

# Non-Equity Modes of Trade in ASEAN

## Promoting new forms of trade between Japan and ASEAN

PAPER 6  
MARCH  
2020

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Paper 6 / March 2020 / Non-Equity Modes of Trade in ASEAN: Myanmar  
Promoting new forms of trade between Japan and ASEAN

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The following symbols have been used in the tables:

- Two dots (..) indicate that data are not available or are not separately reported.
- A dash (-) indicates that the item is equal to zero or its value is negligible.
- Use of a dash (-) between dates representing years, e.g., 2015–2016, signifies the period involved between the years, including the beginning and end years.

Reference to “dollars” (\$) means United States dollars, unless otherwise indicated.

There are ten papers in total. The other nine papers are being prepared simultaneously.

Paper 1. Brunei Darussalam

Paper 2. Cambodia (published in August 2019)

Paper 3. Indonesia

Paper 4. Lao People’s Democratic Republic (published in March 2020)

Paper 5. Malaysia

**Paper 6. Myanmar**

Paper 7. Philippines (published in March 2018)

Paper 8. Singapore

Paper 9. Thailand

Paper 10. Viet Nam (published in December 2018)

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## CONTENTS

|  |           |
|--|-----------|
| <b>1. Introduction</b> .....   | <b>1</b>  |
| <b>2. Characteristics and Scope of NEMs</b> .....                      | <b>8</b>  |
| 2.1 Scale and scope of NEM.....  | <b>8</b>  |
| 2.2 NEM by modality.....   | <b>12</b> |
| (1) Subcontracting: Garments.....                                      | <b>12</b> |
| (2) Subcontracting: IT-BPO.....  | <b>17</b> |
| (3) Licensing and management contracts: Hotels .....                   | <b>22</b> |
| <b>3. Opportunities and challenges</b> .....                           | <b>26</b> |
| 3.1 Local capabilities.....  | <b>27</b> |
| 3.2 Relationships between NEM modalities and industries.....           | <b>27</b> |
| 3.3 Ownership and control .....  | <b>28</b> |
| 3.4 Localization strategies .....                                      | <b>29</b> |
| 3.5 Local NEM firms.....   | <b>29</b> |
| <b>4. Policy implications</b> .....                                    | <b>31</b> |
| 4.1 Enhancing capacities of local firms .....                          | <b>31</b> |
| 4.2 Developing the basic infrastructure .....                          | <b>32</b> |
| 4.3 Developing science, technology and innovation infrastructure ..... | <b>33</b> |
| 4.4 Promoting connectivity and coordination.....                       | <b>33</b> |
| 4.5 Promoting integration into global markets.....                     | <b>33</b> |
| 4.6 Mainstreaming sustainable development .....                        | <b>34</b> |
| <b>References</b> .....  | <b>37</b> |



## KEY MESSAGES

- The value of non-equity modes (NEMs) of production in Myanmar has grown rapidly. A number of industries, including services, produce considerable NEM exports.
- Having engaged in the world economy only about two decades ago and started to integrate into it only recently, NEM firms in Myanmar are still in the nascent stage of operations. They are observed largely as subcontracts, management contracts and franchising operations, varying by industry.
- The garment industry, which is dominated by the outsourcing (subcontracting) activities of transnational corporations (TNCs), is among the highest generators of exports and employment in NEM businesses in Myanmar. The volume of NEM exports in the industry is estimated at \$1 billion, more than 70 per cent of total garment exports.
- The information technology-business process outsourcing/business process management (IT-BPO/BPM) industry is new to Myanmar and offers tremendous growth potential in the country. Because competition in the industry is severe, the government needs to develop infrastructure in communication networks to stimulate its growth.
- International hotels are operated in Myanmar through either management contracts or franchise agreements, or on long-term leased land on which hotels are built with equity investments. The government's inward foreign direct investment (FDI) policy prohibits foreigners from owning private land.
- NEM firms in Myanmar face a significant challenge that those in other countries also face. TNCs can easily terminate their contracts, particularly if the quality of services or goods supplied does not meet their competitive standards or when more competitive suppliers emerge in other countries.
- The government should develop basic infrastructure, as well as science, technology and innovation (STI) infrastructure to promote connectivity and coordination between firms and organizations and external markets. This development is necessary for NEM firms to be able to connect and coordinate competitively with global value chains (GVCs), and to upgrade in them.
- The government should form a one-stop agency within the Economic Planning Board, entrusted to play the role of promoting investment, and establishing and increasing interactions between firms, organizations and government agencies responsible for providing basic infrastructure services.
- The government should consider implementing and strengthening the regulatory environment to enable NEM firms to export, expand their employment and upgrade technologically.





## 1. INTRODUCTION

The extensive literature on accounts of trade between countries has focused on aggregate statistics by broad ownership patterns, largely discussing exports by local and joint-venture firms and by foreign firms at different levels of product categories. Few works have studied non-equity modes (NEMs) of ownership, where trade links appear with supply chains, or in many cases, with the global value chains (GVCs) of transnational corporations (TNCs). NEMs tend to either dominate trade, as in clothing and electronics, or manifest in the form of intra- and inter-firm trade, vertically or horizontally, among TNC affiliates. NEMs of participation in trade within GVCs started gaining significance following the successful expansion of firms from Japan, the Republic of Korea, and Taiwan Province of China. In light of the importance of the balance of payments and the overall economic development of national economies, there is increasing recognition that NEM engagement in trade is important not only to check resource outflows but also to develop local productive capabilities. Trade between Japan and ASEAN members is no exception.

