

# Chapter 6

## **ERIA Survey of Supply Chain Resiliency in ASEAN during COVID-19: Opportunities and Challenges for ASEAN and Trade Partners**

August 2021

**This chapter should be cited as**

Study team (2021), 'ERIA Survey of Supply Chain Resiliency in ASEAN during COVID-19: Opportunities and Challenges for ASEAN and Trade Partners', in Prakash, A., A.G. Herrero, and D.M. Turégano (eds.), *UK-ASEAN Trade: Strengthening the Supply Chain Linkages*. ERIA Research Project Report FY2021 No. 11, Jakarta: ERIA, pp.73-89.

## Chapter 6

### ERIA Survey of Supply Chain Resiliency in ASEAN during COVID-19: Opportunities and Challenges for ASEAN and Trade Partners

This chapter explains the findings of a survey conducted by the Economic Research Institute for ASEAN and East Asia (ERIA) of supply chain mechanisms and trade performance amongst national and international firms in the Association of Southeast Asian Nations (ASEAN) during the coronavirus disease (COVID-19) pandemic in 2020. The survey results and their explanation help in understanding the types of shocks delivered to the ASEAN economy in general, and the subsequent performance and resilience of supply chains across major industries in the region. Data on changes made by firms in customer and supplier relations, their plans for business expansion, and government assistance to the industries will help stakeholders in the United Kingdom (UK) and ASEAN respond to the undergoing changes in business activities and plan for trade and investment facilitation according to regional needs. The prognosis for digitalisation of supply chains can also be sourced from these data.

#### Overview

ERIA conducted a questionnaire survey in the last quarter (October 2020–January 2021) of 2020 amongst local and foreign companies in ASEAN and India to understand the impact of COVID-19 on corporate activities and supply chains, with the objective of utilising the results for policy recommendations to national governments and international organisations. Some features of the survey results from firms in Singapore, Thailand, and Malaysia are explained in greater detail as these ASEAN economies are most integrated into the international production networks (IPNs). These survey results help improve understanding of the shocks to the supply chains, and general resilience and adaptation of firms' customer- and supplier-side features. The findings are important for ASEAN's trading partners for planning and investing in the post-COVID-19 supply chain structures and markets in the region. They are especially meaningful for the UK as it sets up trade and investment relations independent of the European Union (EU), and looks for new partnerships and markets in Asia.

The initial results of the survey have revealed important insights into firms' business activities, production and supply chain movements, and the likely course of action in 2021 and beyond – particularly for the post-COVID-19 recovery phase. The survey has highlighted the effect of COVID-19 on the participation of micro, small, and medium-sized enterprises in the overall economic activities; and revealed the conditions necessary for their continued participation in the regional supply chains and production networks in the recovery years.

While the results of the survey depict the supply chain activities of national and international firms, including many UK firms located in ASEAN, the findings have an important bearing on the post-COVID-19 economic recovery. Both ASEAN and its partner countries with extensive production networks can draw out the focus areas for policy support to bilateral trade and investment, for deepening the production networks and improving the overall business environment. For new partners such as the UK, the survey findings will supplement their overall plans for deepening bilateral trade and investment with ASEAN, especially for sectoral competitiveness.

## Regaining positive growth in 2021

The ERIA survey has also drawn on data from other institutions to forecast that most countries will have negative gross domestic product (GDP) growth in 2020 but will largely regain growth in 2021.

COVID-19 has impacted the surveyed economies differently. Singapore and India are the most affected by COVID-19, followed by Thailand and the Philippines. Since the end of the survey period, India has suffered a second wave of the pandemic – leading to a high number of deaths per million population, which has negatively impacted its economy and infrastructure growth. At the time of finalising this study, many ASEAN Member States (AMS) are also facing a second wave of COVID-19, resulting in further negative impacts on the economy. Malaysia, which introduced severe lockdown measures in 2020, has also witnessed a high number of deaths in the second wave in 2021. Cambodia, the Lao People's Democratic Republic (Lao PDR), and Myanmar fared better in managing the pandemic in 2020, but are now facing the second wave of COVID-19 and are likely to face lower GDP growth in 2021.

The growth matrix (Figure 6.1) was developed from the GDP forecast in GDP Growth in Asia and the Pacific of *Asian Development Outlook* (ADB, 2021) and the COVID-19 data from John Hopkins University (as on 8 June 2021). Since all the surveyed countries will be reporting GDP growth in 2021 from a lower base (due to slow or negative growth in GDP in 2020), India and Singapore have reported high forecasts for 2021 despite their economies being severely affected by COVID-19. High death rates in India, Singapore, and Malaysia (JHU, 2021) may have set back their economic activities but the forecast for growth remains encouraging. Malaysia will be growing from a lower base in 2020, so its forecast is higher than that of other bigger economies in ASEAN such as Indonesia and the Philippines. The smaller economies of Cambodia, the Lao PDR, and Brunei will have medium growth, but Myanmar's growth figure is expected to decrease considerably. The negative growth forecast has been revised further downwards since the military coup in January 2021. Viet Nam is an exception which has managed to both prevent the COVID-19 spread in 2020 and retain high growth in 2021. In sum, the matrix supports the findings of the ERIA survey that economic activities in this region faced initial shocks in 2020 but regained momentum towards growth in 2021.

**Figure 6.1: Impact of COVID-19 on GDP Growth in Surveyed Countries (%)**

Annual GDP growth rate	High growth (> 5%)	Viet Nam (6.7)		India (11) Singapore (6.0) Malaysia (6.0)
	Medium growth (0% to 5%)	Cambodia (4.0) Lao PDR (4.0) Brunei (2.5)	Thailand (3.0)	Philippines (4.5) Indonesia (4.5)
	Low growth (0% or less)		Myanmar (-9.8)	
		Low no. of cases (0–999)	Medium no. of cases (1,000–4,999)	High no. of cases (5,000+)
Number of COVID-19 cases per million population (as of 8 June 2021)				

COVID-19 = coronavirus disease, GDP = gross domestic product, Lao PDR = Lao People's Democratic Republic.  
Sources: COVID-19 cases: JHU (2021), GDP growth: ADB (2021).

### Key findings of the survey:

- The COVID-19 impact is likely to promote changes in the supply chain, although the supply chains have shown greater resilience to shocks. In the short term, the resultant effects on supply chains will be somewhat greater than those caused by trade frictions between China and the US.
- Many of the surveyed firms have already implemented customer-side changes. Less changes have been made on the supplier side and in the production location. All changes are likely to be permanent.
- Cost reduction/optimisation is the preferred supply chain measure in response to COVID-19, but not many firms have adopted digitisation.
- About 40% of the **manufacturing** respondents have already implemented or planned to change the production location, but this is mainly due to COVID-19 supply and demand shocks. The US–China trade tensions have a very meagre effect on production location change plans.

### Survey design

The survey findings are grouped into three important aspects of firms' operations during COVID-19 in 2020 and the early part of 2021. The firms answered key questions under each of the three sections.

