliates in China. While the data used by Sun et al. (2019) do not allow for differentiating sales destinations in third countries, our annual dataset can identify sales to the North American market. Licheng and Matsuura (2023) investigated the effect on sales by Japanese affiliates in ASEAN using the same dataset as ours. They found that ASEAN-based affiliates, whose parent firms also conducted vertical FDI in China, increased exports to North America. In summary, while the two previous studies investigated the effects of this tariff war on Japanese affiliates in ASEAN and China, our study comprehensively examines its effects on the entire sales channel to North America, including exports from Japan, local sales by Japanese affiliates in the US, and exports by affiliates in other third countries. Furthermore, we study the heterogeneous effects across firms based on their main sales channels in North America.

Our study also relates to the literature on firms' international transaction modes. Helpman et al. (2004) explored the selection mechanism between domestic exports and horizontal FDI. Several studies have expanded the choice of export platform FDI (e.g., Baltagi et al., 2007; Bernard et al., 2006; Blonigen et al., 2007; Ekholm et al., 2007; Grossman et al., 2006; Head and Mayer, 2019; Yeaple, 2003). Furthermore, several studies have considered the dynamics of these modes. Conconi et al. (2016) showed that most firms initially serve markets through exports before investing. One possible interpretation is that firms are uncertain about their profitability in foreign markets and may experiment via exports before engaging in FDI. Reflecting this uncertainty, Egger et al. (2014) demonstrated that firms' foreign affiliate networks tend to expand in markets closer to their home base. Chen et al. (2022) reported similar findings. In our analysis, we treat the main sales channel as predetermined; however, we also investigate its determinants.

Our findings can be summarized as follows. First, on average, US tariffs against China do not have significant effects on sales to North America by Japanese manufacturing affiliates in the US, China, and Europe, or on exports from Japan. However, they have a positive impact on sales to North America by Japanese manufacturing affiliates in Mexico. Second, a heterogeneous effect is found among firms' sales channels. In particular, affiliates in ASEAN and Mexico experience a greater trade diversion effect when they are the main production bases for the North American market, although exports from ASEAN and Mexico are quantitatively small overall. These results suggest that Japanese manufacturing firms did not significantly respond to the tariff changes during Trump 1.0, in terms of sales to North America, with only minor quantitative changes and heterogeneous effects. Third, firms' main sales channels are determined based on their total factor productivity (TFP), labor intensity, sales experience, and R&D intensity.

The remainder of this paper is organized as follows. Section 2 overviews Japanese firms' sales in North America. After presenting our empirical framework in Section 3, we report our estimation results in Section 4. Section 5 investigates the determinants of firms' main sales channels. Section 6 concludes the study.

2. Overview of Sales to North America by Japanese Firms

This section provides an overview of Japanese manufacturing firms' sales to North America, including Canada and the US. Due to data limitations, we cannot differentiate between sales in these two countries. Japanese firms' sales to North America include exports from Japan to North America, local sales (more precisely, local sales and exports to Canada) by Japanese affiliates in the US, and exports to North America by Japanese affiliates in third countries other than Japan and the US.

To identify these sales, we use two data sources. One is the Basic Survey of Japanese Business Structure and Activities (BSJBSA) from Japan's Ministry of Economy, Trade, and Industry (METI). According to the METI website[4], this survey is conducted to obtain basic data for policy implementation. It covers enterprises with 50 or more employees and paid-up capital or investment funds exceeding 30 million yen, operating in sectors such as mining, manufacturing, wholesale, and retail. From this survey, we obtain firm-level data on exports from Japan to North America. The second data source is the Basic Survey on Overseas Business Activities (BSOBA) from METI[5]. This survey presents the actual conditions of Japanese corporations' overseas business activities. It includes Japanese corporations that own overseas affiliates, as well as the affiliates themselves.[6] This survey reports exports to Japan, sales in host countries (i.e., local sales), exports to North America, Asia, Europe, and other regions. From this survey, we obtain firm-level data on sales in North America by Japanese overseas affiliates.

A notable feature of Japanese FDI in North America is that the non-manufacturing portion of affiliates owned by Japanese manufacturing firms is significant, as many of these are engaged in wholesale or retail activities. As shown in Table 1, the manufacturing share of affiliates with manufacturing parent firms is only around half, both in terms of the number of affiliates and the value of sales for affiliates in North America. This contrasts with affiliates in other countries or regions, such as ASEAN, China, and Mexico. However, classification as a non-manufacturing industry does not necessarily imply the absence of manufacturing activities. Moreover, the proportion of local sales by affiliates in North America that import products from Japan remains unknown. Thus, this study considers several patterns of industry combinations between parent firms and affiliates.

== Table 1 ==

[4] https://www.meti.go.jp/english/statistics/tyo/kikatu/index.html

[5] https://www.meti.go.jp/english/statistics/tyo/kaigaizi/index.html

[6] Overseas affiliates include the following: (i) a foreign affiliate in which a Japanese corporation has invested capital of 10% or more; (ii) a foreign affiliate in which a subsidiary—more than 50% funded by a Japanese corporation—has invested more than 50% of the capital; and (iii) a foreign affiliate in which a Japanese corporation and a subsidiary funded more than 50% by a Japanese corporation have invested more than 50% of the capital.

Figure 1 shows the shares of major source countries and regions in total sales to North America by Japanese manufacturing firms and their affiliates abroad. At the aggregate level, the primary sales base for Japanese manufacturing firms selling to North America is local affiliates in North America, followed by Japan.[7] Sales by affiliates in North America account for over 70 percent of the aggregated total sales to North America when using data that cover affiliates in all industries, and around 60 percent when using data that include only manufacturing affiliates. These proportions have remained largely unchanged since 2014. In contrast, the shares of third countries, that is, those other than North America and Japan, are certainly low in terms of sales value, including China. In other words, the major sales channels for Japanese manufacturing firms in the North America market are mostly local sales or exports from Japan.

== Figure 1 ==

For comparison, Figure 1 shows the cases of Europe and China. The local shares are less than 60 percent (for affiliates in all industries) and around 40 percent (for manufacturing affiliates) in Europe, while in China, the corresponding figures are less than 60 percent and around 50 percent. Although the local shares are high in these regions, they are even higher in North America. The high dependence of Japanese manufacturing firms on local sales by Japanese affiliates in the US can be traced back to the quid pro quo FDI during the US–Japan trade friction in the 1980s and 1990s, when Japanese firms invested in the US to avoid potential trade barriers (a form of precautionary, tariff-jumping FDI) and sold their products locally via their affiliates in the US. Local sales are likely to dominate in sectors and industries where this type of operation is applicable.[8]

Table 2 shows the compositions of sales to North America by industry in 2021. The upper panel presents figures for affiliates in all industries, while the lower panel includes only affiliates with manufacturing parent firms. In the upper panel, most industries show the highest shares in local sales. In several industries—including food products, textile products, wood products, chemical products, transport equipment, and other manufacturing industries—local sales (i.e., sales within North America) account for over 70 percent. Exports from Japan account for the highest share in industries such as petroleum products, general-purpose machinery, production machinery, and information and communication. For manufacturing affiliates, metal products and business-oriented machinery industries also show the highest share from exports from Japan. Shares of exports from other regions are minimal, except for exports of ceramic products from Europe.

[7] A total of 20 percent of manufacturing firms in our database report sales to North America.

[8] See Table A1 in the Appendix for the industry composition of sales to North America by Japanese affiliates or firms located in each country or region. The transport equipment industry is the most significant in terms of sales size.

In summary, for Japanese manufacturing firms, local sales account for the majority of sales to North America in terms of sales values.

== Table 2 ==

However, this dominance of local sales disappears when we consider the number of firms selling to North America. Table 3 reports the ratio of firms with sales in North America. Since firms may use multiple sales channels, the sum of the percentages in each row can exceed 100 percent. While 90 percent of manufacturing firms with sales to North America export from Japan, only 26 percent have sales within North America. This number drops to 15 percent in the case of manufacturing affiliates. The proportion of firms exporting from third countries also approaches 10 percent for ASEAN and China, and exceeds 10 percent in some industries. For instance, the share reaches nearly 20 percent for ASEAN, 15 percent for China, and over 10 percent for Mexico in the transport equipment industry. It also exceeds 10 percent for ASEAN and China in the textile, non-ferrous metal, and information and communication equipment industries. These figures confirm that it is worth analyzing the effects of US tariffs under Trump 1.0 on sales from each source country or region at the firm or affiliate level.

== Table 3 ==

Table 4 presents the changes in sales to North America from 2014 to 2021. In terms of aggregated export values, we observe significant changes across most channels. However, at the industry level, some industries show remarkable increases or decreases during this period. For example, the upper panel shows that local sales and exports from Japan in the food industry more than double. In contrast, the information and communications industry experience a dramatic decrease in local sales. Furthermore, the aggregated value of exports by manufacturing affiliates in China decrease significantly, by 40 percent. This sharp decline reflects a drop of more than 50 percent in many industries, while an increase in exports of more than 50 percent is also observed in some industries. In other words, the change in exports by affiliates in China is not uniform across industries. For ASEAN affiliates, several industries, such as wood products, metal products, general-purpose machinery, and other

manufacturing products, experience an increase in exports.[9] These changes suggest that the sources of sales to North America may be changing in some industries.[10]

== Table 4 ==

Next, we examine the major source of sales to North America at the firm level across seven regions or countries: North America (the US and Canada), Japan, ASEAN, China (including Hong Kong and Macao), Europe, Mexico, and others (hereafter referred to as the main channel). This study uses two criteria to determine the main channel. First, on a regional basis, we classify the main channel as either sales within North America, exports from Japan, or exports from third countries as a whole. For firms with the largest share of exports from third countries, we identify the main channels among exports from ASEAN (as a whole), China (as a whole), Europe (as a whole), Mexico, and others. The second criterion is based on the country level: we identify the country with the largest sales and then determine the main channel for each firm among the seven main channels.

Table 5 shows the proportion of manufacturing firms by the three main channels of sales to North America: sales within North America, exports from Japan, and exports from third countries. For most firms with sales in North America, the main channel is either exports from Japan or sales within North America. Thus, only about five to six percent of firms have exports from third countries as their main channel. However, when firms that supply exclusively from Japan only are excluded, the corresponding portion on sales within North American increases to 66 percent (for all affiliates) and 51 percent (for manufacturing affiliates) over the study period. The share for exports from third countries also increases to an average of 16 percent and 22 percent, respectively. Interestingly, the proportion of exports from third countries is gradually increasing regionally, although this change is small. This suggests the possibility of minor changes, in the role of third countries during the tariff war under Trump 1.0, even in the absence of a major restructuring of supply chains.[11]

== Table 5 ==

[9] For example, Ando et al. (2024) demonstrated that Mexico plays a connecting role between Factory Asia and Factory America, with strengthened export linkages to Mexico not only from China but also other East Asian countries, particularly in machinery parts and components, during the 2010s. They also emphasized that Mexico's role intensified during the 2019–2021 period due to the following: the US–China confrontation; stricter rules of origins (ROOs) under the United States–Mexico–Canada Agreement (USMCA)—which replaced the North America Free Trade Agreement (NAFTA) in 2020; growing momentum for near-shoring after the COVID-19 pandemic; and other factors.

[10] The number of firms exporting from Mexico to North America increases by 80 percent for all manufacturing, which is much larger than the change for the total for other countries or regions (Table A2). In particular, the number of manufacturing firms with affiliates in Mexico that export to North America more than double in the transport equipment industry.

[11] See Appendix B for more detailed discussion on changes in the main channel among third countries.

3. Empirical Framework

This section explains our empirical framework to investigate the effects of US tariffs against Chinese goods on sales to North America by Japanese firms. We examine three kinds of sales in North America by Japanese firms: (i) local sales (more precisely, local sales plus exports to Canada) by manufacturing affiliates in the US, and exports from China by manufacturing affiliates in China, from the perspective of countries directly involved in the tariff war; (ii) exports from ASEAN and Mexico by manufacturing affiliates in these countries, representing developing countries indirectly involved; and (iii) exports from Europe by manufacturing affiliates in Europe and exports from Japan by manufacturing firms in Japan as exports from developed countries indirectly involved. Exports from China to North America may decrease due to the increased tariffs. In contrast, due to reduced competition with Chinese imports in the US market, local sales by Japanese affiliates in the US are expected to increase in industries subject to additional US tariffs on China. Similarly, exports from third countries (i.e., countries other than the US and China) may benefit from trade diversion and increase their exports to North America. In short, Japanese firms will change their sales to North America depending on the location.