NEM engagement in trade is also spreading in Myanmar in the form of international subcontracting in manufacturing industries, such as electronics and garments; contract farming in agriculture and food processing; international franchising in fast food, hotels and retail stores; variations of build-own-operate transfer arrangements and other concessions in infrastructure projects; and management contracts (e.g. in international hotel chains). Offshore software development (information technology-business process outsourcing, or IT-BPO) has gradually become popular in Myanmar. These businesses are largely undertaken under contractual agreements with foreign entities. This study examines the case of Myanmar in the overall framework of the ASEAN-Japan Centre project (box 1) targeted at NEMs, particularly with a focus on selected industries.

### Box 1. The NEM project by the ASEAN-Japan Centre

Other than arms-length relationships, equity-holding is not the only means of exerting control over the international production chain. Companies also enter into a contractual relationship with other independent firms. This trade is gaining importance as the system of global production is more integrated and forms value chains. This is the area in which lack of knowledge and a huge gap of research exist in ASEAN. It also calls for an overall analytical framework to assess development impacts in order to propose a generic policy framework for dealing with this kind of transactions. The fundamental difference to normal trade is that non-equity forms of operations relate to a contractual partnership between private parties. The role of the state related to this partnership is limited to setting the framework conditions within which the private parties can freely negotiate the terms of their cooperation. By understanding better this phenomenon including the scale and scope, and filling in a policy analysis gap, the ASEAN-Japan Centre (AJC) will provide ASEAN governments with policies that they need to consider in order to fully benefit from these new forms of trade as well as investment.

In order to understand the scale and scope of non-equity involvement in major industrial sectors, a case study methodology is used. The reasons for taking this approach are two-fold: (1) balance of payment and supplementary statistics do not provide the detail necessary to accurately measure cross-border non-equity participation; and (2) the relevant microdata are fragmented and disconnected. As much as possible, each case study builds on existing research and statistics.

.../

**Box 1. The NEM project by the ASEAN-Japan Centre (Concluded)**

New opportunities are emerging for ASEAN countries owing to developments in TNCs' international innovation networks (IINs). While attracting foreign direct investment (FDI) and encouraging foreign TNCs to establish affiliates remain an important option for ASEAN countries, Governments need to review their current regulatory regimes to appropriate synergies from IINs. A key objective of this study is to make recommendations on which policies (investment and global value chains (GVCs) and industrial policies) the Government needs to consider in order to fully extract these emerging opportunities.

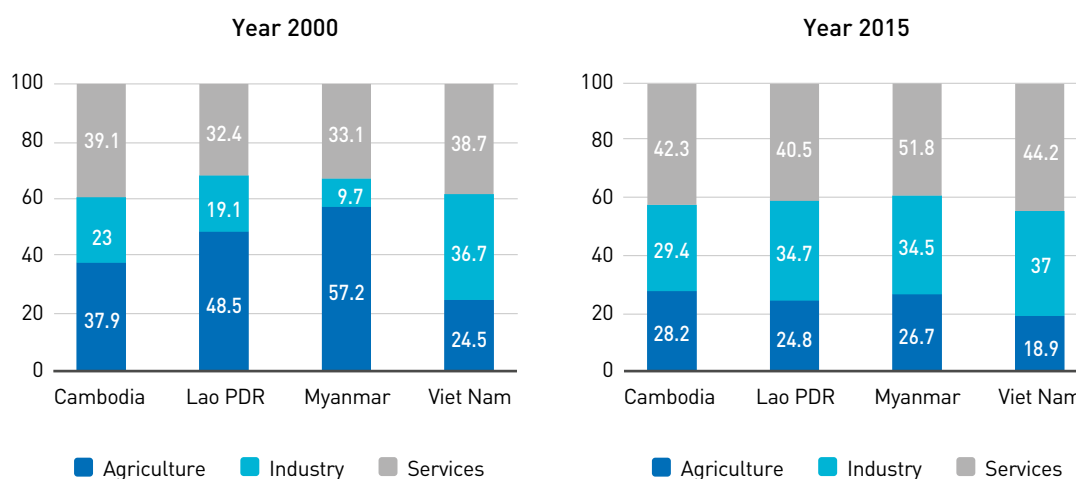
Two industries in Myanmar possess strong potential to penetrate export markets in future: garments and food processing. Garments are currently the most significant manufactured export, having risen in value from \$12 million in 1990 to \$800 million in 2000 and \$859 million in 2015 (table 1). Exports to Japan rose from \$1.1 million in 1997 to \$649 million in 2016. Food processing has seen strong growth in Myanmar. Although the food processing industry's contribution to exports at the time this report was prepared could not be assessed, the overall contribution of the agricultural sector to gross domestic product (GDP) is more than one quarter (figure 1).

**Table 1. Major export and import products of Myanmar, fiscal year 2015 and 2016**

| Major export items | Export value (US\$ million) | Share of total exports (%) | Major import items                | Import value (US\$ million) | Share of total imports (%) |
|--------------------|-----------------------------|----------------------------|-----------------------------------|-----------------------------|----------------------------|
| Natural gas        | 4 343                       | 39.1                       | Machinery and transport equipment | 4 945                       | 29.8                       |
| Beans              | 1 152                       | 10.3                       | Base metals and manufactures      | 1 902                       | 11.5                       |
| Garments           | 859                         | 7.7                        | Refined mineral oil               | 1 514                       | 9.1                        |
| Jade               | 570                         | 5.1                        | Electric machinery and apparatus  | 1 417                       | 8.5                        |
| Rice               | 522                         | 4.7                        | Edible vegetable oil              | 563                         | 3.4                        |
| Base metal/Ore     | 360                         | 3.2                        | Plastic                           | 532                         | 3.2                        |
| Fish               | 312                         | 2.8                        | Cement                            | 332                         | 2.0                        |
| Maize              | 305                         | 2.7                        | Artificial and synthetic fabrics  | 309                         | 1.9                        |
| Sesame             | 131                         | 1.2                        | Pharmaceutical products           | 280                         | 1.7                        |
| <b>Others</b>      | <b>2 583</b>                | <b>23.2</b>                | <b>Others</b>                     | <b>4 784</b>                | <b>28.9</b>                |
| <b>Total</b>       | <b>11 137</b>               | <b>100</b>                 | <b>Total</b>                      | <b>16 578</b>               | <b>100</b>                 |

Source: Central Statistical Organization, Myanmar.