**1. Business activity:** This section covers firms' responses to the impact of COVID-19 on sales and operating profits, and their business outlook for the next few years. Sales performance and changes in operating profits were found to be a strong indicator of supply chain resilience. Firms reporting negative or reduced business activity in 2020 still maintained a positive or no-change outlook for 2021. Their responses on measures taken to recover from COVID-19 – in terms of customers, suppliers, production location, etc. – are not very different from the firms reporting positive sales and operating profits.

**2. Supply chain activity:** This section measures the impact of COVID-19 on the demand, supply, and production activities of firms in five important sectors – manufacturing, wholesale and retail, communications and software, transportation, and others. It also analyses changes in customer and supplier relations, and production location, to maintain or expand trade. Key measures undertaken by firms for sustaining and optimising the supply chain during the pandemic are also illustrated in this section.

**3. Impact of the COVID-19 pandemic:** This section covers the status of funding and payment amongst firms during the pandemic. Firms’ expected policy support from the government – in terms of tax benefits, assistance packages, and policies supporting the mobility of goods and people – is reported in this section.

Four categories of questions on the impact of COVID-19 on business activities and supply chains were answered by manufacturing and non-manufacturing companies in ASEAN and India. The first is how significantly COVID-19 affected business performance in the region. This category of questions asks respondents about the effect of COVID-19 on sales and operating profits, and firms’ business outlook in the next few years. The second is how the COVID-19 shocks impacted and are expected to change the regions’ supply chain networks. Third, companies were asked about measures taken to recover from the COVID-19 impact. The fourth category is about the status of government assistance to companies and the support expected from the government.

### Company profile and attributes

A total of 2,083 companies in the 10 AMS and India responded to the survey questions (Figures 6.2 and 6.3). Some 57% of the firms (1,153) can be categorised as large firms employing more than 100 persons. Small and medium-sized firms were also evenly represented, at 21% and 22%, respectively.

**Figure 6.2: Profile of Surveyed Companies**

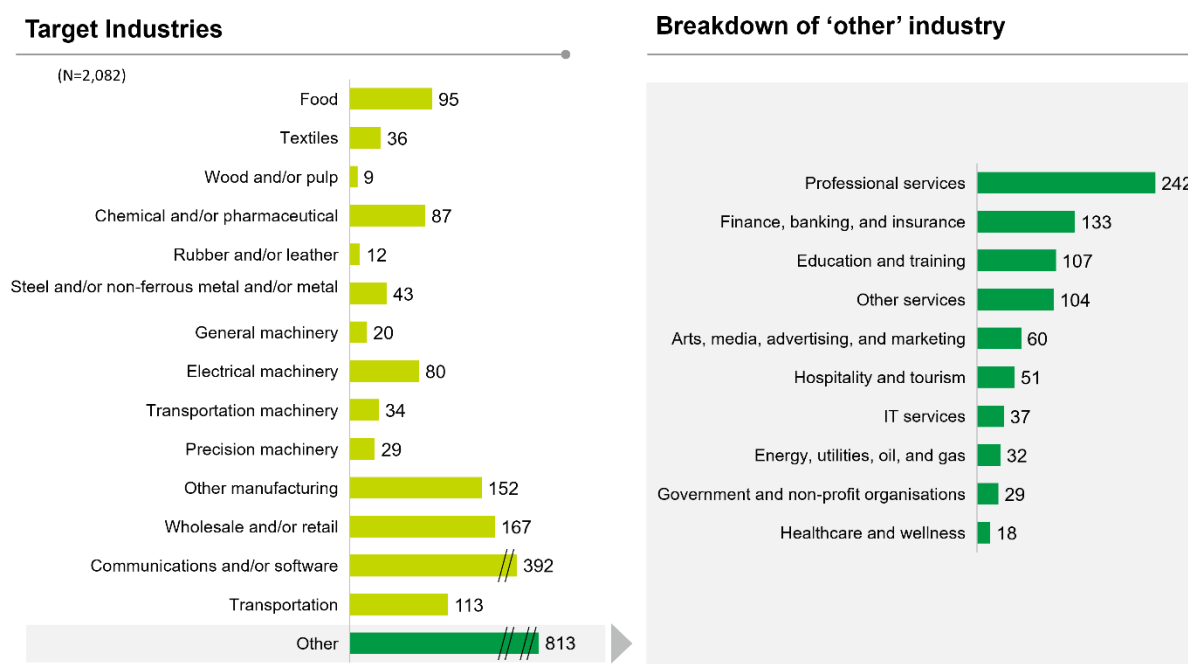


ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People’s Democratic Republic.

\* = Almost all (32 out of 35) the Myanmar respondents answered the questionnaire before the military takeover in February 2021.

Source: ERIA (2021).

**Figure 6.3: Profile of Companies by Industry**



IT = information technology.

Source: ERIA (2021).

### Survey coverage of economic shocks to supply chains

The ASEAN and Indian economies experienced three types of economic shocks caused by the COVID-19 pandemic, as explained in the introductory chapter of this study. The first – negative supply shocks to IPNs or supply chains – was experienced in the early months of the COVID-19 pandemic. The AMS economies experienced and responded to a shortage of intermediate inputs originating in China.

The second – negative demand shocks to the macroeconomy – was caused by the demand shortage brought about by lockdown measures and suppressed economic activities, both in the domestic economy and in the major markets.

The third – positive demand shocks to the goods and services supplied in response to the demands arising from the COVID-19 pandemic – has two aspects. The surge in demand for critical healthcare items led to stressed healthcare supply chains. Social distancing, working from home, and restricted movement of people across borders resulted in a rise in demand for information and communication technology (ICT) equipment and internet-based services. These positive demand shocks are also opportunities for firms to grow now and after the COVID-19 pandemic.

These three types of shocks to the supply chains, and the firms' adaptive features, are captured in the three sections of the survey.

### Business activity: Sales, performance, and business outlook

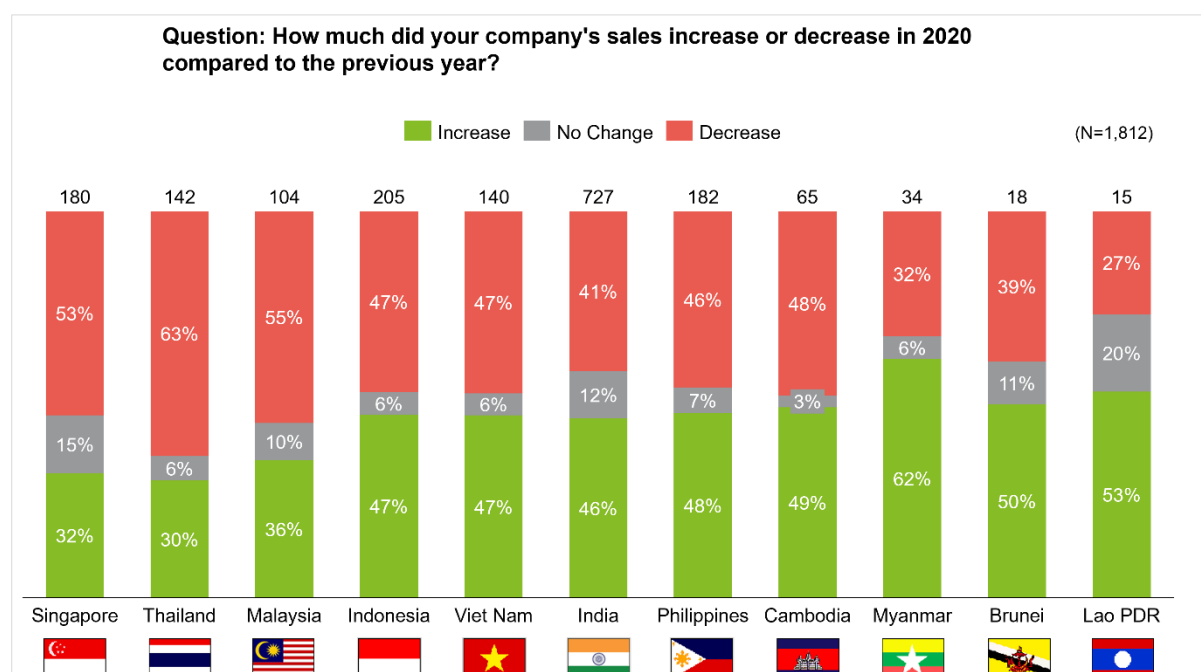
Firms' business activities were surveyed under the broad question head: How significantly did COVID-19 affect business performance in the region? Specific questions asked were: How were the firms' sales, exports, and operating profits growth rates in the first year of the COVID-19 pandemic distributed? How do the firms envisage their business outlook? What attributes of firms affect their