To examine within-firm changes in sales to North America, we estimate the following simple equation for manufacturing affiliate *f* in industry *j* in country *i* in year *t* using the ordinary least squares (OLS) method.

$$\frac{Sales_{fit}}{Total\ sales_{ft}} = \beta \ln\left(1 + Tariffs_{jt}\right) + \gamma Labor\ cost\ share_{fit} + FE_f + FE_{it} + \epsilon_{fit} \qquad (1)$$

The dependent variable is sales to North America by affiliate *f* in country *i*, normalized by the total sales in North America by the Japanese firm to which affiliate *f* belongs. We estimate this equation by region: the US, China (including Hong Kong and Macao), ASEAN, Mexico, Europe, and Japan.[12] $Tariffs_{jt}$ refers to the US tariffs for industry *j* on Chinese goods in year *t*.[13] We take a simple average of monthly tariffs at the annual level.[14][15] It lies

[12] One may propose aggregating affiliates by region. However, such aggregation may combine affiliates from different industries. To align with tariff data at the four-digit level, we conduct analyses at the affiliate level. For the same reason, we do not aggregate affiliates by country.

[13] The industry *j* is based on the industry classification of each overseas affiliate at the four-digit level (and the BOSBA-BSJBSA matched industry classification for firms located in Japan).

[14] Given that our study period covers only four years since the initiation of additional tariffs, and exports can be directly and immediately affected by tariffs, we use tariffs in year *t*, without applying lags, such as a one-year lag. All results for tariffs are insignificant when a one-year lag for tariffs is used.

[15] The potential endogeneity of the tariff variable in this equation warrants discussion. The initial tariff levels, or most-favored-nation rates, do not suffer from endogeneity bias because equation (1) includes affiliate fixed effects. US additional tariffs against China are also unlikely to introduce bias, as our sample

within a unit interval [0, 1]. To control for the labor intensity of goods, we introduce $Labor\ cost\ share_{fit}$, the share of labor expenses in the operating costs of affiliate *f* in country *i*. We include affiliate fixed effects in addition to country-year fixed effects, which control for time-variant country characteristics. Later, we also control for sector-year fixed effects, that is, the time-variant sector characteristics at the two-digit level.[16]

The structure of supply chains may affect the impact of US tariffs on sales at each location. On one hand, if local sales by Japanese affiliates in the US were the main channel for sales to North America, such affiliates may increase their local sales more significantly after the rise in US tariffs against China. However, if exports from China play a minor role in sales to North America within the firms' supply chain, they may not change their exports to North America dramatically. To examine the differences according to the main sales channel, we add an interaction term between US tariffs and the main channel dummy to equation (1) as follows:

$$\frac{Sales_{fit}}{Total\ sales_{ft}} = \beta_1 \ln(1 + Tariffs_{jt}) + \beta_2 \ln(1 + Tariffs_{jt}) \times Main_{fit-1} + \gamma Labor\ cost\ share_{fit} + FE_f + FE_{it} + \epsilon_{fit} \qquad (2)$$

$Main_{fit-1}$ takes a value of one if sales from country *i* were the main channel—i.e., the largest sales—to North America for firm *f* in year *t*−1.

Our main data sources are the same as those used in the previous section: BSOBA and BSJBSA. The study period covers 2014 to 2021. Considering that the US–China tariff war began in 2017 and the most recent available data are from 2021, we set a more or less equal number of years before and after the start of the tariff war. Data on US tariffs are drawn from the World Integrated Trade Solution, the replication files of Fajgelbaum et al. (2020), and Notices of Modification by the Office of the United States Trade Representative. The tariff data are matched to the BSOBA industry classification at the four-digit level for the cases other than Japan and the BSOBA-BSOBA matched industry classification for the case of Japan. Notably, the parent firm's industry is not necessarily the same as that of its affiliates. Therefore, we estimate the equation above for two sets: (i) manufacturing affiliates with parent firms across all industries, and (ii) manufacturing affiliates of manufacturing parent firms. Additionally, when estimating equation (2), as in Table 5, we classify the main sales channels based on two criteria: regional and country level.

consists of affiliates of Japanese multinational firms. This is especially true for affiliates located in third countries.

[16] For affiliates in China, those in Hong Kong and Macao are included. Thus, country-year fixed effects are included in the analysis of sales by affiliates in China. In the case of Japan, variables are defined at the firm level. Sales to North America refer to firms' exports from Japan to North America. Affiliate fixed effects are, indeed, firm fixed effects.

4. Empirical Results

This section reports our estimation results for equations (1) and (2). Table 6 shows the sales of Japanese manufacturing affiliates in the US in panel (A) and sales of Japanese manufacturing affiliates in China in panel (B). Columns (I) and (II) show estimates for manufacturing affiliates of all parent firms, while columns (III) and (IV) focus on affiliates of manufacturing parent firms only. Columns (I) and (III) control for affiliate- and country-year fixed effects. Sector-year fixed effects are added to these fixed effects in columns (II) and (IV). Sectors are defined at the two-digit level. Standard errors are clustered at the industry level. All coefficients, including those for US tariffs and labor cost share, are insignificantly estimated. This suggests that, on average, US tariffs on imports from China do not significantly impact sales within North America (including local sales) by Japanese manufacturing affiliates in the US, nor on exports to North America by Japanese manufacturing affiliates in China. In other words, Japanese affiliates in countries directly affected by the tariff war under Trump 1.0 do not change their sales in North America.

=== Table 6 ===

One possible reason for the insignificant results for local sales by Japanese manufacturing affiliates in the US is the difference in products. As discussed in Section 2, Japanese firms have invested in the US—where production costs are high—partly as a type of precautionary, tariff-jumping FDI. The products sold in the US by these affiliates may differ from those imported from China. Therefore, less competition with Chinese products in the US market do not significantly change the local sales of Japanese affiliates. Another possible reason is that some key parts and components used for in US production are imported from China, and the additional tariffs have increased these input costs.[17] In either case, Japanese affiliates in the US do not enjoy the positive effects of additional tariffs imposed on imports from China. In China's case, for Japanese firms that have adopted the "China plus one" strategy, it is uncommon to use production bases in China as a platform for exports to the US. This type of operation may have little impact on North American sales by Japanese affiliates in China.

Table 7 reports the results for Japanese manufacturing affiliates in ASEAN and Mexico. While panel (A) includes affiliates in both regions, panels (B) and (C) report results for ASEAN and Mexico separately. In panel (A), column (III) shows a significantly negative coefficient for US tariffs against China, indicating that rising tariffs are associated with a

[17] Unfortunately, our data does not allow us to identify imports specifically from China. Therefore, in the analysis of sales by affiliates in the US, we examine the interaction between tariffs and a dummy variable for imports from Asia (excluding Japan). The results for US tariffs and this interaction term, however, are insignificant.

relative decline in sales to North America by Japanese manufacturing affiliates in ASEAN and Mexico—although most coefficients are insignificant. This result is contrary to our expectations and remains unchanged when focusing solely on ASEAN, as indicated in panel (B). Nevertheless, when focusing on Mexico, most coefficients for US tariffs against China are significantly positive, as reported in panel (C). This suggests that higher US tariffs against China increase sales to North America by Japanese manufacturing affiliates in Mexico. In other words, they appear to benefit, at least partially, from the trade diversion effect caused by additional US tariffs against China. Other factors may also play a role, such as stricter ROO under the USMCA and the growing momentum for near-shoring following the COVID-19 pandemic, as discussed in Section 2. The labor cost share also shows significantly negative coefficients, suggesting that less labor-intensive affiliates in Mexico have greater sales to North America.

=== Table 7 ===

Table 8 presents the results for manufacturing affiliates in Europe and manufacturing firms in Japan. Similar to the findings for affiliates in the US and China, panel (A) shows that US tariffs against China have no significant effects on sales by affiliates in Europe. Such insignificant effects are also observed for exports from Japan, as indicated in panel (B). Thus, on average, US tariffs on China do not change exports from Europe and Japan to North America. One possible reason for these insignificant results is product differentiation, similar to affiliates in the US. Consequently, affiliates in Europe and firms located in Japan exporting to the US do not experience a positive trade diversion effect on their exports from Europe and Japan, respectively.

=== Table 8 ===

Next, we report the estimation results of equation (2). Table 9 presents the results for Japanese manufacturing affiliates in the US (panel A) and China (panel B). We define the main sales channel based on the regional base in columns (I) to (III) and the country base in columns (IV) to (VI). In columns (I), (II), (IV), and (V) of panel (A), US tariffs on China have significantly negative coefficients. Their interaction terms with the main channel dummy have significantly positive coefficients in all columns. The absolute magnitude is larger for the non-interacted variable, indicating that rising US tariffs against China do not increase local sales by Japanese manufacturing affiliates in the US, even for those affiliates identified as the main sales channel to North America (i.e., affiliates located in a country or region identified as the main channel of sales for each firm). Nevertheless, the negative effect is smaller for those affiliates. This smaller effect remains even after controlling for industry-year fixed effects, as shown in columns (III) and (VI). Panel (B) shows no significant results

for affiliates in China. We also find no significant differences in the results based on the main sales channels for affiliates in China.

=== Table 9 ===

Similarly, Table 10 reports the results for affiliates in ASEAN and Mexico. In panel (A), while the coefficients for US tariffs are insignificant, their interaction terms have significantly positive coefficients in all columns. In panel (B), while some non-interacted US tariff variables have significantly negative coefficients, their interaction terms have significantly positive coefficients in all columns, with the absolute magnitude being greater for the interaction terms. In panel (C), both the non-interacted and interacted variables have positive coefficients, although some are insignificant. Combined with the results in Table 7, Japanese affiliates in Mexico may increase sales to North America, regardless of whether they are the main channel of sales to that region.[18] Overall, these results indicate that a rise in US tariffs against China increases exports to North America by Japanese affiliates in ASEAN and Mexico more significantly when they are the main production bases for the North American market for each firm. Thus, whether an affiliate's location is the main channel or not tends to be critical for developing countries indirectly concerned, such as ASEAN and Mexico—particularly for ASEAN.

=== Table 10 ===

Lastly, the results for manufacturing affiliates in Europe (panel A) and manufacturing firms located in Japan (panel B) are shown in Table 11. As reported in panel (A), no tariff-related variables have significant coefficients for affiliates in Europe. We find no significant differences in the results based on the main sales channel. In panel (B), while US tariffs against China have significantly negative coefficients, their interaction term with the main dummy has significantly positive coefficients. The absolute magnitudes of these two coefficients are almost the same, suggesting that US tariffs against China do not change exports from Japan to North America when Japanese firms mainly sell their products to North America through exports from Japan. In other words, they do not benefit from the positive trade diversion effect of additional US tariffs on China. As discussed above, this may be due to product differentiation between goods exported from Japan to the US and those exported from China. In contrast, firms with other main channels decrease their exports to North America. These firms may have shifted their resources from Japan to their main production base.

[18] We also check the estimation results of US tariffs against China separately for non-main affiliates and main affiliates. The results corresponding to column (I) and (IV) are both significantly positive, with larger coefficients for the latter.

=== Table 11 ===

In summary, except for sales by Japanese manufacturing affiliates in Mexico, none of the channels of sales to North America significantly change, on average, in response to US tariffs against China. However, in some cases, we find heterogeneous effects according to the main channel for each firm. In particular, affiliates in ASEAN experience a positive trade diversion effect when their exports are identified as the main sales channel, while affiliates in Mexico enjoy a positive trade diversion effect regardless of whether their exports are the main channel. However, as found in Section 2, exports from ASEAN and Mexico to North America are quantitatively small and account for a small fraction of total sales. Thus, our results indicate that Japanese manufacturing firms do not significantly restructure their supply chains in terms of sales to North America in response to Trump 1.0 tariffs, although there are minor changes and some heterogeneity.[19]

5. Determinants of the Main Sales Channel

In the previous section, we found that the main sales channel plays a significant role in the effects of US tariffs on Chinese goods on sales to North America by Japanese manufacturing firms. While we treated the main sales channel as predetermined in the previous section, this section investigates its determinants. Specifically, we estimate a multinomial logit model with three choices for the main sales channel to North America by Japanese manufacturing firms: local sales (more precisely, sales within North America) by their affiliates in the US, exports from Japan (exports by manufacturing firms located in Japan), and exports from third countries (exports by their affiliates in countries other than the US and Japan). As in the previous section, we obtain the data necessary for this analysis from the BSOBA and BSJBSA. The study period covers 2014 to 2021. Additionally, as in the previous sections, we define the main sales channel based on the region or country base. We also examine two types of sales: sales by affiliates in all industries with manufacturing parent firms, and sales by manufacturing affiliates with manufacturing parent firms.