Figure 1. GDP share by sector in the CLMV countries, 2000 and 2015 (Per cent)



Source: Asian Development Bank, Key Economic Indicators 2016.

Deregulation and the consequent rising importance of foreign direct investment (FDI) into Myanmar are now well documented (Myint, 2012). What is less documented is the growth and expansion of local firms. Yet, local firms have been overwhelmed by foreign firms and those from Japan, the Republic of Korea and Taiwan Province of China exhibit different behaviours. In the case of firms from the latter two countries, the GVCs that helped support their growth were strongly integrated into the activities of United States and European firms. In Asia, the technological catch-up that facilitated the transformation of local firms from low to high value added activities was very much based initially on creative learning from knowledge acquired and imported from Western and Japanese firms, with FDI playing a critical role (Amsden, 1989; Kim, 1997). The successful leapfrogging experience of many firms in ASEAN occurred. Although it is too early to study the possibility of a similar experience in Myanmar, nevertheless it will be helpful to investigate whether there are signs that could be used to formulate relevant policy recommendations to stimulate such a development.

Local participation in GVCs has already emerged in some ASEAN countries, particularly in the electronics and the textile and clothing industries, with outsourcing firms coming from sophisticated local innovation systems. Changes in such intra-firm and inter-firm production linkages have resulted in changes in the nature of control exerted by buyer TNCs and target markets. However, not much work has emerged on value chains that local NEM firms connect with. This paper seeks to examine the nature of control in the value chains of local clothing and textile firms either selling to Japanese firms in Myanmar or exporting to Japanese markets.

**Box 2. Factors that make countries attractive NEM locations: the case of Myanmar**

When examining the factors that make locations attractive and conducive to NEMs, there is a need to address overlapping factors that stimulate FDI inflows. As with FDI, determinants of location include political and social stability, sufficiently efficient and competitive policies, financial incentives, smooth trading procedures and conducive macroeconomic policies. These factors are also conducive to attracting NEMs.

In addition to policy-related determinants, many other factors can support NEM development in host countries. First, as NEMs include forms of contract-based TNC engagement in the host economy, these factors include stable contract laws and commercial contract laws. For example, in franchises (e.g. Krispy Kreme and Doughnut Group, a Singapore-based firm) and contract farming (e.g. Mitsui and MAPCO, the Myanmar Agribusiness Public Corporation), it is important to establish sufficient protection of intellectual property rights.

Second, as with FDI, facilitation measures for promoting businesses are very important for attracting NEMs. For example, investment promotion institutions must apply promotional activities and financial incentives over a wide scope. Access to capital procurement is also an important factor for regional enterprises that has strong potential for promoting NEM expansion.

TNCs must establish footholds from places where they can support NEM businesses. These footholds can be a minimal commercial presence, as when purchasing and quality management organizations provide support for outsourced manufacturing or, as in the case of retail and quick service restaurant business franchises, when logistics support operations include the provision of materials to franchise locations.

The existence of reliable and capable regional enterprises, and the ability to engage them, are important factors in NEM operations. Most NEMs require local partners that are powerful, efficient and capable of taking on risk on behalf of TNCs. For example, when TNCs do not enter contracts directly with individual farms, agricultural cooperatives can act as intermediaries to reduce business risk and provide reliability (Barrett et al., 2010).

The third factor is the degree of economic development and its association with social capital within a country. For example, consumer market scale and growth, and access to regional markets are equally as important to such NEMs as franchises and out-licensing as they are to FDI. Basic infrastructure provision, and transport, energy, and communications costs are all major areas of interest to companies.

Technological capabilities and the capacity to improve the quality and productivity of regional enterprises are critical to both TNC and NEM operations. Government policies targeted at improving such capabilities in national firms, as well as regulations to stimulate strong corporate social responsibility practices and minimum labour conditions, are also important to stimulate upgrading in both TNCs and NEMs. Such initiatives also help expand the pool of NEMs available to network with TNCs. For example, the Malaysian government has introduced a law specifically concerning franchises, and has implemented other measures to promote TNC participation in regional economies. For service outsourcing, the government of the Philippines has contributed to the promotion of the IT-BPO industry.

Factors such as these have contributed to increasing the overall allure of ASEAN countries as sites for various types of NEMs. Box table 2.1 summarizes the major locational determinants of each mode.

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**Box 2. Factors that make countries attractive NEM locations: the case of Myanmar**  
(Concluded)