business performance and outlook? Did any specific pattern of the firms' supply chains influence them? A collation of the replies shows that firms' business performance during the pandemic was distributed widely from positive to negative, and the firms that were adaptive to the COVID-19 shock in terms of quickly re-arranging their supply chains were more likely to perform well and have a better outlook for 2021. Moreover, manufacturing and ICT firms tended to show better performance in 2020 than other industries, which suggests that IPNs in the region have been relatively robust to negative supply shocks while positive demand shocks have benefitted ICT services and industries.

Even though most of the surveyed firms were affected by COVID-19, the business outlook remains positive. More than half the companies expect increases in profits and plan to hire more employees in the next few years.

Firms in smaller countries (e.g. Brunei, Myanmar, and the Lao PDR) experienced better sales in 2020 than those in larger economies (e.g. Singapore, Malaysia, and Thailand) (Figure 6.4). Singapore, Malaysia, and Thailand are more mature economies with greater IPN linkages and higher GDP per capita. Their mix of firm type, size, and backward and forward supply chain linkages is more varied than that of the smaller ASEAN economies. The larger economies also faced greater negative supply and negative demand shocks to their supply chains than the smaller AMS. Amongst industry types, manufacturing, ICT, and business services firms showed better performance than the 'other' industry category (Figure 6.5). This is due to the positive demand shocks generated for goods and services unique to COVID-19 measures and needs. Negative demand shocks are seen in the decrease in the sales performance of the retail and wholesale sector.

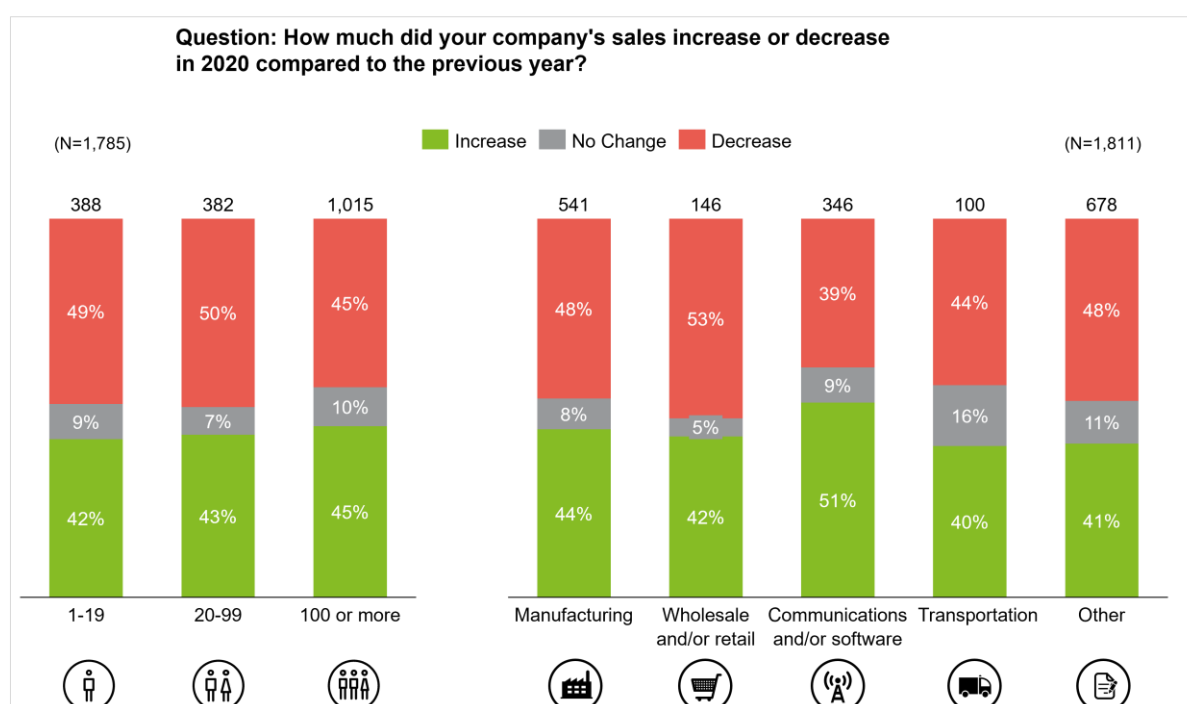
**Figure 6.4: Sales Performance of Firms in ASEAN**



ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People's Democratic Republic.

Source: ERIA (2021).