We examine the following four independent variables. The first is firms' productivity in Japan.[20] As discussed in Section 1, previous studies on firms' international activity selection highlight productivity as a key element. The second variable is labor intensity in the primary location (among the seven countries or regions), which is the share of labor

[19] See Appendix C for other estimation results.

[20] We calculate firms' productivity as the log of sales minus a weighted average of the logs of labor and capital. The weight for labor is the median labor share in value-added across firms within a given industry. The weight for capital is estimated under the assumptions of a constant returns-to-scale production function and a constant elasticity of substitution in the demand function. This method is a slightly simplified version of Asker et al. (2014). Following their approach, we set the elasticity of demand to four.

expenses in operating costs.[21] This variable captures the characteristics of products sold in the US. The third variable is sales experience in the North American market, that is, the duration of sales to North America. Specifically, we introduce two dummy variables that take a value of one if a firms' first sales in North America occurred in the 2000s and in the 2010s or later, respectively. As discussed in Section 1, some studies on internationalization dynamics suggest that firms change their main mode of international activity as they gain experience. The fourth variable is Japanese firms' R&D intensity, measured by R&D expenditure divided by total sales. Finally, we control for fixed effects. While industry and year fixed effects are included in some equations, others use industry-year fixed effects to account for tariffs.

The estimation results are presented in Table 12. Compared to firms whose main channel is exports from Japan, firms whose main channel is sales within North America (i.e., local sales) tend to have higher productivity at home (in Japan), more active R&D activities in Japan, more labor-intensive operations in North America, and greater experience in sales to North America.[22] The coefficients for TFP and R&D are positive and statistically significant in all equations.[23] Additionally, the coefficients for sales experience to North America—measured by first access in the 2000s or in the 2010s or later, with the baseline being first access before 2000—are negative for both, with larger absolute values for the latter in all columns. This suggests that firms with first access to North America before 2000 were more likely to select local sales as their main channel than those entering in the 2000s, and those entering in the 2010s or later were the least likely to do so. Moreover, the coefficient for labor cost share is positive but close to zero, suggesting that local production activities in North America are more labor intensive, but not substantially different from those of firms whose main channel is exports from Japan.[24]

== Table 12 ==

In contrast, firms whose main channel is exports from third countries tend to have lower productivity at home (in Japan), fewer R&D activities at home (in Japan), fewer labor-intensive activities in third countries, and abundant sales to North America compared with firms whose main channel is exports from Japan. The coefficients for TFP, R&D, and labor

[21] The main location refers to the primary source country or region of sales to North America among seven regions: North America (the US and Canada), Japan, ASEAN, China (including Hong Kong and Macao), Europe, Mexico, and others, defined at the firm level as in our definition of the main channel.

[22] The major results discussed in this subsection, based on the analysis of the 2014–2021, remain unchanged when the study period is changed to 2009–2021, including the results related to sales experience in North America.

[23] The results for R&D remain consistent when the R&D dummy variable is used instead of R&D expenditure as a share of total sales.

[24] This result may support our implication of product differentiation due to high production costs in the US, which may explain insignificant results for sales by affiliates in the US discussed in Section 4.

cost share are negative and statistically significant in all equations. Although these firms are less productive than exporters from Japan, they may maintain international competitiveness through location advantages and other factors in third countries. The coefficients for sales experience in North America—measured by first access in the 2000s or in the 2010s or later—are negative for both, with slightly larger absolute values for the latter in all equations. However, the difference between the two coefficients is small, and their absolute values are lower than those for firms whose main channel is sales within North America. This indicates while sales experience in North America is important for firms exporting from third countries as their main channel, the effect is not as strong as for firms with sales in North America as their main channel.

These results indicate that a firm's main sales channel is determined by its TFP, labor intensity, sales experience, and R&D intensity. Differences in main sales channels create varying impacts of US tariffs against China on firms' sales in the North American market. Some characteristics, especially sales experience, are dynamic; thus, the main sales channel may change over time. Therefore, the impact of external shocks on firm performance can vary depending on their timing and the firms' international mode at that juncture in time.

6. Conclusion

This study empirically investigated the impacts of US tariffs against China during the Trump 1.0 period on sales to North America by Japanese manufacturing firms and their overseas affiliates. For Japanese manufacturing firms, the major sales channels for the US market are mostly local sales in terms of aggregate values, followed by exports from Japan. This pattern partly reflects their historical strategy of the quid pro quo FDI, a legacy of the US–Japan trade friction in the 1980s and 1990s. During that period, Japanese firms invested in the US to avoid potential trade barriers—a form of precautionary, tariff-jumping FDI—and sold their products locally via their affiliates in the US. Because local sales and exports from Japan comprise a large portion of sales to North America, the share of exports from third countries, including China, in total sales is quantitatively small. Unlike Taiwanese firms, Japanese firms have not adopted the strategy of using production bases in China as a primary export platform to the US.

Our econometric results demonstrated that, except for sales by Japanese manufacturing affiliates in Mexico, all sales channels to North America did not significantly change in response to US tariffs against China, on average, whether positively or negatively. This includes sales by affiliates in countries directly concerned, that is, the US and China, which is largely due to product differentiation in the US and the role of operations in China. However, we found heterogeneity in the effects depending on each firm's main sales channels. In particular, affiliates in ASEAN countries enjoyed a positive trade diversion effect when their location was identified as the main channel for each firm, whereas both

types of affiliates in Mexico enjoyed a positive trade diversion effect. Considering that exports from ASEAN and Mexico are quantitatively small overall, our results suggest that, to some extent, there were positive and heterogeneous trade diversion effects, but Japanese manufacturing firms did not significantly restructure their supply chains in response to the Trump 1.0 tariffs, largely due to their heavy investment in US-based production—a legacy of the US–Japan trade friction, as well as their strategy of not using production bases in China as a major platform for exports to the US to avoid China-related risks.

The Japan External Trade Organization (JETRO) conducts a yearly questionnaire survey on Japanese firms' overseas businesses. The latest survey was conducted from November to December 2024, when Trump's victory in the US presidential election was confirmed (JETRO, 2025). There is a question about the destination countries of exports, which are expected to increase over the coming three years. The number of firms that listed the US as a destination has rapidly increased, and many firms regard the US as the most important destination for exports, particularly in industries such as food and beverages and transport equipment, parts, and components. Additionally, the number of firms that have listed the US as a country to expand their business has increased, particularly among small and medium enterprises. One reason for this may be the strong US economy (so far), but US tariff policies—which have been threatened under Trump 2.0—and other possible factors may influence these results. These include expectations of rising US tariffs against Japan, the possibility of increased tariffs against many other countries, and talks of tariffs targeting Mexico. Although Japanese firms responded to Trump 1.0 tariff policies primarily by adjusting exports without significant changes in their supply chains, the expectation of rising US tariffs—not only against Japan but also against third countries—under Trump 2.0, seems to have forced many firms to consider increasing FDI in the US, which would become a notable feature of Trump 2.0. Considering the reaction to Trump 1.0 tariffs and the background discussed, however, Japanese firms may exhibit a more "sticky" response to Trump 2.0 tariffs, aiming to maintain the current supply chain structure compared with firms from other countries.

The logic behind justifying US tariff policies under Trump 2.0 is wavering. This may include factors such as the US–China conflict, an increasing tariff revenue, diminishing trade deficit, reciprocal tariffs, industry protection, and using tariffs as leverage in negotiations. Unlike under Trump 1.0, there is a fallacy in the logic of increasing tax revenues, along with strong concerns about inflation under Trump 2.0. The rationale for justifying tariffs is continuously changing. Even if it is difficult to control US trade policies, it is important to strive for a rules-based international trade order with as many countries as possible. Given the recent decline of Japanese FDI in ASEAN, Japan needs to maintain its position using all available means, including trade policy and policy research. It is also important for the Japanese government to provide a business environment in which Japanese firms flexibly restructure supply chains when necessary, rather than retreat. This

includes proper information sharing through JETRO and other channels, and support for trade and investment through export and investment insurance and other measures.

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Table 1. Manufacturing share of Japanese affiliates with manufacturing parent firms by host country/region (%)

Data	BSOBA			BSOBA and BSJBSA		
	2014	2017	2021	2014	2017	2021
	A. Based on the number of affiliates					
ASEAN	74	73	73	73	72	71
China	72	70	69	72	69	68
Mexico	64	68	69	66	68	68
Others	54	53	52	54	53	52
N.America	50	48	47	51	49	47
Europe	39	38	38	40	38	37
	B. Based on total sales					
ASEAN	70	74	75	68	73	70
China	70	70	71	69	69	70
Mexico	92	90	86	92	90	86
Others	68	67	67	66	67	66
N.America	49	46	45	49	46	45
Europe	41	41	44	43	40	45
	C. Based on total sales (calculated by aggregating sales by regions)					
ASEAN	81	81	82	80	82	74
China	73	73	76	71	72	76
Mexico	88	89	87	88	89	87
Others	67	67	69	65	67	69
N.America	47	44	43	47	44	43
Europe	48	49	52	51	48	54

Source: authors' calculation, based on METI BSOBA and BSJBSA.

Note: Figures in column "BSOBA and BSJBSA" are calculated, based on data that includes only affiliates in BSOBA with parent firms covered in BSJBSA.

Table 2. Composition of Sales to North America in 2021(%)

	Local	Japan	ASEAN	China	Mexico	Europe
(i) Affiliates in all industries						
Food products	80	11	2	0	0	1
Textile products	71	17	2	3	0	6
Wood, pulp and paper products	74	10	0	0	0	1
Chemical products	74	23	1	0	0	1
Petroleum and coal products	0	100	0	0	0	0
Ceramic, stone and clay	45	27	2	0	4	21
Iron and steel	69	22	3	1	0	1
Non-ferrous metals	65	30	1	3	0	1
Metal products	56	36	1	1	1	1
General-purpose machinery	42	54	1	1	0	1
Production machinery	44	55	0	0	0	0
Business oriented machinery	63	35	0	0	0	1
Electrical machinery	68	25	2	2	0	3
Information and communication	36	58	1	4	0	0
Transport equipment	79	17	1	0	3	0
Other manufacturing	72	25	2	0	0	0
All manufacturing	73	23	1	0	2	1
(ii) Manufacturing affiliates only						
Food products	75	20	2	0	0	1
Textile products	66	21	3	1	0	9
Wood, pulp and paper products	73	10	0	0	0	1
Chemical products	74	23	1	0	0	1
Petroleum and coal products	0	99	0	1	0	0
Ceramic, stone and clay	36	31	3	0	5	26
Iron and steel	46	38	6	2	0	2
Non-ferrous metals	62	36	1	0	0	1
Metal products	44	46	2	2	1	1
General-purpose machinery	23	73	2	1	0	1
Production machinery	22	77	0	0	0	0
Business oriented machinery	25	72	0	0	0	1
Electrical machinery	67	28	1	1	0	2
Information and communication	27	70	1	1	0	0
Transport equipment	57	35	1	0	6	0
Other manufacturing	58	37	3	0	1	1
All manufacturing	55	38	1	0	3	1

Source: authors' calculation, based on METI BSOBA and BSJBSA.

Notes: "Local" means North America. Parent firms (and firm in Japan without affiliates abroad) are manufacturing firms. In this table, BSJTBSA is used for Japan, and BSOBA is used for others.