**Box Table 2.1. Locational determinants for FDI and NEMs**

| Relevant for FDI and NEMs  | More relevant for FDI   | More relevant for NEMs  |
|--|---|---|
| <b>Policy framework</b>  |   |   |
| <ul style="list-style-type: none"> <li>• Economic, political and social stability</li> <li>• Competition policy</li> <li>• Trade policy</li> <li>• Tax policy</li> </ul>   | <ul style="list-style-type: none"> <li>• Rules regarding entry and operations</li> <li>• Standards of treatment of foreign affiliates</li> <li>• International investment agreements</li> <li>• Privatization policy</li> </ul> | <ul style="list-style-type: none"> <li>• Stable general commercial and contract law</li> <li>• Specific laws governing NEM contractual forms (e.g. recognizing licensing, franchising contracts)</li> <li>• Intellectual property protection</li> </ul>   |
| <b>Business facilitation</b>   |   |   |
| <ul style="list-style-type: none"> <li>• Reduction of hassle costs (e.g. cost of doing business)</li> </ul>  | <ul style="list-style-type: none"> <li>• Investment promotion</li> <li>• Investment incentives</li> <li>• Provision of after-care</li> <li>• Provision of social amenities (e.g. quality of life)</li> </ul>                    | <ul style="list-style-type: none"> <li>• Facilitation efforts aimed at               <ul style="list-style-type: none"> <li>- upgrading of technological quality, productivity standards of local firms</li> <li>- enterprise development, increasing local entrepreneurial drive, business facilitation</li> <li>- subsidies, fiscal incentives for start-ups</li> <li>- information provision, awareness-building on NEM opportunities with local groups</li> <li>- support for minimum standards of working conditions and corporate social responsibility in local firms</li> </ul> </li> </ul> |
| <b>Economic determinants</b>   |   |   |
| <ul style="list-style-type: none"> <li>• Infrastructure</li> <li>• Market size and per capita income</li> <li>• Market growth</li> <li>• Access to regional and global markets</li> <li>• Country-specific consumer preferences</li> <li>• Access to raw materials</li> <li>• Access to low-cost labour</li> <li>• Access to skilled labour</li> <li>• Relative cost and productivity of resources and assets</li> <li>• Other input costs (e.g. transportation, communication, energy)</li> </ul> | <ul style="list-style-type: none"> <li>• Access to strategic assets</li> <li>• Created assets (e.g. technology, intellectual property)</li> <li>• Strategic infrastructure</li> </ul>   | <ul style="list-style-type: none"> <li>• Presence of credible local entrepreneurs and business partners</li> <li>• Access to local capital</li> </ul>   |

Source: AJC based on various issues.

Since shifting to civilian rule, Myanmar (which is the seventh largest export economy in ASEAN), has emerged among foreign investors as Asia's last untapped market. In 2017 it had the fifth largest population in ASEAN after Indonesia, the Philippines, Viet Nam, and Thailand in 2017. NEMs have already emerged in all sectors in the country – primary, manufacturing and services – to contribute to its economic development (table 2). In manufacturing, for example, the garment industry plays a pivotal role in the country's economic development, accounting for 7.7 per cent (over \$859 million in 2015) of total exports, with approximately 400 companies employing 300,000 workers.

Myanmar is primarily an agricultural country, with the sector accounting for over a quarter of GDP. Paddy rice is the country's most important crop, with \$522 million in exports to over 50 countries in 2015. China was the biggest importer, accounting for over 70 per cent of Myanmar's rice exports,<sup>1</sup> transported largely through its northern border with China.<sup>2</sup> Services has become the fastest-growing sector, accounting for over half of GDP in 2015,<sup>3</sup> with the retail sector generating \$25 billion in revenue. These developments demonstrate the strong potential for the development of NEMs in Myanmar in a wide range of economic sectors.

The next section explains the characteristics and scope of NEM by type and introduces particular types of NEM that are distinctive in Myanmar. Section 3 discusses opportunities and challenges in selected industries to draw implications of NEM for the Myanmar economy. The policy conclusions are presented in the last section.

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<sup>1</sup> Ministry of Commerce.

<sup>2</sup> Myanmar has 15 border points with neighbouring Bangladesh, China, India and Thailand.

<sup>3</sup> Its GDP contribution share reached 52 per cent in 2015.

Table 2. Selected NEMs, including examples of typical industries, in Myanmar

| Modality                             | Description<br>(in the international context)  | Typical industries  | Company examples   |
|--------------------------------------|--|---------------------|--|
| Subcontracting                       | Agreement whereby a TNC contracts out to a host-country firm one or more aspects of product design, processing or manufacturing. Includes contract manufacturing and design outsourcing, in the case of services and business processes.   | Electronics         | <ul style="list-style-type: none"> <li>• Earth Tamura Electronics (SATORI S-Tech)</li> <li>• Foster</li> </ul> |
|                                      |  | Garments            | Yangon Pan Pacific/A1 Garment  |
|                                      |  | IT                  | FROBO Myanmar  |
| Contract farming/<br>contract mining | Agreement between a TNC buyer and host-country farmers/miners (including governments) that establishes conditions for the production and marketing of farm or mining products.   | Agriculture         | <ul style="list-style-type: none"> <li>• MAPCO (Mitsui)</li> <li>• Lluvia (Mitsubishi)</li> </ul>              |
| Licensing                            | Contractual relationship in which a TNC (licensor) grants to a host-country firm (licensee) the right to use an intellectual property (e.g. copyrights, trademarks, patents, industrial design rights, trade secrets) in exchange for a payment (royalty). Includes brand licensing, product licensing and process licensing (cross-licensing and intra-firm licensing). | Fuel                | Max Energy (Shell)   |
|                                      |  | Finance (chip card) | MPU (Union Pay/JCB)  |
|                                      |  | Telecommunication   | MPT (KDDI)   |
| Franchising                          | Contractual relationship in which a TNC (franchisor) permits a host-country firm (franchisee) to run a specified business model on a system developed by the franchisor in exchange for a fee.   | Fast food           | Doughnut Group (Krispy Kreme)  |
|                                      |  | Hotel               | Asia Myanmar Shining Star (Wyndham Hotel)  |
| Management contracts                 | Agreement under which operational control of an asset in a host country is vested in a TNC contractor that manages the asset for a fee.  | Hotel               | LP Holding (Hilton Worldwide)  |
| Other                                | Includes concessions, leasing agreements, build-operate-transfer arrangements, etc., involving public-private partnerships.  | Infrastructure      | YMA (LSG Sky Chefs)  |

Source: AJC.

## 2. CHARACTERISTICS AND SCOPE OF NEMS

The characteristics and scope of the different modalities vary; hence, it is important to discuss them so that efforts to promote them are cognizant of the unique elements associated with each of them. Since most NEM modalities have already emerged in Myanmar, a systematic discussion is provided in this section.