**Figure 6.5: Sales Performance, by Company Size and Industry Type**

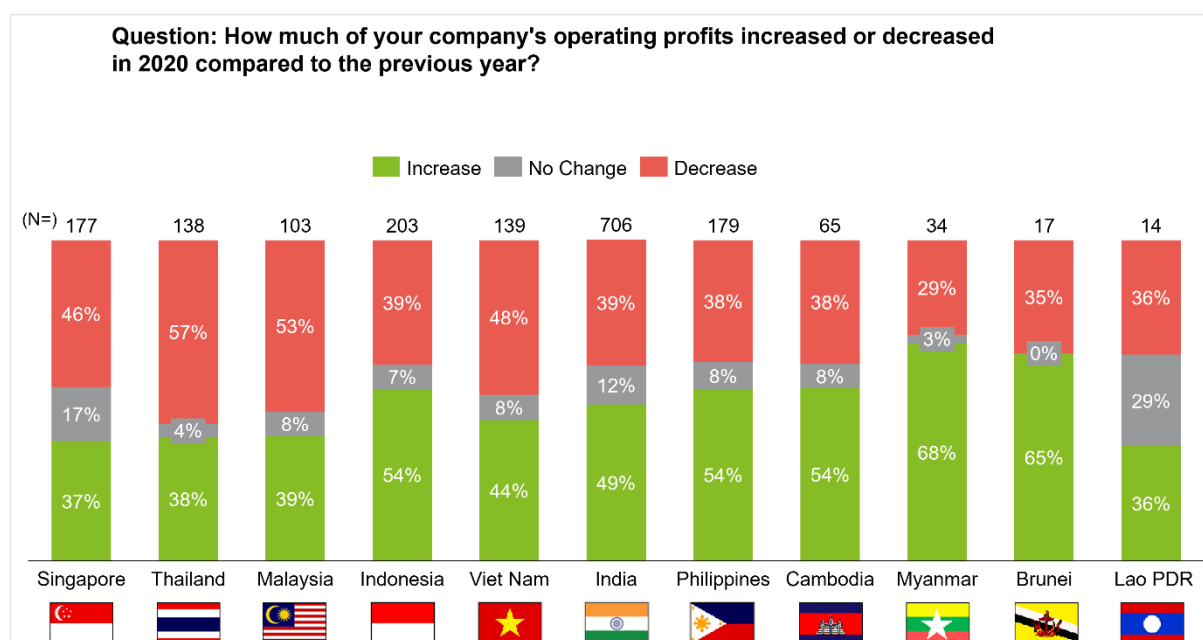


Source: ERIA (2021).

A noteworthy feature of firms in smaller economies in 2020 is the increase in operating profits, when compared with larger ASEAN economies. More than 60% of the respondents in Myanmar and Brunei experienced an increase in operating profits in 2020, while slightly less than 40% of the respondents in Singapore, Thailand, and Malaysia did so (Figure 6.6). Most of the firms reported (except in the Lao PDR) that decreases in profits were due to COVID-19. There is a direct link between improved operating profits and increased sales, as in the case of smaller economies. However, this suggests that when compared with counterparts in larger ASEAN economies, firms in smaller economies were able to manage the overall costs of production better.



**Figure 6.6: Change in Operating Profits of Firms in ASEAN, 2020**



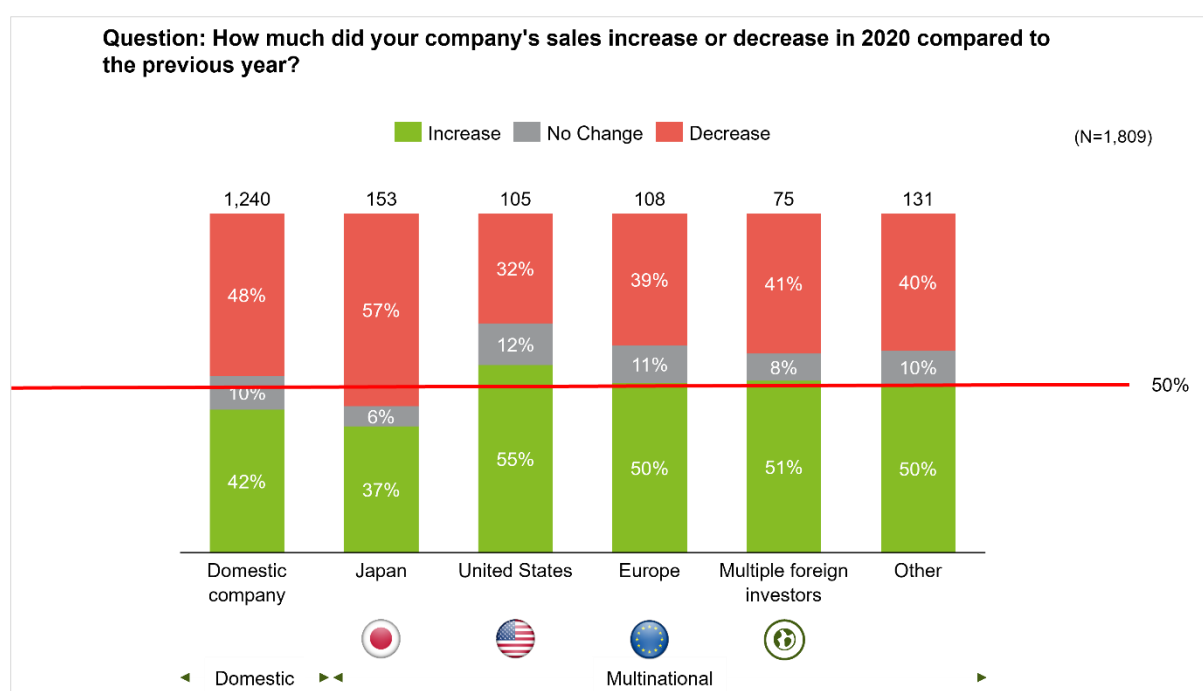
ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People's Democratic Republic.

Source: ERIA (2021).

The survey results also show that more than half of the foreign-affiliated firms (except for Japan) experienced increased sales in exports in 2020. Comparatively, domestic firms experienced lower sales from exports than foreign-affiliated firms (Figure 6.7).

These results show that COVID-19 has negatively impacted on business performance in the ASEAN region. However, there were significant differences amongst the firms in terms of the vectors of COVID-19 impacts, and the majority of firms have been able to withstand the demand and supply shocks with optimism for business plans in 2021 (Oikawa et al., 2021).

**Figure 6.7: Profits Amongst Foreign-Affiliated Firms**

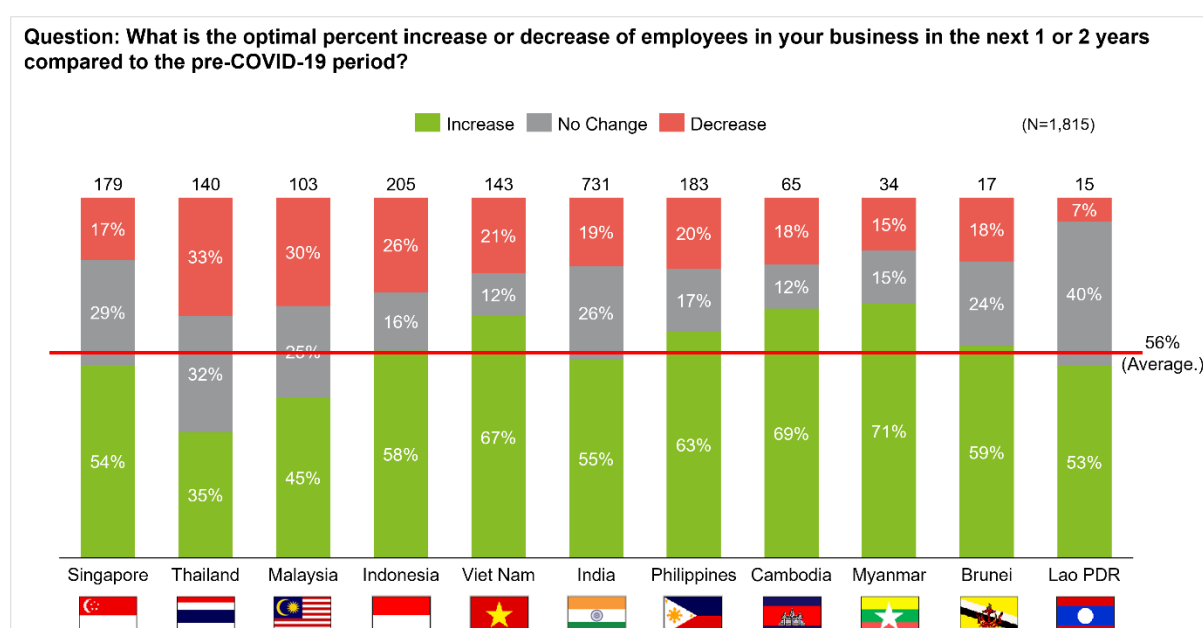


Source: ERIA (2021).