Table 3. Composition of Firms/Affiliates with Sales to North America in 2021 (%)

	Local	Japan	ASEAN	China	Mexico	Europe
(i) Affiliates in all industries						
Food products	21	87	6	5	0	2
Texile products	25	88	18	16	1	3
Wood, pulp and paper products	27	73	12	8	0	6
Chemical products	23	94	5	7	2	8
Petroleum and coal products	0	100	7	7	0	7
Ceramic, stone and clay	14	92	12	12	1	8
Iron and steel	31	87	13	9	7	5
Non-ferrous metals	25	83	15	11	4	6
Metal products	22	85	11	7	2	3
General-purpose machinery	18	95	5	7	2	7
Production machinery	29	93	5	5	0	7
Business oriented machinery	24	96	5	6	2	9
Electrical machinery	27	93	6	10	1	8
Information and communication	29	90	13	15	0	8
Transport equipment	40	84	19	15	12	7
Other manufacturing	22	91	12	9	3	5
All manufacturing	26	90	10	9	3	6
(ii) Manufacturing affiliates only						
Food products	16	86	6	4	0	1
Texile products	12	83	19	14	2	3
Wood, pulp and paper products	17	81	14	5	0	7
Chemical products	14	94	5	4	1	6
Petroleum and coal products	0	100	0	8	0	0
Ceramic, stone and clay	9	91	13	9	1	6
Iron and steel	24	87	13	9	7	6
Non-ferrous metals	13	82	16	10	4	4
Metal products	13	85	9	7	2	2
General-purpose machinery	10	96	5	7	1	4
Production machinery	10	94	4	5	0	4
Business oriented machinery	8	96	3	5	0	4
Electrical machinery	12	95	5	9	0	5
Information and communication	11	91	11	13	0	3
Transport equipment	34	84	18	15	11	6
Other manufacturing	11	90	11	8	2	2
All manufacturing	15	90	9	8	2	4

Source: authors' calculation, based on METI BSOBA and BSJBSA.

Notes: "Local" means North America. Parent firms (and firm in Japan without affiliates abroad) are manufacturing firms. In this table, BSJTBSA is used for Japan, and BSOBA is used for others.

Table 4. Changes in Sales to North America in 2021 (2014=1)

	Total	Local	Japan	ASEAN	China	Mexico	Europe
(i) Affiliates in all industries							
Food products	2.3	2.5	2.3	0.7	0.2	n.a.	4.5
Texile products	0.7	0.7	1.1	0.3	2.1	n.a.	0.6
Wood, pulp and paper products	1.4	1.6	1.2	0.8	0.2	n.a.	1.2
Chemical products	1.3	1.4	1.2	0.6	2.0	1.6	0.7
Petroleum and coal products	0.2	n.a.	0.8	n.a.	n.a.	n.a.	n.a.
Ceramic, stone and clay	1.1	0.8	2.0	1.8	0.1	n.a.	1.2
Iron and steel	1.3	1.8	0.7	104.4	0.7	n.a.	42.2
Non-ferrous metals	1.8	1.5	2.8	0.7	7.2	0.4	9.5
Metal products	1.3	1.5	1.8	4.0	0.9	n.a.	0.1
General-purpose machinery	1.1	0.7	2.0	5.5	0.2	0.5	0.3
Production machinery	1.2	1.2	1.2	0.6	1.1	0.7	0.6
Business oriented machinery	0.8	0.7	1.1	0.0	0.2	0.5	0.8
Electrical machinery	0.7	0.7	0.7	1.2	0.5	0.2	2.2
Information and communication	0.8	0.6	0.9	0.6	2.1	0.1	1.2
Transport equipment	1.0	1.0	1.0	1.1	0.6	1.0	3.9
Other manufacturing	1.3	1.2	1.2	4.5	1.6	1.6	4.5
All manufacturing	1.0	1.0	1.0	1.0	0.9	1.0	1.3
(ii) Manufacturing affiliates only							
Food products	1.4	1.3	2.3	0.8	0.2	n.a.	2.1
Texile products	0.7	0.6	1.2	0.3	0.9	n.a.	0.6
Wood, pulp and paper products	1.4	1.6	1.1	0.8	1.3	n.a.	1.2
Chemical products	1.4	1.4	1.3	0.6	2.0	1.6	0.8
Petroleum and coal products	0.2	n.a.	0.3	n.a.	n.a.	n.a.	n.a.
Ceramic, stone and clay	1.3	1.1	1.9	1.8	0.1	n.a.	1.1
Iron and steel	0.9	1.1	0.7	104.3	0.7	n.a.	42.2
Non-ferrous metals	1.8	1.5	2.8	0.7	1.2	0.4	5.3
Metal products	1.3	1.5	1.8	4.0	4.0	n.a.	0.1
General-purpose machinery	1.1	0.5	2.0	5.0	0.2	n.a.	0.3
Production machinery	1.1	0.8	1.2	0.4	0.9	0.6	0.6
Business oriented machinery	0.9	0.6	1.1	0.0	0.2	n.a.	0.7
Electrical machinery	0.7	0.8	0.6	1.5	0.7	0.2	1.6
Information and communication	0.8	1.0	0.7	0.7	0.8	0.1	0.4
Transport equipment	0.9	0.9	1.0	1.3	0.4	0.9	1.6
Other manufacturing	1.1	0.9	1.6	3.8	1.8	1.6	5.0
All manufacturing	1.0	0.9	1.0	1.2	0.6	0.9	1.0

Source: authors' calculation, based on METI BSOBA and BSJBSA.

Notes: "Local" means North America. Parent firms (and firm in Japan without affiliates abroad) are manufacturing firms. In this table, BSJTBSA is used for Japan, and BSOBA is used for others.

Table 5. Portion of Firms by Three Main Sales Channels (%)

	Main channel: Region						Main channel: Country					
	N. America		Japan		Third		N. America		Japan		Third	
(i) Affiliates in all industries												
2014	21.4	(65.1)	73.4	(19.1)	5.2	(15.8)	21.2	(64.6)	73.6	(19.7)	5.1	(15.7)
2017	22.0	(65.4)	72.4	(18.0)	5.6	(16.6)	21.9	(65.2)	72.6	(18.3)	5.5	(16.5)
2021	20.4	(63.2)	74.2	(20.0)	5.4	(16.8)	20.4	(63.2)	74.5	(21.0)	5.1	(15.8)
All	21.1	(65.6)	73.3	(18.9)	5.6	(15.5)	21.1	(65.4)	73.5	(19.3)	5.5	(15.3)
(ii) Manufacturing affiliates only												
2014	12.8	(52.5)	81.9	(25.6)	5.3	(21.9)	12.8	(52.7)	81.9	(25.6)	5.3	(21.7)
2017	12.9	(51.5)	81.3	(25.2)	5.8	(23.3)	12.9	(51.7)	81.3	(25.5)	5.7	(22.9)
2021	10.9	(47.1)	83.5	(28.9)	5.6	(24.0)	11.0	(47.3)	83.7	(29.9)	5.3	(22.8)
All	12.1	(51.3)	82.2	(26.3)	5.8	(22.4)	12.1	(51.3)	82.2	(26.6)	5.7	(22.1)

Source: authors' calculation, based on METI BSOBA and BSJBSA.

Notes: "All" refers to years from 2014 to 2021. All parent firms and firms in Japan without affiliates abroad in this table are manufacturing firms. Figures in parenthesis show the case of manufacturing firms, excluding those with exports from Japan only.

Table 6. Estimation Results by the OLS: US and China

	All (I)	All (II)	Mfg (III)	Mfg (IV)
A. US				
ln (1+Tariffs)	-0.353	-0.422	-0.381	-0.355
	[0.277]	[0.331]	[0.278]	[0.354]
Labor cost share	0.027	0.026	0.042	0.045
	[0.046]	[0.045]	[0.053]	[0.051]
N	4,705	4,702	4,382	4,379
Adj. R-sq	0.646	0.649	0.649	0.652
B. China				
ln (1+Tariffs)	0.002	0.041	-0.020	0.021
	[0.044]	[0.070]	[0.049]	[0.075]
Labor cost share	-0.003	-0.002	-0.002	-0.002
	[0.003]	[0.003]	[0.003]	[0.003]
N	12,267	12,267	11,014	11,014
Adj. R-sq	0.825	0.825	0.82	0.819
Affiliate FE	X	X	X	X
Country-year FE	X	X	X	X
Sector-year FE		X		X

Source: authors' estimation, based on METI BSOBA and BSJBSA.

Notes: Estimation results were obtained using the OLS method. The dependent variable is the sales share of each channel. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Standard errors are clustered by industry. In columns (I) and (II), we estimate for manufacturing affiliates with all parents, while only manufacturing affiliates of manufacturing parents are examined in columns (III) and (IV).

Table 7. Estimation Results by the OLS: ASEAN and Mexico

	All (I)	All (II)	Mfg (III)	Mfg (IV)
A. ASEAN+Mexico				
ln (1+Tariffs)	-0.049	-0.019	-0.062	-0.007
	[0.029]	[0.031]	[0.032]*	[0.033]
Labor cost share	-0.019	-0.019	-0.020	-0.019
	[0.018]	[0.019]	[0.020]	[0.020]
N	12,149	12,149	10,960	10,960
Adj. R-sq	0.838	0.838	0.845	0.845
B. ASEAN				
ln (1+Tariffs)	-0.069	-0.047	-0.087	-0.036
	[0.035]*	[0.031]	[0.039]**	[0.034]
Labor cost share	-0.008	-0.008	-0.008	-0.007
	[0.019]	[0.020]	[0.022]	[0.023]
N	11,261	11,261	10,143	10,143
Adj. R-sq	0.851	0.85	0.859	0.858
C. Mexico				
ln (1+Tariffs)	0.346	0.352	0.393	0.342
	[0.158]**	[0.166]**	[0.174]**	[0.230]
Labor cost share	-0.066	-0.081	-0.068	-0.079
	[0.044]	[0.036]**	[0.045]	[0.033]**
N	888	857	817	785
Adj. R-sq	0.731	0.727	0.729	0.726
Affiliate FE	X	X	X	X
Country-year FE	X	X	X	X
Sector-year FE		X		X

Source: authors' estimation, based on METI BSOBA and BSJBSA.

Notes: Estimation results were obtained using the OLS method. The dependent variable is the sales share of each channel. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Standard errors are clustered by industry. In columns (I) and (II), we estimate for manufacturing affiliates with all parents, while only manufacturing affiliates of manufacturing parents are examined in columns (III) and (IV).

Table 8. Estimation Results by the OLS: Europe and Japan

	All (I)	All (II)	Mfg (III)	Mfg (IV)
A. Europe				
ln (1+Tariffs)	-0.026	-0.045	-0.027	-0.037
	[0.023]	[0.039]	[0.025]	[0.037]
Labor cost share	-0.003	-0.003	-0.004	-0.003
	[0.004]	[0.005]	[0.004]	[0.005]
N	3,448	3,448	3,241	3,239
Adj. R-sq	0.884	0.891	0.875	0.886
B. Japan				
ln (1+Tariffs)			-0.041	-0.059
			[0.056]	[0.069]
Labor cost share			-0.065	-0.055
			[0.047]	[0.048]
N			20,494	20,494
Adj. R-sq			0.796	0.797
Affiliate FE	X	X	X	X
Country-year FE	X	X	X	X
Sector-year FE		X		X

Source: authors' estimation, based on METI BSOBA and BSJBSA.

Notes: Estimation results were obtained using the OLS method. The dependent variable is the sales share of each channel. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Standard errors are clustered by industry. In columns (I) and (II), we estimate for manufacturing affiliates with all parents, while only manufacturing affiliates of manufacturing parents are examined in columns (III) and (IV). For panel (B) (analysis for exports from Japan), firm fixed effects are used instead of affiliate fixed effects.