### 2.1 Scale and scope of NEM

NEMs can be compared with FDI from the perspective of TNC's motivation. For example, contract farming is motivated by a search for supply of resources. Contract manufacturing and outsourcing or subcontracting are motivated by the desire to improve efficiency by reducing costs, while moving the production of agricultural materials to local owners. Licensing and franchising are motivated by the desire to expand markets. Whereas subcontracting is similar to FDI in that it consists of transferring resources, technologies and expertise to contractors in the form of "packages", licensing and management contracts involve little direct transfer. Table 2 shows various forms of NEMs; following is an overview of the features of each NEM.

#### (1) Manufacturing: Subcontracting

The degree to which subcontracting accounts for overall production varies by industry type. In the toy, sporting goods, electronics and automotive industries, subcontracting generates about 50 per cent or more of value added. In pharmaceutical products, it accounts for less than 50 per cent of the value added.

Subcontracting has grown significantly in the electronics industry since the 1990s as competition has driven firms to seek cheaper options while taking advantage of the opportunities presented by NEMs in rapidly industrializing economies, such as Taiwan Province of China, China and Malaysia. Major electronics companies dedicated themselves to research and development (R&D), product design and brand management, using electronics manufacturing services (EMSs) to outsource component manufacturing. Some suppliers, such as Celestica (Canada), Flex (Singapore) and Foxconn (Taiwan Province of China), evolved to undertake R&D and the design of these components so as to create a modular value chain (Sturgeon, 2002).

Subcontracting also expanded into labour-intensive industries, such as apparel, footwear and toys. From simple cut, make and pack (CMP) operations, subcontractors in clothing value chains have evolved to become intermediaries handling a large number of the stages involved in value chains – e.g. manufacturing and logistics throughout Africa, Asia and Latin America (Rasiah, 2007; UNCTAD, 2011).

Myanmar garment manufacturers have started to participate in international subcontracting as subcontractors. Foreign companies in Myanmar, such as Famoso Clothing and Manufacture GFT Enterprise (both Japan), and local companies, such as Yangon Pan Pacific and A1 Garment, are involved in subcontracting for foreign apparel makers, including major brands such as GAP (United States), H&M (Sweden) and Uniqlo (Japan).



## **(2) IT-BPO: Outsourcing**

For TNCs, value chains have also undergone business function differentiation and segmentation in services, such as back-office functions and customer services. Major advances in information and communication technology (ICT) have made it possible to outsource, with locations where services are created that are physically separated from the locations where those services are consumed. Services outsourcing began in the 1990s with IT “onshoring”, but quickly shifted to developing countries where costs could be kept down.

The major outsourcing services contractors are primarily located in Asia, owing to the presence of large pools of human capital in IT. India, the Philippines, and Malaysia enjoy language advantages, high IT skill levels (especially software skills), low wages and reasonably good ICT infrastructure at particular locations.

Since the transfer of power to civilian control in 2011, Myanmar has developed the potential to be a key centre of offshore software development. In addition, BPO services, such as data entry and call centres, have started growing.

## **(3) Agriculture: Contract Farming**

Contract farming spanning international borders has become widespread. TNCs use contract farming in over 110 developing countries and are involved in a diverse range of agricultural products, including fruits, vegetables and tubers (UNCTAD, 2011).

Contract agriculture is a tool for the efficient procurement of agricultural products because it makes it possible for TNCs to secure the necessary quantity and quality of products while leaving production in the hands of national producers. Where a strong regulatory framework exists, farmers can also secure stable prices and sales to improve their income. TNCs demand high quality from contract farmers, and farmers try to meet that quality because they can sell at prices higher than in the domestic market owing to demand from richer consumers in developed countries. In addition, contract farming offers the opportunity for farmers to acquire new information and technology by trading with TNCs.

Contract farming contributes extensively to employment as it is primarily undertaken by large numbers of small-scale farmers. This employment has a reasonable impact on reducing poverty. Although the total number of contract farms is hard to identify, individual projects can have several tens of thousands of participating farms.

The Myanmar government and agricultural associations have initiated the adoption of guidelines for contract farming systems and procedures to implement by companies and farmers. Measures are currently being taken to promote the adoption of these procedures by important stakeholders, such as the Ministry of Planning and Finance, the Ministry of Agriculture, Livestock and Irrigation, the Farmers Affairs Committee of the Parliament and the Myanmar Rice Federation.

## **(4) Retail, hotels, etc.: Franchising**

Franchising is well known as a channel for marketing and distributing products and services. Franchisers are able not only to rapidly and efficiently expand operations, but also to procure capital. The formula is being applied to the retail industry, including high street retail and goods stores, as well as in restaurants, hotels, business services, education and a variety of other business practices.

In franchise agreements, typically franchisers provide franchisees with various types of support related to business operations. This support can include initial and ongoing support, training, management guidance, marketing, and administration and human resource advice.



UNCTAD (2011) estimated global NEM production at over \$2 trillion of sales in 2010.<sup>4</sup> However, the report also states that the analysis of NEMs is complex since “the web of directly owned, partially owned, contract-based, and arm’s-length forms of international operation of TNCs is entangled, so that some of the distinctions between the different modes are blurred” (p. 130). Thus, the analysis here is limited to a number of industries in which NEMs are especially important.

NEMs have generated significant exports in all three sectors in Myanmar (table 3).

In the primary sector, through the contract farming mode, rice and bean production and exports are operated and managed by cooperatives and exporting companies that are affiliated with major companies, such as the Myanmar Agribusiness Public Corporation (MAPCO).<sup>5</sup> The Myanmar Agricultural Development Bank has extended credit to farmers, as well as millers, traders and brokers in Myanmar. The government has also started to introduce reforms in the agricultural sector to promote market diversification and greater yields, which are also targeted to contract farmers. There has been much dialogue between farmers and policy officials to increase the supply of high-yielding rice seeds, which is considered to be important in order to take advantage of high prices and demand in the developed countries.<sup>6</sup> It is widely known that the contract farming system can benefit from technology transfer from buyers, as competition and exposure to developed markets require constant upgrading in national farms. Contract farming can benefit from stable markets and prices, improved technological methods and environmental practices, provided that host governments introduce good governance institutions.