## Business plans for 2021 and ahead

As testimony to their performance and resilient outlook, 56% of ASEAN firms reported plans for hiring additional labour in 2021 (Figure 6.8). Some 71% of companies in Myanmar, 69% in Cambodia, 67% in Viet Nam, and 58% in Indonesia plan to increase employment, while only 35% of Thai and 45% of Malaysian companies plan to increase hiring. In keeping with their performance, firms in smaller economies presented a better business outlook for 2021. Firms that broadened supplier arrangements across countries during 2020 are less likely to downsize business and more likely to hire more workers in the next few years. This may, however, still be subject to change due to continued negative demand shocks coming from important markets in the US and the EU. Intra-ASEAN demand for goods and services will be equally important for business plans in the next 2 years.

**Figure 6.8: Business Plans of Companies in 2021 and Ahead**



COVID-19 = coronavirus disease, Lao PDR = Lao People's Democratic Republic.

Source: ERIA (2021).

## Supply chain performance

This section of the survey covers the changes in firms' supply chain activities and measures the respondents' plans (or lack thereof) to change their customer, supplier, or production relationship due to COVID-19. The survey also maps measures such as cost reduction/optimisation and digitisation as a supply chain measure during COVID-19. The broad question for mapping changes in the supply chain activities is: Did the firm's relationship with its customers and suppliers change during 2020? For which reasons? Firms were asked further sub-questions: How did (or would) the firms reconstruct their customer and supplier relationships and production locations in the year of the COVID-19 outbreak? To what degree? Are the changes temporary or in a medium- or long-term perspective? Did the pre-COVID-19 transaction links between customers and suppliers increase, remain the same, or shrink during 2020? For what reason? What elements of transaction links affected the firm's vulnerability to the COVID-19 shocks?

To map the measures related to the supply chains undertaken, the firms were asked to respond to these questions: What kind of measures related to the supply chains did firms take in response to the COVID-19 pandemic? Were there any combinations of different measures against COVID-19 that firms preferred to implement? Were there any differences in the attributes of firms that took different measures against COVID-19?

The survey reveals that many firms restructured their supply chains to a certain extent in response to the COVID-19 shock. Furthermore, most of the supply chain reforms are unlikely to be reversed. Cost reduction is the most common supply chain measure adopted by the firms. It is noteworthy that the least common adopted measure was supply chain digitalisation. Remote operations were not a preferred measure. The firms that implemented supply chain digitalisation tend to have implemented

both supply chain optimisation and remote operations. Large or young firms, or firms with diversified customers across countries, were more likely to implement supply chain digitalisation.

Most companies in all countries experienced changes in supplier relationships due to COVID-19 (Table 1). The majority of the firms changed or planned to change customer or supplier relationships in response to the COVID-19 shock. About 70% of firms have reviewed their customer relationships, and about 60% have already undertaken and/or plan to undertake changes in supplier relationships. The number of surveyed firms that had no plan to change their supplier relationships is somewhat larger, but changes in supplier relationships were identified by firms as a major step in meeting the negative supply shocks as well as meeting production demand. Supplier relationship changes also helped in meeting positive demand shocks in the manufacturing, ICT, and transport sectors.

**Table 6.1: When (Row) and to What Degree (Column) Supplier Change Is Made**

When?	To What Degree?					Total
	No plan	1%–9%	10%–29%	30%–99%	100%	
No plan	39.0	0.0	0.0	0.0	0.0	<b>39.0</b>
By 2020	0.0	13.8	17.1	9.3	3.8	<b>44.0</b>
2021, 1st half	0.0	4.0	5.5	1.6	0.7	<b>11.8</b>
2021, 2nd half	0.0	0.8	1.5	1.5	0.4	<b>4.1</b>
2022 or beyond	0.0	0.2	0.4	0.4	0.1	<b>1.1</b>
<b>Total</b>	<b>39.0</b>	<b>18.8</b>	<b>24.4</b>	<b>12.9</b>	<b>4.9</b>	<b>100.0</b>

Notes: Survey size – 1,305 firms. Each cell's value stands for the ratio of the number of respondents that reported the corresponding row and column category choices to the grand total. Percentages may not sum 100% due to rounding.

Source: Oikawa et al. (2021).

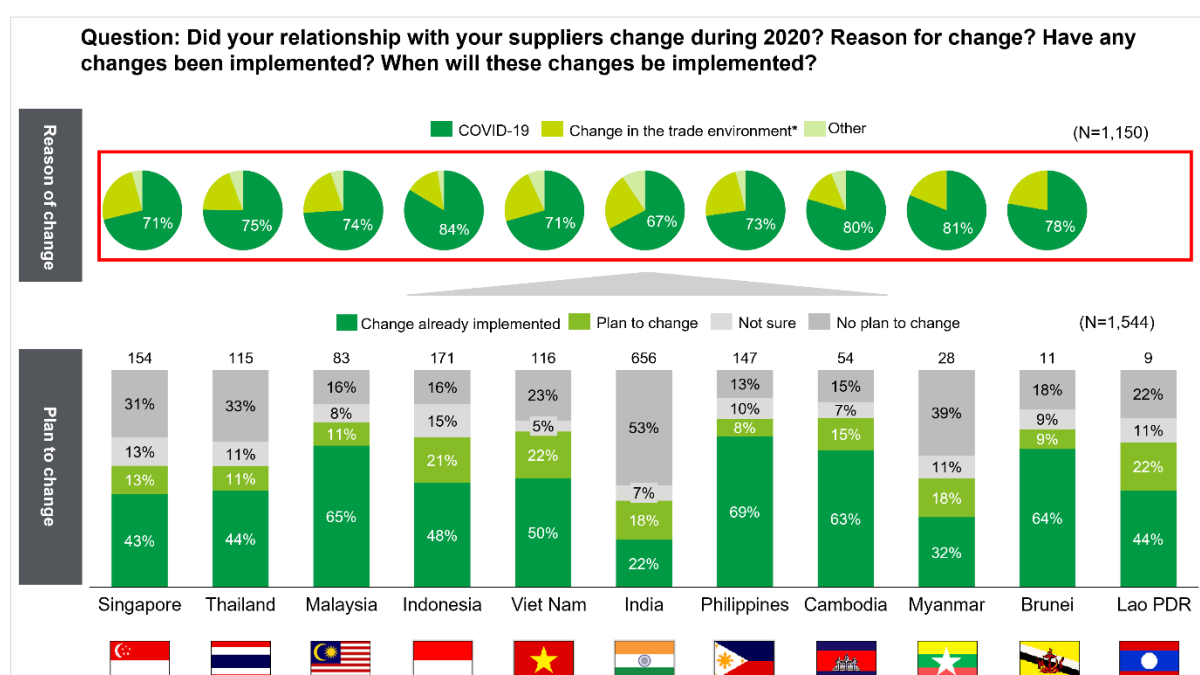
More than half of the firms surveyed in Cambodia, Brunei, and Viet Nam, which are smaller economies, have made changes in their supplier relationships (Figure 6.9). Malaysia and the Philippines stand out as important examples of larger economies where more than 60% of the surveyed firms had to carry out changes in supplier relationships to remedy the negative supply and demand shocks. Malaysia and the Philippines have a large component of domestic suppliers. The survey reveals that the greater the component of domestic suppliers (as in the case of Malaysia, at 70%), the less confidence in sustained supplies in 2021 and afterwards. The top suppliers of most firms in Singapore (77%), Thailand (88%), and Malaysia (95%) are from Asia. However, unlike Singapore and Thailand, which reported positive or stable sentiments about suppliers, the surveyed firms in Malaysia reported a further drop in or suspension of supplies from domestic suppliers (49%) and overseas suppliers (36%) in 2021 and afterwards.