Table 9. The Main Sales Channel: US and China

	Main channel: region			Main channel: country		
	(I)	(II)	(III)	(IV)	(V)	(VI)
A. US						
ln (1+Tariffs)	-0.535	-0.640		-0.534	-0.638	
	[0.288]*	[0.366]*		[0.288]*	[0.366]*	
ln (1+Tariffs) * Main	0.158	0.199	0.196	0.159	0.199	0.197
	[0.070]**	[0.071]***	[0.072]***	[0.071]**	[0.070]***	[0.071]***
Labor cost share	0.028	0.033	0.031	0.028	0.033	0.030
	[0.046]	[0.044]	[0.046]	[0.046]	[0.044]	[0.046]
N	4,666	4,663	4,619	4,666	4,663	4,619
Adj. R-sq	0.619	0.621	0.62	0.619	0.621	0.62
B. China						
ln (1+Tariffs)	-0.016	0.039		-0.015	0.040	
	[0.047]	[0.072]		[0.047]	[0.072]	
ln (1+Tariffs) * Main	-0.047	-0.046	-0.051	-0.049	-0.050	-0.055
	[0.104]	[0.105]	[0.105]	[0.110]	[0.111]	[0.112]
Labor cost share	-0.003	-0.003	-0.003	-0.003	-0.003	-0.003
	[0.003]	[0.003]	[0.003]	[0.003]	[0.003]	[0.003]
N	11,718	11,718	11,706	11,718	11,718	11,706
Adj. R-sq	0.857	0.856	0.856	0.857	0.856	0.856
Affiliate FE	X	X	X	X	X	X
Country-year FE	X	X	X	X	X	X
Sector-year FE		X			X	
Industry-year FE			X			X

Source: authors' estimation, based on METI BSOBA and BSJBSA.

Notes: Estimation results were obtained using the OLS method. The dependent variable is the sales share of each channel. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Standard errors are clustered by industry. We estimate for only manufacturing affiliates with manufacturing parent firms. We define the main sales channel based on the regional base in columns (I)-(III) and the country base in columns (IV)-(VI).

Table 10. The Main Sales Channel: ASEAN and Mexico

	Main channel: region			Main channel: country		
	(I)	(II)	(III)	(IV)	(V)	(VI)
A. ASEAN+Mexico						
ln (1+Tariffs)	-0.049	-0.029		-0.051	-0.033	
	[0.032]	[0.031]		[0.031]	[0.030]	
ln (1+Tariffs) * Main	0.154	0.159	0.165	0.216	0.220	0.231
	[0.077]*	[0.078]**	[0.079]**	[0.105]**	[0.107]**	[0.107]**
Labor cost share	-0.008	-0.007	-0.008	-0.009	-0.008	-0.009
	[0.019]	[0.019]	[0.020]	[0.019]	[0.020]	[0.020]
N	11,655	11,655	11,644	11,655	11,655	11,644
Adj. R-sq	0.877	0.877	0.874	0.877	0.877	0.875
B. ASEAN						
ln (1+Tariffs)	-0.071	-0.046		-0.073	-0.050	
	[0.038]*	[0.030]		[0.038]*	[0.030]	
ln (1+Tariffs) * Main	0.119	0.119	0.123	0.18	0.178	0.187
	[0.0639]*	[0.0652]*	[0.0664]*	[0.0947]*	[0.0962]*	[0.0970]*
Labor cost share	0.000	0.000	0.000	-0.002	-0.001	-0.001
	[0.022]	[0.022]	[0.023]	[0.022]	[0.022]	[0.023]
N	10,812	10,812	10,801	10,812	10,812	10,801
Adj. R-sq	0.891	0.891	0.889	0.891	0.891	0.889
C. Mexico						
ln (1+Tariffs)	0.343	0.183		0.343	0.183	
	[0.169]*	[0.263]		[0.169]*	[0.263]	
ln (1+Tariffs) * Main	0.413	0.377	0.457	0.413	0.377	0.457
	[0.288]	[0.258]	[0.232]*	[0.288]	[0.258]	[0.232]*
Labor cost share	-0.037	-0.053	-0.046	-0.037	-0.053	-0.046
	[0.043]	[0.029]*	[0.021]**	[0.043]	[0.029]*	[0.021]**
N	843	816	741	843	816	741
Adj. R-sq	0.711	0.710	0.690	0.711	0.710	0.690
Affiliate FE	X	X	X	X	X	X
Country-year FE	X	X	X	X	X	X
Sector-year FE		X			X	
Industry-year FE			X			X

Source: authors' estimation, based on METI BSOBA and BSJBSA.

Notes: Estimation results were obtained using the OLS method. The dependent variable is the sales share of each channel. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Standard errors are clustered by industry. We estimate for only manufacturing affiliates with manufacturing parent firms. We define the main sales channel based on the regional base in columns (I)-(III) and the country base in columns (IV)-(VI).

Table 11. The Main Sales Channel: Europe and Japan

	Main channel: region			Main channel: country		
	(I)	(II)	(III)	(IV)	(V)	(VI)
A. Europe						
ln (1+Tariffs)	-0.051	-0.041		-0.0484	-0.0367	
	[0.036]	[0.042]		[0.034]	[0.042]	
ln (1+Tariffs) * Main	-0.115	-0.133	-0.106	-0.192	-0.215	-0.159
	[0.179]	[0.160]	[0.183]	[0.261]	[0.230]	[0.275]
Labor cost share	-0.004	-0.002	-0.010	-0.004	-0.003	-0.010
	[0.004]	[0.006]	[0.006]*	[0.004]	[0.006]	[0.006]*
N	3,435	3,433	3,381	3,435	3,433	3,381
Adj. R-sq	0.857	0.861	0.854	0.857	0.861	0.854
B. Japan						
ln (1+Tariffs)	-0.295	-0.339		-0.294	-0.338	
	[0.099]***	[0.099]***		[0.099]***	[0.010]***	
ln (1+Tariffs) * Main	0.300	0.311	0.302	0.298	0.309	0.3
	[0.072]***	[0.063]***	[0.064]***	[0.073]***	[0.064]***	[0.064]***
Labor cost share	-0.032	-0.022	-0.011	-0.032	-0.022	-0.011
	[0.046]	[0.047]	[0.045]	[0.046]	[0.047]	[0.045]
N	17,880	17,880	17,875	17,880	17,880	17,875
Adj. R-sq	0.804	0.805	0.806	0.804	0.805	0.806
Affiliate FE	X	X	X	X	X	X
Country-year FE	X	X	X	X	X	X
Sector-year FE		X			X	
Industry-year FE			X			X

Source: authors' estimation, based on METI BSOBA and BSJBSA.

Notes: Estimation results were obtained using the OLS method. The dependent variable is the sales share of each channel. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Standard errors are clustered by industry. We estimate for only manufacturing affiliates with manufacturing parent firms. We define the main sales channel based on the regional base in columns (I)-(III) and the country base in columns (IV)-(VI). For panel (B) (analysis for exports from Japan), firm fixed effects are used instead of affiliate fixed effects.

Table 12. Multinomial Logit Model

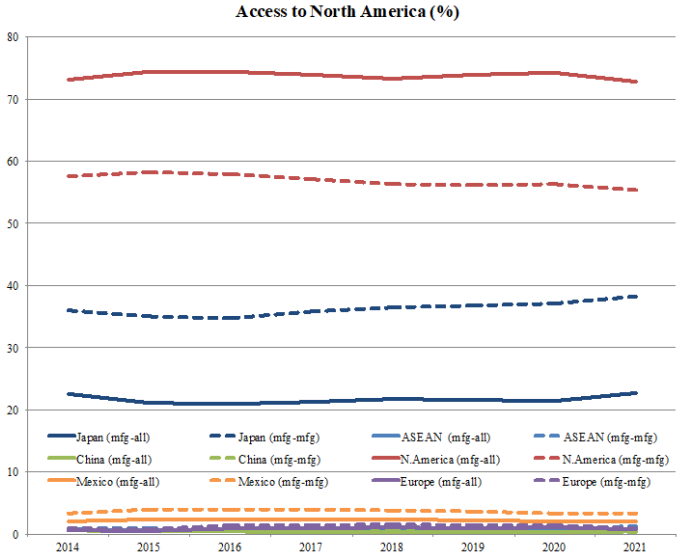
Affiliates	All				Manufacturing			
Main channel level	Region (I-II)		Country (III-IV)		Region (V-VI)		Country (VII-VIII)	
	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)
North America including local								
TFP	0.305	0.306	0.298	0.291	0.285	0.275	0.285	0.275
	[0.072]***	[0.073]***	[0.072]***	[0.073]***	[0.092]***	[0.092]***	[0.092]***	[0.092]***
Labor cost share (production)	0.003	0.003	0.003	0.003	-1.560	-1.576	-1.565	-1.579
	[0.001]**	[0.001]**	[0.001]**	[0.001]**	[1.173]	[1.182]	[1.174]	[1.184]
Experience of sales to North America:	-1.485	-1.493	-1.489	-1.498	-1.526	-1.531	-1.530	-1.535
first access in 2000s	[0.160]***	[0.163]***	[0.159]***	[0.161]***	[0.198]***	[0.201]***	[0.197]***	[0.200]***
Experience of sales to North America:	-2.629	-2.645	-2.638	-2.654	-2.711	-2.729	-2.710	-2.727
first access in 2010s or later	[0.152]***	[0.155]***	[0.149]***	[0.153]***	[0.252]***	[0.258]***	[0.251]***	[0.258]***
R&D (ratio to total sales)	3.815	3.854	3.766	3.805	1.841	1.886	1.813	1.860
	[1.377]***	[1.395]***	[1.356]***	[1.376]***	[0.943]*	[0.971]*	[0.941]*	[0.969]*
Third countries								
TFP	-0.419	-0.350	-0.423	-0.399	-0.520	-0.544	-0.528	-0.554
	[0.081]***	[0.088]***	[0.081]***	[0.085]***	[0.068]***	[0.071]***	[0.068]***	[0.072]***
Labor cost share (production)	-5.696	-5.555	-5.586	-5.528	-7.302	-7.408	-7.306	-7.400
	[0.981]***	[0.985]***	[1.072]***	[1.081]***	[1.316]***	[1.333]***	[1.422]***	[1.443]***
Experience of sales to North America:	-1.137	-1.135	-1.151	-1.154	-1.094	-1.102	-1.109	-1.118
first access in 2000s	[0.223]***	[0.225]***	[0.232]***	[0.235]***	[0.185]***	[0.188]***	[0.191]***	[0.194]***
Experience of sales to North America:	-1.288	-1.293	-1.268	-1.279	-1.235	-1.254	-1.224	-1.243
first access in 2010s	[0.285]***	[0.292]***	[0.286]***	[0.295]***	[0.269]***	[0.278]***	[0.273]***	[0.282]***
R&D (ratio to total sales)	-12.350	-12.510	-12.570	-12.640	-6.603	-6.594	-6.901	-6.888
	[4.630]***	[4.614]***	[4.771]***	[4.761]***	[3.674]*	[3.645]*	[3.830]*	[3.802]*
Industry FE	x		x		x		x	
Year FE	x		x		x		x	
Industry-year FE		x		x		x		x
Number of observations	21,030	21,030	21,030	21,030	20,846	20,846	20,846	20,846

Source: authors' estimation, based on METI BSOBA and BSJBSA.

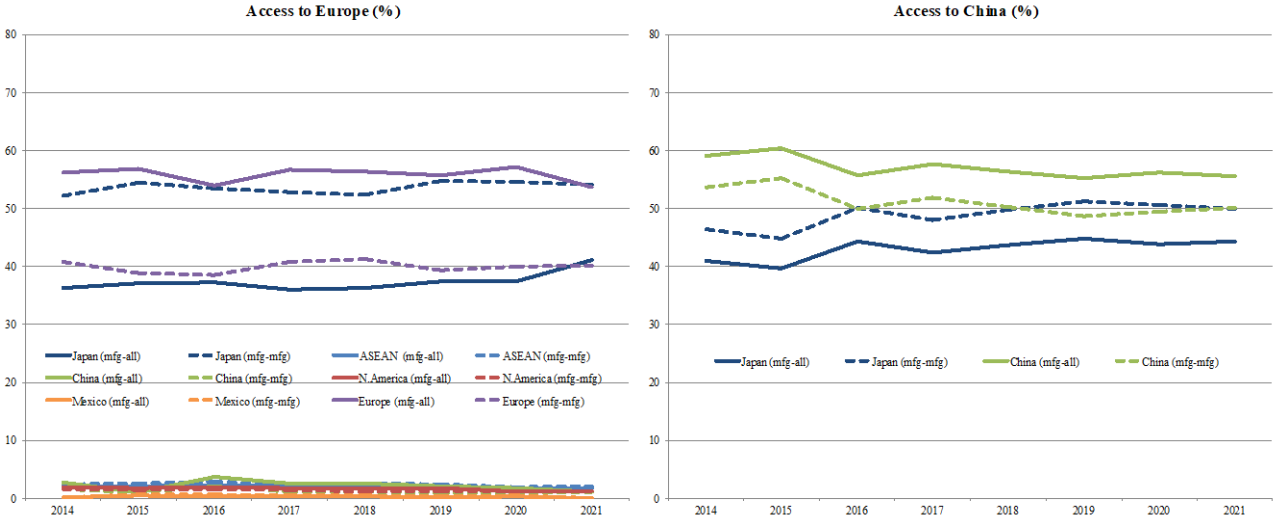
Notes: This table reports the estimation results of the multinomial logit model for Japanese manufacturing firms. The base category is exports from Japan. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Standard errors are clustered by affiliate. We define the main sales channel based on the regional or country base.