Rice and broken rice, and beans are major agricultural export products of Myanmar. They play a vital role in creating jobs, generating incomes, contributing to GDP and bringing in foreign exchange from export earnings. China is Myanmar’s largest destination for rice exports, accounting for \$320 million or 73 per cent of total rice exports in 2016.<sup>7</sup> Exports of beans, pulses, and green and black grams go mainly to India, the United Arab Emirates, Viet Nam, Malaysia, Indonesia, China, Japan and the United Kingdom. India is the largest importer of Myanmar’s dry beans.

In the secondary sector, FDI-dominated garment production has been the main export, and it is the second largest export of Myanmar, following natural gas, accounting for 13.6 per cent (\$1.5 billion) of overall exports in 2016. Garment manufacturing is also a major focus of FDI, accounting for 33 per cent of all such investment. About 400 export-oriented companies are members of the Myanmar Garment Manufacturers Association (MGMA). Nearly 100 of them started or expanded operations in 2014 and early 2015, and more than 200 are foreign companies from Japan, the Republic of Korea and the United States.

<sup>4</sup> Contract manufacturing and services outsourcing accounted for \$1.1-1.3 trillion, franchising \$330-350 billion, licensing \$340-360 billion, and management contracts about \$100 billion (UNCTAD, 2011, p. 132).

<sup>5</sup> Contract growing is a contract between plantation company and cooperative.

<sup>6</sup> Senior officials reported at the ASEAN-Japan Centre and Myanmar Ministry of Trade seminar, Non-Equity Modes of Trade in ASEAN, Myanmar 6-8 March 2018.

<sup>7</sup> UNCOM Trade.

Table 3. NEM operations in major sectors, 2016

| Sector  | Primary   |  | Secondary  |  | Tertiary   |  |
|---|---|--|--|--|--|--|
|   | Rice  | Beans  | Garment  | Electronics  | IT-BPO   | Hotel  |
| Product/services  | Rice and broken rice  | Beans and pulses   | Apparel (CMP)  | Trigger-switch<br>Car speaker                              | Software development<br>Data entry   | Welcome, comfort, quality, trust<br>and safety services              |
| No. of companies<br>(NEM-related firms,<br>estimation)  | 21 Myanmar Rice Federation  | 73 Myanmar Pulses, Beans<br>and Sesame Seeds Merchants<br>Association  | 387 Myanmar Garment<br>Manufacturers Association   | 51 Electrical equipment<br>manufacturing companies<br>(20) | Myanmar Computer<br>Industry Association<br>(Over 550)                           | Myanmar Hotelier Association<br>(Over 800)                           |
| Major companies<br>(local partner/main<br>franchisee)   | Mitsui (MAPCO)  | Shwe Myanmar   | Yangon Pan Pacific/AT Garment  | Niban<br>Foster IIDA                                       | FROBO Myanmar  | LP Holding (Hilton Worldwide)  |
| Estimated export<br>volume (estimated<br>export by NEM) | 1.5 million tonnes<br>\$438.9 million<br>(\$44 million)   | 660,000 tonnes<br>\$484 million<br>(\$48 million)  | \$1.5 billion (\$1 billion)  | \$213.8 million  | \$9 million (\$5 million)  | 56,429 hotel rooms   |
| <b>Modality in NEM</b>                                  | <b>Contract farming/growing</b>   |  | <b>Subcontracting</b>  | <b>Subcontracting</b>                                      | <b>Subcontracting</b>  | <b>Licensing, Management contract</b>                                |
| Employment<br>(estimated NEM<br>employment)             | Total farmers: 5,763,203<br>Agricultural extension workers: 5,572 (2015-2016)   |  | 230,000 (160,000: MGMA only)   | 30,000 (24,000)  | 24,000 (6,000 computer-<br>related graduates every<br>year)                      | 962,720 hotel and restaurants<br>(2014)                              |
| Average export growth                                   | 4.3% average, 2014-2016   | 25% 2014-2015  | Nearly 145% growth FY2014-<br>2015   | 1211%, 2015-2016   | 180%, 2015- 2016   | 7% average growth rate forecast<br>for 2017-2027                     |
| Market/trade scale                                      | China 73%<br>Bulgaria 5%<br>Belgium 4%<br>Singapore 3%<br>Côte d'Ivoire 2%  | India 80%<br>China<br>Japan<br>Pakistan<br>Singapore   | Japan 33%<br>European Union 25%<br>Korea 25%<br>United States 2.4%<br>China 2.4%   | 85% of electric exports go to<br>Singapore                 | Genex, a BPO company,<br>manages Telenor call<br>centre operation in<br>Mandalay | \$0.8 billion increase in sales<br>from 2015                         |
| Product/<br>service scope                               | Illegal outflows of rice on China's<br>border routes<br>Expected to boost production,<br>increase liquidity, improve logistics<br>and distribution, and expand<br>access to credit for small farmers. | Illegal outflows of beans and<br>pulses via India's border routes<br>Supply chain at risk as Indian<br>government imposes restrictions<br>on Myanmar beans | TNCs keep eyeing Myanmar as<br>a low-cost garment hub<br>Step up from CMP to<br>OEM (original equipment<br>manufacturing) will be needed<br>in order to sustain the industry | Rapid export increase by<br>foreign companies in SEZs      | Rapid shift to higher value<br>work<br>Locational expansion<br>outside Yangon    | More international hotel chains<br>have rooms to enter local resorts |

Source: AJC.

Note: Selected industries only.