While the surveyed firms in Singapore, Thailand, and Malaysia have indicated general confidence in their top suppliers in ASEAN and East Asia, 44% of Malaysian firms anticipate a suspension of supplies from suppliers located in ASEAN in 2021 and afterwards. Malaysia has largest component of domestic suppliers (70%) amongst all ASEAN economies. In 2020, Malaysia had the most severe restrictions for manufacturing industries amongst AMS. The Malaysian government imposed a movement control order, limiting Malaysian firms' activities except for food and medical equipment firms. A Japan External Trade Organization study (JETRO, 2020) pointed out that Japanese, European, and US firms have reduced their supplies in Malaysia because of the stringent local lockdown measures. The same study also reported that Thailand's delayed customs procedures (due to the work-from-home

requirement for customs officials) have affected international supply chains and would also lead to Thailand's prospective decrease in trade with customers.

Manufacturing firms have remained relatively stable, and only about 40% of them reconstructed or planned to reconstruct their supply chains. Most supply chain rearrangements by firms were implemented during the first year of the pandemic. Most firms have changed or are expected to change their supply chains by 10% or more, but less than 30% in terms of trade or production value. The majority of the firms that rearranged their supply chains, or plan to change, have done this in a medium- or long-term perspective. These findings imply that firms in the ASEAN region responded quickly to the COVID-19 shock and reconstructed their supply chains to a certain degree. Furthermore, many of the changes implemented in supply chains are unlikely to return to the pre-COVID-19 status.

**Figure 6.9: Changes Implemented or Planned in Supplier Relationships**



COVID-19 = coronavirus disease, Lao PDR = Lao People's Democratic Republic.

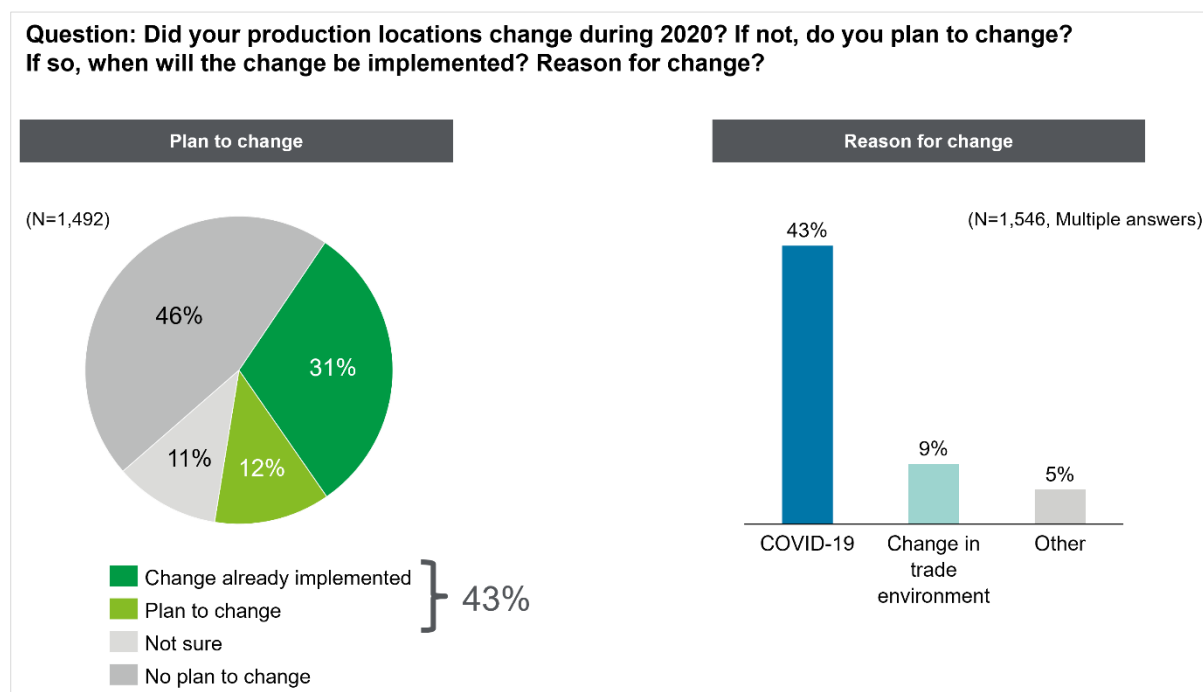
\* = e.g. imposition of additional customs duties, US–China trade discord

Source: ERIA (2021).

Changes in production locations were considered by just 43% of surveyed firms that responded to the question on location change (Figure 6.10). The retail and wholesale sector has witnessed more changes in production locations. However, about 40% of the manufacturing companies also responded that they have either already implemented or plan to change production location. Most companies that experienced production location changes answered that the reason was due to the impact of COVID-19. An average of 65% of firms in Malaysia and the Philippines reported changes in production location. Negative supply shocks are the main reason for changes in production location, but fulfilling the positive demand shocks may also be an important reason behind the plans for changes in location, especially for ICT and transportation companies that must meet a surge in demand. So far, the surveyed firms have not accounted for US–China trade frictions and tariff and non-tariff measures as a significant reason for location change. Clearly, businesses are focused on preserving and expanding markets/clients amidst the negative and positive COVID-19 shocks. Changes

in production location only supplement the measures undertaken to keep the supply chains resilient to shocks. It is also noted that firms with less workers are more inclined to change location than larger firms (Figure 6.11).