Figure 1. Shares of Major Source Countries/Regions in Total Values of Sales to North America by Japanese Manufacturing Firms

(i) By-origin Shares for Sales to North America



(ii) By-origin Shares for Sales to Europe and China (for comparison)



Source: authors' calculation, based on METI BSOBA and BSJBSA.

Notes: The total value of sales to North America by Japanese manufacturing firms are defined as the sum of sales to North America by Japanese affiliates abroad and exports to North America from Japan by manufacturing firms. "Mfg-all" means the case of affiliates in all industries with manufacturing parent firms, and "mfg-mfg" refers the case of manufacturing affiliates of manufacturing parent firms. In this figure, BSJTBSA is used for Japan, and BSOBA is used for others.

Appendix A. Other Tables

Table A1. Industry Composition of Sales to North America by Japanese Manufacturing Firms in Each Source Country/Region in 2021 (%)

i) Affiliates in all industries

	Total		Local		Japan		ASEAN		China		Mexico		Europe	
	V	N	V	N	V	N	V	N	V	N	V	N	V	N
Food products	1.0	5.5	1.1	4.5	0.5	5.3	2.0	3.3	0.2	3.1	0.0	0.0	1.4	1.5
Texile products	0.3	2.2	0.3	2.1	0.2	2.1	0.8	3.9	1.6	3.8	0.0	1.2	2.3	1.0
Wood, pulp and paper products	0.3	1.6	0.3	1.6	0.1	1.3	0.0	2.0	0.1	1.4	0.0	0.0	0.4	1.5
Chemical products	5.8	11	6.0	9.9	6.0	12	4.8	6.2	1.8	8.3	0.5	7.1	6.9	15
Petroleum and coal products	0.1	0.4	0.0	0.0	0.6	0.5	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.5
Ceramic, stone and clay	0.9	2.9	0.5	1.6	1.1	2.9	2.2	3.6	0.1	3.8	1.6	1.2	24	3.4
Iron and steel	1.2	1.8	1.1	2.1	1.1	1.7	5.0	2.3	2.5	1.7	0.1	4.7	1.6	1.5
Non-ferrous metals	1.9	2.6	1.7	2.4	2.5	2.3	2.1	3.9	11	3.1	0.2	3.5	2.3	2.5
Metal products	0.5	5.9	0.4	5.0	0.8	5.6	0.8	6.5	1.2	4.5	0.2	3.5	0.9	3.0
General-purpose machinery	1.2	5.5	0.7	3.8	3.0	5.8	2.3	2.9	1.7	4.2	0.0	3.5	1.4	5.9
Production machinery	2.9	14	1.7	15	6.9	14	1.2	7.5	0.9	7.6	0.0	2.4	1.1	14
Business oriented machinery	2.8	6.1	2.4	5.6	4.3	6.4	0.3	2.9	0.9	3.8	0.0	3.5	5.1	8.4
Electrical machinery	5.0	7.6	4.7	7.7	5.5	7.8	9.9	4.6	20	8.3	0.3	2.4	17	9.4
Information and communication	4.8	8.1	2.4	9.0	12	8.0	4.2	10	36	13	0.0	1.2	1.8	9.4
Transport equipment	64	12	70	19	47	12	44	24	17	20	96	53	30	14
Other manufacturing	7.0	13	6.9	11	7.6	13	21	15	4.3	12	1.3	13	3.5	9.4
All manufacturing	100	100	100	100	100	100	100	100	100	100	100	100	100	100

ii) Manufacturing affiliates only

	Total		Local		Japan		ASEAN		China		Mexico		Europe	
	V	N	V	N	V	N	V	N	V	N	V	N	V	N
Food products	0.8	5.4	1.1	5.7	0.4	5.1	1.5	3.4	0.5	2.9	0.0	0.0	0.9	1.6
Texile products	0.4	1.9	0.4	1.6	0.2	1.8	0.9	4.1	1.3	3.3	0.0	1.4	3.5	1.6
Wood, pulp and paper products	0.4	1.4	0.6	1.6	0.1	1.3	0.0	2.2	0.1	0.8	0.0	0.0	0.6	2.4
Chemical products	9.5	11	13	11	5.8	12	5.4	6.0	2.3	5.8	0.5	6.8	10	17
Petroleum and coal products	0.0	0.4	0.0	0.0	0.1	0.5	0.0	0.0	0.1	0.4	0.0	0.0	0.0	0.0
Ceramic, stone and clay	1.2	2.9	0.8	1.8	0.9	2.9	2.5	4.1	0.2	3.3	1.8	1.4	33	4.1
Iron and steel	1.2	1.8	1.0	3.0	1.2	1.7	5.8	2.6	6.0	2.1	0.1	5.5	2.4	2.4
Non-ferrous metals	2.7	2.6	3.1	2.3	2.6	2.3	2.3	4.5	3.2	3.3	0.2	4.1	1.7	2.4
Metal products	0.7	6.0	0.6	5.3	0.8	5.7	0.9	6.0	3.0	5.0	0.3	4.1	0.9	2.4
General-purpose machinery	1.6	5.6	0.7	3.7	3.1	5.9	2.4	3.0	4.2	4.5	0.0	1.4	2.1	5.7
Production machinery	3.6	14	1.4	9.4	7.2	14	0.8	6.4	1.8	8.3	0.0	1.4	1.6	12
Business oriented machinery	2.2	6.0	1.0	3.2	4.2	6.4	0.4	2.2	2.0	3.7	0.0	0.0	3.4	6.5
Electrical machinery	7.8	7.6	9.4	6.4	5.7	8.0	8.9	4.5	26	8.3	0.3	1.4	18	9.8
Information and communication	5.5	7.9	2.7	5.9	10	7.9	3.9	9.4	12	13	0.1	1.4	0.5	6.5
Transport equipment	54	13	56	30	50	12	44	26	27	23	95	60	16	18
Other manufacturing	8.0	12	8.4	9.6	7.7	12	20	15	10	12	1.4	11	5.1	7.3
All manufacturing	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: authors' calculation, based on METI BSOBA and BSJBSA.

Notes: "Local" means North America. Columns in "V" and "N" refer the shares in terms of values and the number of firms, respectively, In this table, BSJTBSA is used for Japan, and BSOBA is used for others.

Table A2. Changes in the Number of Firms with Sales to North America in 2021 (2014=1)

	Total	Local	Japan	ASEAN	China	Mexico	Europe
(i) Affiliates in all industries							
Food products	1.4	1.1	1.5	1.4	0.8	n.a.	1.0
Texile products	0.9	0.9	0.9	0.8	0.8	n.a.	0.3
Wood, pulp and paper products	1.3	1.2	1.2	6.0	1.3	n.a.	1.5
Chemical products	1.0	0.9	1.1	0.7	1.3	2.0	0.9
Petroleum and coal products	1.0	n.a.	1.1	n.a.	n.a.	n.a.	n.a.
Ceramic, stone and clay	1.1	0.7	1.1	1.6	0.8	n.a.	0.9
Iron and steel	0.9	0.9	1.0	1.4	0.6	n.a.	3.0
Non-ferrous metals	1.0	1.1	1.0	1.3	0.9	1.5	1.3
Metal products	1.2	1.1	1.2	1.3	0.8	n.a.	1.2
General-purpose machinery	1.1	1.0	1.1	1.3	1.1	1.5	0.9
Production machinery	1.1	1.1	1.1	1.2	1.1	2.0	2.0
Business oriented machinery	1.0	1.0	1.0	0.7	0.7	3.0	0.8
Electrical machinery	1.1	1.0	1.1	0.6	0.8	0.7	1.1
Information and communication	1.1	1.0	1.1	0.9	0.9	0.3	0.8
Transport equipment	1.1	1.0	1.0	1.1	0.9	2.0	1.3
Other manufacturing	1.2	1.0	1.3	1.2	1.1	1.8	1.0
All manufacturing	1.1	1.0	1.1	1.1	0.9	1.8	1.1
(ii) Manufacturing affiliates only							
Food products	1.5	1.1	1.5	1.8	0.8	n.a.	1.0
Texile products	0.9	0.6	1.0	0.8	0.8	n.a.	0.4
Wood, pulp and paper products	1.2	0.9	1.2	6.0	1.0	n.a.	1.5
Chemical products	1.0	0.9	1.0	0.7	1.0	1.7	0.9
Petroleum and coal products	1.0	n.a.	1.1	n.a.	n.a.	n.a.	n.a.
Ceramic, stone and clay	1.1	0.9	1.1	1.6	0.8	n.a.	0.7
Iron and steel	0.9	0.9	1.0	1.4	0.7	n.a.	3.0
Non-ferrous metals	1.1	0.9	1.0	1.3	0.9	1.5	1.5
Metal products	1.2	1.2	1.2	1.1	0.9	n.a.	1.0
General-purpose machinery	1.1	1.2	1.1	2.0	1.6	n.a.	1.0
Production machinery	1.1	1.2	1.1	1.1	1.3	1.0	1.9
Business oriented machinery	1.0	0.8	1.0	0.7	0.6	n.a.	0.8
Electrical machinery	1.1	0.8	1.1	0.5	0.9	0.5	0.9
Information and communication	1.1	0.9	1.1	1.0	1.0	0.3	0.7
Transport equipment	1.1	1.0	1.1	1.0	0.9	2.1	1.5
Other manufacturing	1.2	0.8	1.3	1.2	1.1	1.6	0.8
All manufacturing	1.1	1.0	1.1	1.1	0.9	1.8	1.0

Source: authors' calculation, based on METI BSOBA and BSJBSA.
Note: "Local" means North America.

Appendix B. Changes in the Main Channels among Third Countries

Table B1 reports the breakdown of third countries as main channels and the changes in their exports, providing interesting findings. In 2014, China and ASEAN accounted for almost 80 percent of the firms whose main channels were identified as exports from third countries, with shares of over 40 percent and 30 percent, respectively. In 2021, the proportion of ASEAN exceeded that of China. Moreover, the number of firms with exports from China as the main channel decreased, while the number of firms with exports from third countries as a whole increased by 20 percent. This suggests that, among third countries, the importance of ASEAN has increased, while that of China has decreased.[25] Furthermore, the number of firms with exports from Mexico as their main channel increased fivefold from 2014 to 2021. Mexico is rapidly gaining importance as a main channel, although industries are limited. Therefore, the main sources of selling products to North America by Japanese manufacturing firms have been either sales within North America or exports from Japan, but there have indeed been some changes in the role of third countries.

== Table B1 ==

From the perspective of industry composition, as shown in Tables B2 and B3, the transportation equipment industry accounted for one-fourth in 2021, representing by far the largest share among the 16 manufacturing industries. In this industry, Mexico, in particular, increased its regional share from only 5 percent in 2014 to nearly 30 percent in 2021. In other industries with growth rates exceeding that of the overall manufacturing industry, significant increases in regional shares are observed for ASEAN in many industries. This suggests the increasing relative importance of ASEAN as a source region for various industries.

== Table B2 ==

[25] Thailand accounts for half of the exports to North America by affiliates in ASEAN, while Vietnam is the second largest country when focused on manufacturing affiliates.

Table B1. Breakdown of Manufacturing Firms with the Main Access from Third Countries

	ASEAN	China	Mexico	Europe	Others	Total
(i) Affiliates in all industries						
Number of firms in 2021 (2014=1)	1.3	0.9	5.0	1.2	1.2	1.2
Country/region share	37	31	10	8	14	100
in 2021 (2014) (%)	(34)	(43)	(2)	(8)	(13)	(100)
(ii) Manufacturing affiliates only						
Number of firms (2014=1)	1.2	0.8	5.3	1.9	1.2	1.2
Country/region share	39	30	10	8	13	100
in 2021 (2014) (%)	(39)	(41)	(2)	(5)	(13)	(100)

Source: authors' calculation, based on METI BSOBA and BSJBSA.