\* 2016 data unless specified.

Electronics is another manufacturing industry that is expected to expand rapidly in the next decade, especially when Myanmar's special economic zones are launched. In 2016, the export value of electronics increased 12 times from the previous year, to \$213.8 million. EMS providers and original design manufacturing (ODM) providers became important when foreign firms relocated operations to Myanmar. Whereas EMS companies produce electronic parts or devices to order and do not have products of their own brand, ODM companies design the products of clients, then manufacture and supply them under clients' brands. Both types of companies are characterized by NEM operations so long as they have orders from other companies with which they do not have equity relations.

In the tertiary sector, various services are growing quickly. Its GDP share reached 42 per cent of the total in 2016 with an average growth rate of 7.3 per cent from 2012 to 2016. IT-BPO is one of the highest-potential industries in terms of revenues and employment. Although the industry is quite new in Myanmar, its success in neighbouring countries such as Viet Nam and the Philippines implies that industrial developments in voice-based services (call centres) and in outsourcing of later-stage, non-voice and complex knowledge-based processes may be on track in Myanmar.

According to a World Travel & Tourism Council (WTTC) report, the direct contribution of travel and tourism to GDP in 2016 was \$2.1 billion, or 3 per cent of total GDP. The industry also generated 2.7 per cent of total employment or 1,662 million jobs that year. In the industry, hotels – international hotel chains in particular – can best contribute to NEM operations, through the contract management mode.

## 2.2 NEM by modality

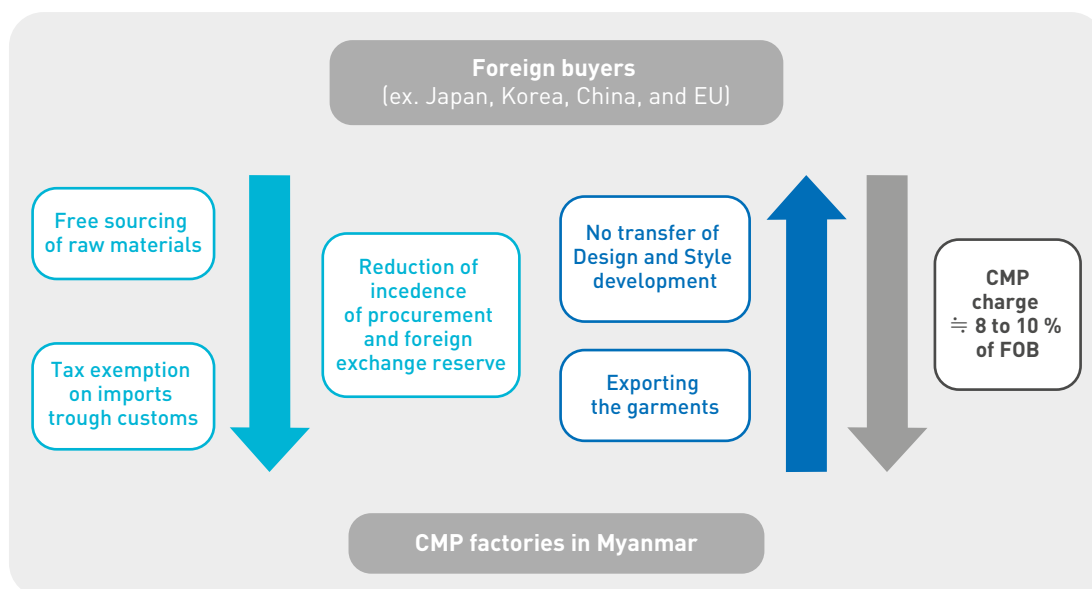
There are several foreign firms and TNCs doing business with local partners in NEM modes in various industries. Their involvement in NEMs and their contribution to the economy vary by modality and industry. This section examines the subcontracting, franchising and management contract modalities by looking at particular industries that relies on those modalities.

### (1) Subcontracting: Garments

Clothing industries have played a significant role in export-oriented industrialization. The rise of the Asian Tigers or Asian Dragons – Hong Kong, Taiwan Province of China and the Republic of Korea – in the early 1980s expanded the export of clothing rapidly. ASEAN member countries such as Indonesia, Malaysia, Thailand and the Philippines followed later. In the 2000s, China extended its capacity to export clothing, becoming the world largest producer. Then, in the 2010s, Cambodia, the Lao People's Democratic Republic, Myanmar and Viet Nam (the CLMV countries) began to extend their clothing exports.

Myanmar's garment industry is dominated by CMP operations. This is a form of contract work in which a foreign buyer with the necessary financial and technical abilities pays contracting fees to a garment factory to perform the labour-intensive tasks of cutting fabric, sewing garments together according to design specifications supplied by brand holders and then packing the garments for export to international markets (figure 2).

According to the MGMA, in 2017 there were about 480 member companies (including enterprises with foreign capital) with a labour force exceeding 230,000. These member companies include firms that perform embroidery and firms that perform inspection, which account for 12 per cent of all Myanmar manufacturers that produce textiles, wearing apparel, leather and related products.

Figure 2. **CMP operations, garment manufacturing, Myanmar**

Source: AJC based on Kudo (2012).  
 Note: FOB means "free on board".

Garment exports from Myanmar began in the middle of the 1990s, but the share of garments in total exports fell from 2001 until 2009 for two reasons: limited access to other markets, in particular the United States and the European Union, under economic sanctions, and the rapid increase in exports of natural gas following the imposition of sanctions. Garment exports began to grow again with renewed access to new markets, such as Japan, and with the return to civilian rule.

Although orders from the European Union overtook those from Japan for the first time in 2016, the East Asian market has been the prime target of Myanmar's garment exports. Indeed, in that year Japan was the largest single importer of Myanmar's apparel products, totalling \$667 million, followed by the Republic of Korea at \$344 million. These two countries accounted for 31 per cent and 16 per cent of Myanmar's garment exports in 2016.