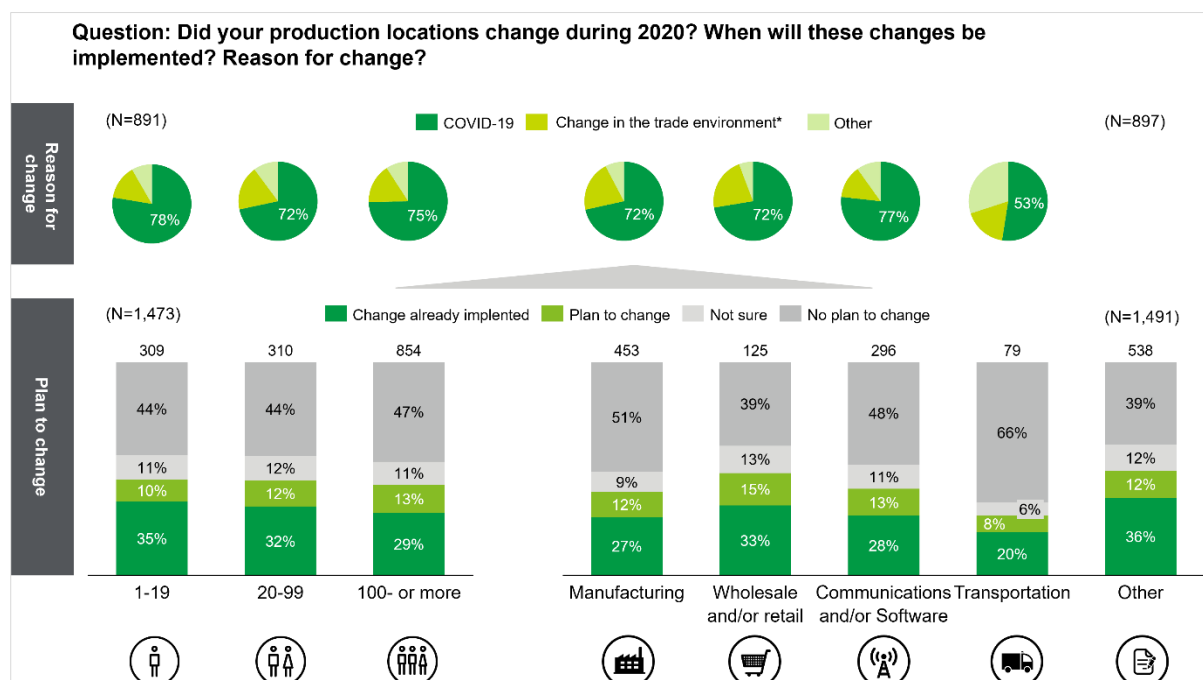
**Figure 6.10: Changes Implemented or Planned in Production Location**



COVID-19 = coronavirus disease.

Source: ERIA (2021).

**Figure 6.11: Change in Production Location, by Industry Size and Type**



COVID-19 = coronavirus disease. \* = e.g. imposition of additional customs duties, US–China trade discord.

Source: ERIA (2021).

## Supply chain measures against COVID-19

The most prevalent supply chain measure in the response to COVID-19 is cost reduction and/or optimisation (Figure 6.12). Some 63% of the respondents adopted this measure. Notably, only 23% of the responding firms adopted supply chain digitalisation (inter-firm digitalisation). Moreover, only about 31% of the respondents adopted remotely manageable operations (intra-firm digitalisation). The firms that implemented supply chain digitalisation tend to have implemented both supply chain optimisation and remote operations. If a firm is large or young, or has internationally diversified customers, it is more likely to adopt the supply chain digitalisation measure. The remote operations measure tends to be taken by firms that are foreign-affiliated or located in countries with a relatively high internet penetration rate.

Rebuilding relationships with customers and suppliers is the next most preferred measure to deal with the COVID-19 shocks. About half of the reporting firms chose the rebuilding customer relationship measure and about one-third of respondents chose the rebuilding supplier relationship measure. It is notable that firms' relationships or transaction links with customers were more flexible to change than with suppliers.

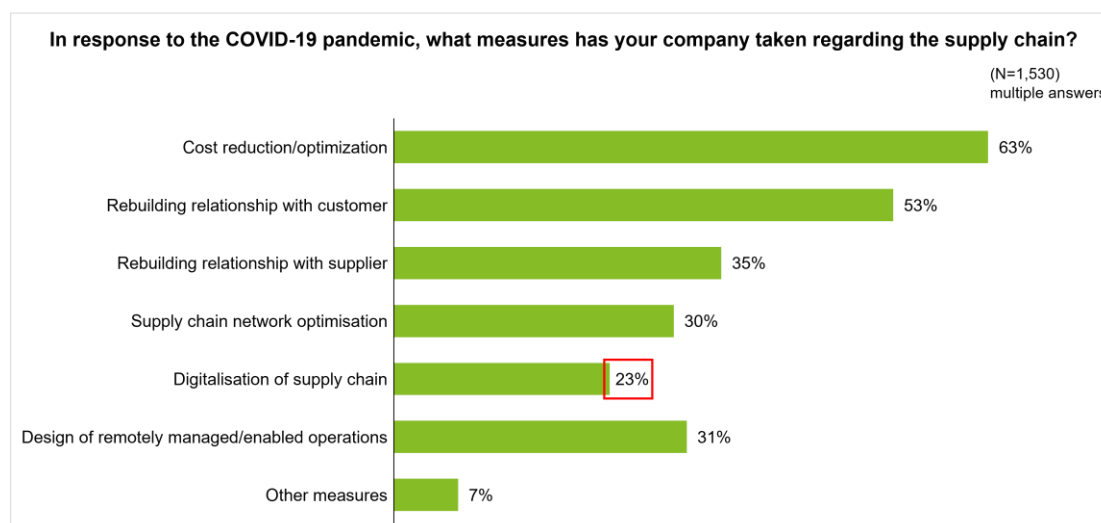
Rebuilding relationships with customers includes changing the way of doing business with customers. This measure includes stopping trading with existing customers/suppliers; starting trading with new ones; and renegotiating financial agreements with distributors and suppliers, e.g. payment terms, changing logistics arrangements, educating customers more intensively, etc.

The supply chain network optimisation measure allows a firm to improve its efficiency in the whole supply chain. However, larger firms employ this measure regularly so it may not be specific to the COVID-19 pandemic.

About two-thirds of respondents reported the cost reduction and/or optimisation measure in response to the COVID-19 pandemic.

Digitalisation and remote management of operations was the least preferred measure amongst the respondent firms. This will have important implications for policy inputs for the digital economy supply chains in the region.

**Figure 6.12: Measures Undertaken by Firms to Reduce the COVID-19 Impact**



COVID-19 = coronavirus disease.

Source: ERIA (2021).