Table B2. Breakdown of Firms with the Main Access from Third Countries in 2021 by Industries of Manufacturing Parent Firms

(i) Affiliates in all industries

	Country/regional share (%)										Industry share (%): total		Total number of firms
	ASEAN		China		Mexico		Europe		Others				
	2021	(2014)	2021	(2014)	2021	(2014)	2021	(2014)	2021	(2014)	2021	(2014)	2021/2014
Food products	33	(25)	47	(50)	0	(0)	7	(0)	13	(25)	10	(6)	1.9
Texile products	100	(67)	0	(0)	0	(0)	0	(33)	0	(0)	2	(2)	1.0
Wood, pulp and paper pro	25	(0)	50	(67)	0	(0)	0	(33)	25	(0)	3	(2)	1.3
Chemical products	15	(21)	31	(21)	15	(0)	23	(36)	15	(21)	8	(10)	0.9
Ceramic, stone and clay	33	(25)	33	(50)	0	(0)	33	(25)	0	(0)	2	(3)	0.8
Iron and steel	20	(13)	20	(38)	20	(0)	20	(0)	20	(50)	3	(6)	0.6
Non-ferrous metals	83	(0)	17	(100)	0	(0)	0	(0)	0	(0)	4	(1)	3.0
Metal products	62	(46)	15	(38)	0	(0)	0	(8)	23	(8)	8	(10)	1.0
General-purpose machiner	0	(25)	63	(50)	0	(0)	13	(0)	25	(25)	5	(3)	2.0
Production machinery	15	(33)	38	(42)	8	(8)	8	(0)	31	(17)	8	(9)	1.1
Business oriented machine	0	(50)	0	(0)	0	(0)	100	(50)	0	(0)	1	(1)	0.5
Electrical machinery	0	(50)	67	(40)	0	(0)	33	(10)	0	(0)	2	(7)	0.3
Information and communi	40	(53)	40	(47)	0	(0)	7	(0)	13	(0)	10	(13)	0.9
Transport equipment	37	(30)	24	(55)	26	(5)	3	(0)	11	(10)	24	(15)	1.9
Other manufacturing	56	(29)	25	(43)	6	(7)	6	(0)	6	(21)	10	(10)	1.1

(ii) Manufacturing affiliates only

	Country/regional share (%)										Industry share (%): total		Total number of firms
	ASEAN		China		Mexico		Europe		Others				
	2021	(2014)	2021	(2014)	2021	(2014)	2021	(2014)	2021	(2014)	2021	(2014)	2021/2014
Food products	31	(17)	46	(50)	0	(0)	8	(0)	15	(33)	8	(4)	2.2
Texile products	100	(50)	0	(0)	0	(0)	0	(25)	0	(25)	2	(3)	0.8
Wood, pulp and paper pro	40	(0)	40	(67)	0	(0)	0	(33)	20	(0)	3	(2)	1.7
Chemical products	8	(17)	33	(25)	17	(0)	25	(25)	17	(33)	8	(9)	1.0
Ceramic, stone and clay	33	(50)	33	(33)	0	(0)	33	(17)	0	(0)	2	(4)	0.5
Iron and steel	20	(14)	20	(29)	20	(0)	20	(0)	20	(57)	3	(5)	0.7
Non-ferrous metals	71	(0)	14	(100)	14	(0)	0	(0)	0	(0)	4	(2)	2.3
Metal products	67	(54)	17	(31)	0	(0)	0	(8)	17	(8)	8	(10)	0.9
General-purpose machiner	0	(25)	67	(50)	0	(0)	17	(0)	17	(25)	4	(3)	1.5
Production machinery	20	(42)	40	(42)	0	(8)	13	(0)	27	(8)	9	(9)	1.3
Business oriented machine	0	(50)	50	(50)	0	(0)	50	(0)	0	(0)	1	(1)	1.0
Electrical machinery	17	(58)	33	(42)	0	(0)	33	(0)	17	(0)	4	(9)	0.5
Information and communi	46	(56)	31	(44)	0	(0)	8	(0)	15	(0)	8	(12)	0.8
Transport equipment	39	(36)	21	(50)	29	(5)	0	(0)	11	(9)	24	(16)	1.7
Other manufacturing	63	(43)	26	(43)	5	(7)	0	(0)	5	(7)	12	(10)	1.4

Source: authors' calculation, based on METI BSOBA and BSJBSA.

Appendix C. Other Estimation Results

We examined within-firm changes in sales to North America in response to tariff changes, but here, we analyze the tariff response from a slightly different perspective, using a dataset without matching BSOBA and BSJBSA, which covers many more affiliates, including those of firms without sales to North America. Specifically, we focus on changes in each affiliate's sales to North America and changes in the share of North American sales relative to total sales, to observe any tariff response at the affiliate level. Thus, we regress two dependent variables: (i) the log of (one-plus) sales in North America, and (ii) the share of sales in North America in each affiliate's total sales.

Table C1 reports estimation results corresponding to Tables 6 to 8, using one of the two sales variables as the dependent variable in equation (1). The results are generally consistent with those based on within-firm changes in sales to North America, but a notable difference is obtained for sales by affiliates in ASEAN. In some cases, including those in ASEAN, the coefficients for the sales values are significantly positive. Although the results for affiliates in ASEAN become insignificant in terms of the share of total sales, the coefficients for affiliates in Mexico—as well as for those in both ASEAN and Mexico—remain significantly positive. These results suggest that affiliates in indirectly affected developing countries such as ASEAN and Mexico, responded to tariff changes to some extent at the affiliate level, even though the overall changes were quantitatively small at the firm level. Regarding affiliates in the US, while some specifications show significantly negative results in the relative term, contrary to our expectations, the results are insignificant in the absolute term. This indicates that they simply maintained (or did not change) sales to North America, while expanding sales to other destinations.

== Table C1 ==

The estimation results shown in Table C2 correspond to Tables 9 to 11, using one of the two sales variables described above as the dependent variable in equation (2). For this analysis, we employ the dataset matching BSOBA and BSJBSA, because it is necessary to create the main variable. Again, the results are similar to those from the perspective of within-firm changes in sales to North America. However, one notable difference is found in sales by affiliates in China. In terms of sales value, the interaction term with the main channel dummy has significantly positive coefficients in all columns, and the sum of coefficients for the interaction term and non-interacted variable is positive. The interaction term is insignificant in all columns in terms of the total share. These findings indicate that the main affiliates in China, in terms of sales to North America, expanded sales to the US in the absolute term but not in the relative term, compared to non-main affiliates. Considering our earlier discussion on the determinants of the main channel, the main affiliates in China (one of the third countries) may have secured international competitiveness by leveraging location advantages and other factors. Consequently, they increased not only sales to North America but also to other destinations, even in the face of additional US tariffs against China.

However, such changes were not substantial enough to alter the overall structure of intra-firm supply chains.[26]

== Table C2 ==

[26] In Table C3, we also report the estimation results for the specification that includes the interaction term between tariffs and the existence of US- or China-based affiliates as of 2014, instead of the interaction with the Main variable.

Table C1. Estimation Results for Sales at the Affiliate Level

		Value of sales				Share in total			
		All	All	Mfg	Mfg	All	All	Mfg	Mfg
		(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)
Countries directly concerned									
US	ln (1+Tariffs)	-3.563	-4.781	-4.469	-5.367	-0.456	-0.658	-0.602	-0.788
		[2.474]	[2.991]	[2.899]	[3.944]	[0.283]	[0.316]**	[0.361]	[0.444]*
	N	5,258	5,255	4,728	4,725	5,258	5,255	4,728	4,725
	Adj. R-sq	0.687	0.688	0.687	0.689	0.654	0.655	0.652	0.655
China	ln (1+Tariffs)	-0.457	-0.331	-0.482	-0.502	-0.012	0.007	-0.031	-0.015
		[0.578]	[0.653]	[0.580]	[0.697]	[0.0190]	[0.0138]	[0.0224]	[0.0197]
	N	20,848	20,848	18,286	18,286	20,848	20,848	18,286	18,286
	Adj. R-sq	0.744	0.744	0.741	0.74	0.649	0.649	0.659	0.659
Developed countries indirectly concerned									
Europe	ln (1+Tariffs)	1.989	1.62	2.861	2.334	0.042	0.037	0.033	0.026
		[1.773]	[2.257]	[1.891]	[2.242]	[0.0540]	[0.0575]	[0.0654]	[0.0581]
	N	4,040	4,040	3,550	3,548	4,040	4,040	3,550	3,548
	Adj. R-sq	0.835	0.836	0.838	0.841	0.715	0.713	0.717	0.717
Japan	ln (1+Tariffs)			-0.146	0.087			-0.006	-0.0009
				[0.0962]	[0.0669]			[0.00423]	[0.00380]
	N			100,442	100,442			100,442	100,442
	Adj. R-sq			0.917	0.917			0.846	0.846
Affiliate FE		X	X	X	X	X	X	X	X
Country-year FE		X	X	X	X	X	X	X	X
Sector-year FE			X		X		X		X

		Value of sales				Share in total			
		All	All	Mfg	Mfg	All	All	Mfg	Mfg
		(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)
Developing countries indirectly concerned									
ASEAN& Mexico	ln (1+Tariffs)	1.005	1.03	1.075	1.034	0.020	0.070	0.026	0.081
		[0.360]***	[0.472]**	[0.448]**	[0.527]*	[0.0429]	[0.0200]***	[0.0472]	[0.0256]***
	N	19,733	19,733	17,474	17,474	19,733	19,733	17,474	17,474
	Adj. R-sq	0.797	0.797	0.791	0.791	0.454	0.456	0.429	0.433
ASEAN	ln (1+Tariffs)	0.644	0.699	0.625	0.66	-0.017	0.036	-0.020	0.043
		[0.367]*	[0.451]	[0.466]	[0.530]	[0.0385]	[0.0234]	[0.0443]	[0.0294]
	N	18,716	18,716	16,536	16,536	18,716	18,716	16,536	16,536
	Adj. R-sq	0.787	0.787	0.783	0.783	0.201	0.204	0.195	0.202
Mexico	ln (1+Tariffs)	11.650	10.230	12.800	11.780	1.088	1.391	1.223	1.426
		[5.368]**	[6.253]	[5.528]**	[6.512]*	[0.485]**	[0.596]**	[0.508]**	[0.660]**
	N	1,017	994	938	911	1,017	994	938	911
	Adj. R-sq	0.761	0.761	0.749	0.751	0.795	0.794	0.78	0.781
Affiliate FE		X	X	X	X	X	X	X	X
Country-year FE		X	X	X	X	X	X	X	X
Sector-year FE			X		X		X		X

Source: authors' estimation, based on METI BSOBA and BSJBSA.

Notes: Estimation results were obtained using the OLS method. The dependent variable is the sales value in columns (I)-(IV), log (1+sales value), and the ratio to the total sales by each affiliate in columns (V)-(VIII). ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Standard errors are clustered by industry. The coefficients for labor cost share are omitted here to save the space. For analysis of Japan, firm fixed effects are used instead of affiliate fixed effects.