## Impact of COVID-19 and firms' expectations

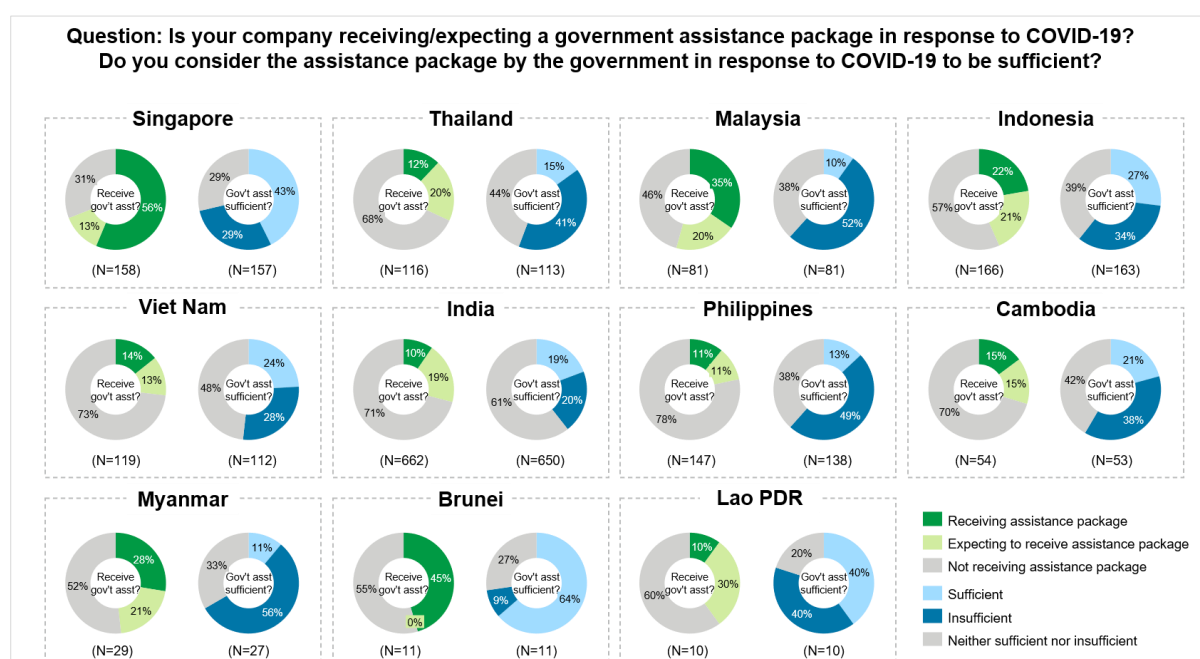
Government assistance to firms varies widely amongst countries in the ASEAN region. Overall, only 18% of firms in the ASEAN region have received assistance while another 17% expected to receive assistance. However, firms in countries like Singapore, Brunei, Myanmar, and Malaysia have received greater government assistance than their counterparts in other AMS (Figure 6.13). Significantly, satisfaction with the assistance is not proportionate to the assistance received. In other words, government assistance and its satisfaction levels vary across the countries, as noted for Malaysia and Myanmar. The results of whether the firms received or were satisfied with government assistance were largely same across firm size and industry type.

Most (58%) of the firms expected to receive tax reduction support from the government in response to the COVID-19 pandemic (Figure 6.14). The second and third preferences for government support were salary support (37%) and acceleration of business people's mobility across countries (32%). Some 61% of Malaysian and 58% of Singaporean firms preferred salary support from the government, while 52% of Thai respondents expected an acceleration in business people's mobility.

Smaller firms chose rent support as the preferred government support, as the rent cost share of a firm tends to be larger when the firm is small. Some 36.2% of manufacturing firms expected the government to accelerate people's mobility across countries, and were less likely than non-manufacturing firms to select wage and rent support as the expected government assistance since manufacturing firms' cost shares of labour compensation and rent are smaller than those of non-manufacturing firms. Manufacturing firms are more capital-intensive and larger than non-manufacturing firms.

Firms' country affiliation caused significant differences in expected government assistance. Foreign-owned/affiliated firms chose business people's mobility as the desired government assistance. In contrast, ASEAN and domestic firms chose other issues, including finance, salary, social security, and rent.

**Figure 6.13: Status of Government Assistance and Firms' Satisfaction**

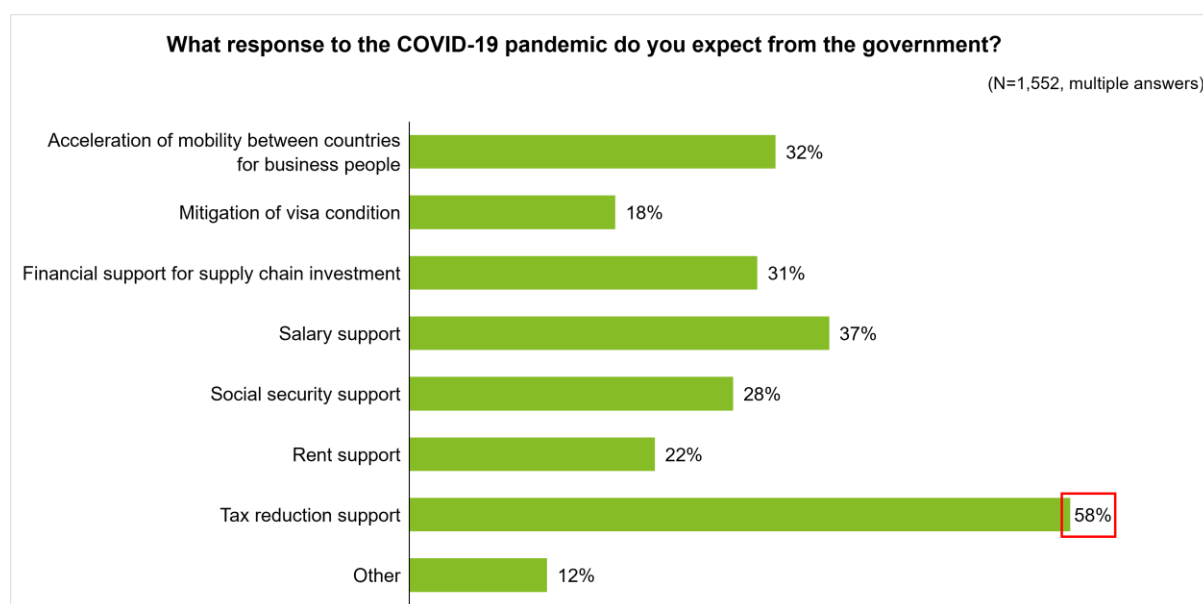


COVID-19 = coronavirus disease, Lao PDR = Lao People's Democratic Republic.

Source: ERIA (2021).



**Figure 6.14: Support Measures Expected from the Government**



COVID-19 = coronavirus disease.

Source: ERIA (2021).

### Trade and investment in supply chains in ASEAN in 2021 and beyond

The COVID-19 pandemic significantly impacted manufacturing and non-manufacturing firms in the AMS. While the impact was negative on average, most of the firms were able to quickly adjust trade with their customers and suppliers across countries and globally. Manufacturing firms showed better performance than other industries in 2020, which suggests that IPNs in the region have been relatively robust to negative supply shocks. Additionally, ICT services firms experienced better business outcomes and are more likely to expand their businesses and to hire more than other industries. This suggests that positive demand shocks have benefitted the ICT industry and its growth will continue.

The UK is pursuing an independent trade and investment roadmap for ASEAN and the East Asia region. The better than average performance of ASEAN markets – supported by policy measures such as the Hanoi Plan of Action to keep the market open to trade and investment – can help ASEAN's trading partners, including the UK, to plan and invest in the value chains of production in the region. The changing patterns of customer and supplier relationships amongst the firms in ASEAN present an opportunity for UK businesses to diversify their supply of goods and services and their markets away from the EU to the ASEAN region and the larger East Asia region, with which ASEAN shares a complex supply chain network and market. The increased mutuality between two economies will help both address the negative supply shocks and negative demand shocks. Importantly, for the UK, the positive demand shocks create an opportunity to provide its goods and services in the ASEAN region, which is also working on changes in supplier and customer relationships.

These findings from the ERIA survey of ASEAN firms will be useful for the UK and all the trading partners to better plan and respond to the post-COVID-19 developments and changes in the supply chains and markets in ASEAN and East Asia.

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