Table C2. The Main Sales Channel for Sales at the Affiliate Level

	A. Value of sales						B. Share in total					
	Main channel: region			Main channel: country			Main channel: region			Main channel: country		
	(I)	(II)	(III)	(IV)	(V)	(VI)	(I)	(II)	(III)	(IV)	(V)	(VI)
Countries directly concerned												
US												
US tariff on China	-5.601	-6.814		-5.476	-6.669		-0.708	-0.922		-0.699	-0.911	
	[3.256]*	[4.048]*		[3.233]*	[4.048]		[0.406]*	[0.457]**		[0.404]*	[0.457]*	
US tariff on China	1.425	1.949	1.77	1.288	1.769	1.586	0.134	0.181	0.155	0.124	0.167	0.140
* Main channel	[0.926]	[0.932]**	[0.996]*	[0.916]	[0.920]*	[0.980]	[0.120]	[0.118]	[0.126]	[0.118]	[0.117]	[0.125]
N	4,728	4,725	4,681	4,728	4,725	4,681	4,728	4,725	4,681	4,728	4,725	4,681
China												
US tariff on China	-0.549	-0.622		-0.551	-0.618		-0.032	-0.017		-0.032	-0.017	
	[0.578]	[0.705]		[0.580]	[0.703]		[0.0224]	[0.0198]		[0.0226]	[0.0198]	
US tariff on China	1.515	1.454	1.475	1.575	1.508	1.532	0.023	0.020	0.021	0.025	0.023	0.024
* Main channel	[0.687]**	[0.694]**	[0.689]**	[0.736]**	[0.740]**	[0.731]**	[0.0288]	[0.0284]	[0.0283]	[0.0311]	[0.0306]	[0.0304]
N	18,286	18,286	18,285	18,286	18,286	18,285	18,286	18,286	18,285	18,286	18,286	18,285
Developed countries indirectly concerned												
Europe												
US tariff on China	2.864	2.334		2.897	2.352		0.035	0.025		0.037	0.028	
	[1.892]	[2.237]		[1.909]	[2.260]		[0.0664]	[0.0596]		[0.0657]	[0.0600]	
US tariff on China	-0.188	0.257	0.969	-1.657	-1.139	-0.872	-0.085	-0.101	-0.073	-0.153	-0.182	-0.188
* Main channel	[2.191]	[2.180]	[2.763]	[2.245]	[2.287]	[3.119]	[0.0679]	[0.0820]	[0.109]	[0.0649]**	[0.0686]**	[0.0967]*
N	3,550	3,548	3,505	3,550	3,548	3,505	3,550	3,548	3,505	3,550	3,548	3,505
Japan												
US tariff on China	-0.336	0.876		-0.347	0.863		-0.033	-0.0007		-0.033	-0.0011	
	[0.488]	[0.516]*		[0.487]	[0.515]		[0.0211]	[0.0233]		[0.0211]	[0.0233]	
US tariff on China	0.015	-0.126	-0.164	0.029	-0.111	-0.151	0.009	0.006	0.008	0.010	0.007	0.008
* Main channel	[0.296]	[0.303]	[0.315]	[0.295]	[0.303]	[0.316]	[0.00725]	[0.00670]	[0.00727]	[0.00706]	[0.00659]	[0.00717]
N	19,103	19,103	19,099	19,103	19,103	19,099	19,103	19,103	19,099	19,103	19,103	19,099
Affiliate FE	X	X	X	X	X	X	X	X	X	X	X	X
Country-year FE	X	X	X	X	X	X	X	X	X	X	X	X
Sector-year FE		X			X			X			X	
Industry-year FE			X			X			X			X

	A. Value of sales						B. Share in total					
	Main channel: region			Main channel: country			Main channel: region			Main channel: country		
	(I)	(II)	(III)	(IV)	(V)	(VI)	(I)	(II)	(III)	(IV)	(V)	(VI)
Developing countries indirectly concerned												
ASEAN+Mexico												
US tariff on China	1.057	0.98		1.037	0.93		0.025	0.079		0.025	0.078	
	[0.441]**	[0.506]*		[0.436]**	[0.509]*		[0.0466]	[0.0255]***		[0.0465]	[0.0254]***	
US tariff on China	2.443	2.557	2.584	3.332	3.422	3.439	0.084	0.082	0.082	0.105	0.101	0.100
* Main channel	[0.903]***	[0.915]***	[0.937]***	[0.955]***	[0.975]***	[0.987]***	[0.0594]	[0.0592]	[0.0597]	[0.0549]*	[0.0546]*	[0.0545]*
N	17,474	17,474	17,468	17,474	17,474	17,468	17,474	17,474	17,468	17,474	17,474	17,468
ASEAN												
US tariff on China	0.610	0.625		0.589	0.58		-0.021	0.042		-0.022	0.041	
	[0.463]	[0.500]		[0.459]	[0.508]		[0.0440]	[0.0289]		[0.0438]	[0.0290]	
US tariff on China	2.261	2.361	2.363	3.195	3.277	3.27	0.081	0.078	0.079	0.103	0.097	0.097
* Main channel	[0.899]**	[0.902]**	[0.918]**	[0.999]***	[1.011]***	[1.020]***	[0.0607]	[0.0605]	[0.0614]	[0.0569]*	[0.0563]*	[0.0567]*
N	16,536	16,536	16,530	16,536	16,536	16,530	16,536	16,536	16,530	16,536	16,536	16,530
Mexico												
US tariff on China	12.720	11.49		12.720	11.49		1.221	1.417		1.221	1.417	
	[5.499]**	[6.425]*		[5.499]**	[6.425]*		[0.510]**	[0.663]**		[0.510]**	[0.663]**	
US tariff on China	3.904	3.18	3.125	3.904	3.18	3.125	0.092	0.095	0.087	0.092	0.095	0.087
* Main channel	[2.056]*	[2.249]	[2.486]	[2.056]*	[2.249]	[2.486]	[0.103]	[0.147]	[0.150]	[0.103]	[0.147]	[0.150]
N	938	911	837	938	911	837	938	911	837	938	911	837
Affiliate FE	X	X	X	X	X	X	X	X	X	X	X	X
Country-year FE	X	X	X	X	X	X	X	X	X	X	X	X
Sector-year FE		X			X			X			X	
Industry-year FE			X			X			X			X

Source: authors' estimation, based on METI BSOBA and BSJBSA.

Notes: Estimation results were obtained using the OLS method. The dependent variable is the sales value (A) and the ratio to the total sales by each affiliate (B). ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Standard errors are clustered by industry. We estimate for only manufacturing affiliates with manufacturing parent firms. We define the main sales channel based on the regional base in columns (I)-(III) and the country base in columns (IV)-(VI). The coefficients for labor cost share and adjust R-squares are omitted here to save the space. For analysis of firms located in Japan, firm fixed effects are used instead of affiliate fixed effects.

Table C3. Estimation Results by the OLS: Existence of US/China-based Affiliates

(i) US and China

	All (I)	All (II)	Mfg (III)	Mfg (IV)
A. US				
ln (1+Tariffs)	-0.222	-0.137	-0.253	-0.0911
	[0.298]	[0.340]	[0.303]	[0.362]
Labor cost share	0.028	0.026	0.040	0.044
	[0.0480]	[0.0465]	[0.0572]	[0.0552]
ln (1+Tariffs)	-0.108	-0.235	-0.107	-0.236
* FDI China 2014	[0.119]	[0.157]	[0.118]	[0.160]
N	4,311	4,308	4,023	4,020
Adj. R-sq	0.648	0.652	0.647	0.651
B. China				
ln (1+Tariffs)	-0.005	0.018	-0.032	-0.007
	[0.0564]	[0.0706]	[0.0628]	[0.0770]
Labor cost share	-0.003	-0.003	-0.002	-0.003
	[0.00290]	[0.00278]	[0.00269]	[0.00265]
ln (1+Tariffs)	0.00269	0.0109	0.00502	0.0128
* FDI US 2014	[0.0299]	[0.0364]	[0.0325]	[0.0390]
N	11,322	11,322	10,124	10,124
Adj. R-sq	0.834	0.833	0.829	0.828
Affiliate FE	X	X	X	X
Country-year FE	X	X	X	X
Sector-year FE		X		X

Source: authors' estimation, based on METI BSOBA and BSJBSA.
Notes: Estimation results were obtained using the OLS method. The dependent variable is the sales share of each channel. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Standard errors are clustered by industry. In columns (I) and (II), we estimate for manufacturing affiliates with all parents, while only manufacturing affiliates of manufacturing parents are examined in columns (III) and (IV). FDI China 2014 (FDI US 2014) takes a value of one if a firm had affiliates in China (the US) in 2014.

(ii) ASEAN and Mexico

	All (I)	All (II)	Mfg (III)	Mfg (IV)
A. ASEAN+Mexico				
ln (1+Tariffs)	-0.056	-0.013	-0.071	-0.005
	[0.0529]	[0.0529]	[0.0473]	[0.0415]
Labor cost share	-0.024	-0.024	-0.023	-0.022
	[0.0189]	[0.0196]	[0.0200]	[0.0206]
ln (1+Tariffs)	0.00155	-0.00478	0.0102	0.00564
* FDI China 2014	[0.0219]	[0.0210]	[0.0260]	[0.0265]
ln (1+Tariffs)	0.0223	0.0229	0.0201	0.0218
* FDI US 2014	[0.0406]	[0.0412]	[0.0325]	[0.0327]
N	11,238	11,238	10,112	10,112
Adj. R-sq	0.83	0.829	0.835	0.835
B. ASEAN				
ln (1+Tariffs)	-0.093	-0.053	-0.114	-0.048
	[0.0487]*	[0.0481]	[0.0488]**	[0.0417]
Labor cost share	-0.014	-0.015	-0.012	-0.012
	[0.0214]	[0.0223]	[0.0230]	[0.0238]
ln (1+Tariffs)	0.0296	0.0231	0.0396	0.0365
* FDI China 2014	[0.0238]	[0.0245]	[0.0286]	[0.0297]
ln (1+Tariffs)	0.0214	0.0246	0.0191	0.0251
* FDI US 2014	[0.0358]	[0.0358]	[0.0322]	[0.0315]
N	10,391	10,391	9,336	9,336
Adj. R-sq	0.846	0.845	0.853	0.852
C. Mexico				
ln (1+Tariffs)	0.619	0.635	0.655	0.631
	[0.182]***	[0.204]***	[0.185]***	[0.276]**
Labor cost share	-0.0558	-0.0696	-0.0571	-0.0662
	[0.0447]	[0.0368]*	[0.0460]	[0.0323]*
ln (1+Tariffs)	-0.331	-0.288	-0.334	-0.306
* FDI China 2014	[0.163]*	[0.152]*	[0.188]*	[0.195]
ln (1+Tariffs)	-0.0439	-0.181	-0.037	-0.181
* FDI US 2014	[0.212]	[0.149]	[0.229]	[0.160]
N	847	812	776	742
Adj. R-sq	0.682	0.68	0.679	0.681
Affiliate FE	X	X	X	X
Country-year FE	X	X	X	X
Sector-year FE		X		X

Source: authors' estimation, based on METI BSOBA and BSJBSA.
Notes: Estimation results were obtained using the OLS method. The dependent variable is the sales share of each channel. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Standard errors are clustered by industry. In columns (I) and (II), we estimate for manufacturing affiliates with all parents, while only manufacturing affiliates of manufacturing parents are examined in columns (III) and (IV). FDI China 2014 (FDI US 2014) takes a value of one if a firm had affiliates in China (the US) in 2014.

(iii) Europe and Japan

	All (I)	All (II)	Mfg (III)	Mfg (IV)
A. Europe				
ln (1+Tariffs)	-0.056	-0.073	-0.058	-0.063
	[0.0597]	[0.0703]	[0.0623]	[0.0691]
Labor cost share	-0.003	-0.003	-0.004	-0.002
	[0.00454]	[0.00569]	[0.00442]	[0.00598]
ln (1+Tariffs)	0.0831	0.0645	0.0876	0.0593
* FDI China 2014	[0.0652]	[0.0542]	[0.0697]	[0.0558]
ln (1+Tariffs)	-0.0449	-0.0247	-0.0464	-0.0178
* FDI US 2014	[0.0478]	[0.0518]	[0.0496]	[0.0562]
N	3,236	3,236	3,042	3,036
Adj. R-sq	0.873	0.881	0.872	0.885
B. Japan				
ln (1+Tariffs)			-0.149	-0.154
			[0.0620]**	[0.0649]**
Labor cost share			-0.0475	-0.0401
			[0.0444]	[0.0444]
ln (1+Tariffs)			0.35	0.378
* FDI China 2014			[0.0623]***	[0.0657]***
ln (1+Tariffs)			0.12	0.114
* FDI US 2014			[0.0756]	[0.0741]
N			18,971	18,971
Adj. R-sq			0.799	0.799
Affiliate(A)/Firm(B) FE	X	X	X	X
Country-year FE	X	X	X	X
Sector-year FE		X		X

Source: authors' estimation, based on METI BSOBA and BSJBSA.
Notes: Estimation results were obtained using the OLS method. The dependent variable is the sales share of each channel. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Standard errors are clustered by industry. In columns (I) and (II), we estimate for manufacturing affiliates with all parents, while only manufacturing affiliates of manufacturing parents are examined in columns (III) and (IV). FDI China 2014 (FDI US 2014) takes a value of one if a firm had affiliates in China (the US) in 2014.