With respect to Japan's imports of garments, China has been its largest partner. However, since 2010 the ratio of imported garments from China began to decline gradually as lower-cost sites emerged, especially the ASEAN countries. Japan offers a zero-tax incentive on imports of woven garments from Viet Nam, Indonesia, Thailand, Cambodia and Myanmar. Table 4 shows garment imports to Japan by country origins.

The increase in exports of garments from Myanmar and other ASEAN transition economies has also strongly benefited from dedicated technical support training on the industry provided by the Japan International Cooperation Agency and the Association for Overseas Technical Cooperation and Sustainable Partnership. These development agencies have provided support for the MGMA's training efforts since 2009. In addition, JUKI and Brothers, Japanese makers of industrial sewing machines, have offered technical training to user companies.

Table 4. Garment imports to Japan by major trading economies, 2014-2016

| Ranking       | 2014                     |                               |              | 2015          |                               |               | 2016         |                               |                          |               |             |
|---------------|--------------------------|-------------------------------|--------------|---------------|-------------------------------|---------------|--------------|-------------------------------|--------------------------|---------------|-------------|
|               | US\$ million             | Change from previous year (%) | Ranking      | US\$ million  | Change from previous year (%) | Ranking       | US\$ million | Change from previous year (%) | Ranking                  |               |             |
| 1             | China                    | 2 625                         | 89.1         | 1             | China                         | 23 189        | 88.4         | 1                             | China                    | 21 789        | 94.0        |
| 2             | Viet Nam                 | 3 172                         | 112.2        | 2             | Viet Nam                      | 3 435         | 108.3        | 2                             | Viet Nam                 | 3 713         | 108.1       |
| 3             | Indonesia                | 1 407                         | 103.4        | 3             | Indonesia                     | 1 434         | 102.0        | 3                             | Indonesia                | 1 412         | 98.4        |
| 4             | Italy                    | 1 027                         | 94.4         | 4             | Italy                         | 918           | 89.3         | 4                             | Italy                    | 960           | 104.6       |
| 5             | Thailand                 | 860                           | 105.8        | 5             | Thailand                      | 840           | 97.7         | 5                             | Thailand                 | 955           | 117.3       |
| 6             | Bangladesh               | 680                           | 112.6        | 6             | Bangladesh                    | 814           | 119.7        | 6                             | Bangladesh               | 858           | 102.2       |
| 7             | Myanmar                  | 561                           | 116.9        | 7             | Myanmar                       | 662           | 139.8        | 7                             | Myanmar                  | 838           | 126.6       |
| 8             | Korea, Republic of       | 516                           | 90.4         | 8             | Korea, Republic of            | 583           | 103.9        | 8                             | Korea, Republic of       | 650           | 111.4       |
| 9             | Cambodia                 | 474                           | 158.8        | 9             | Cambodia                      | 433           | 93.4         | 9                             | Cambodia                 | 422           | 99.8        |
| 10            | Taiwan Province of China | 464                           | 102.1        | 10            | Taiwan Province of China      | 423           | 82.0         | 10                            | Taiwan Province of China | 422           | 100.7       |
| <b>Others</b> |                          | <b>3 062</b>                  | <b>108.0</b> | <b>Others</b> |                               | <b>2 775</b>  | <b>90.6</b>  | <b>Others</b>                 |                          | <b>2 759</b>  | <b>99.3</b> |
| <b>Total</b>  |                          | <b>38 447</b>                 | <b>94.0</b>  | <b>Total</b>  |                               | <b>35 508</b> | <b>92.4</b>  | <b>Total</b>                  |                          | <b>34 777</b> | <b>97.9</b> |

Source: JTTA/Trade Statistics of Japan.

The volume of trade by NEMs in Myanmar garment exports is difficult to estimate. Nonetheless, officials from the MGMA put it at about 70 per cent, or \$1 billion. The estimation is guided by the following observations:

- Of the 480 garment factories that are affiliated with the MGMA, about 100 specialize in CMP and export products based on orders from foreign companies that have no equity capital.
- From the 144 foreign garment companies, about 70 per cent of products are exported as original equipment manufacturing (OEM) products and some are exported to third countries.
- From the 40 joint-venture garment companies, about 90 per cent of products are exported as OEM products, and some are exported to third countries.
- None of the global brand apparel retail companies, such as Zara, GAP, H&M and UNIQLO, have garment factories in Myanmar, only what they call partner factories or contract manufacturers.<sup>8</sup>

The industry currently employs 210,000 to 300,000 workers. According to the MGMA, more than one million people in Myanmar are partly or wholly dependent on garment factories for their incomes, when spouses, parents and children are included. NEM trade in the garment industry thus makes a significant contribution to the Myanmar economy.

### Box 3. The role of the MGMA

The MGMA is among the country's largest member organizations for business, with 480 member companies that collectively employ over 230,000 workers. Among them are Myanmar's exporting garment factories. Founded in 2002, the MGMA is committed to supporting member factories by providing valuable technical training services and support in finding business opportunities. The MGMA operates a skills training centre in North Yangon, engages in business matchmaking for member companies, produces sectoral research reports and serves as the voice of industry. Membership costs 50,000 kyats (\$37) per year and the initial induction fee is 100,000 kyats (\$74). The MGMA works with a variety of international partner organizations to promote responsible and sustainable development in Myanmar's garment sector.

Currently, the MGMA sees its opportunities and challenges as follows:

#### Opportunities

- Myanmar's garment industry is still extremely small, compared with neighbouring countries, and has potential for further growth.
- Having satisfied the quality standards of Japanese and Korean consumers during the so-called "Lost Decade", major European and United States brands are now produced in Myanmar.
- Low wages and a ready supply characterize the relatively well-educated labour force.
- The government offers favourable import and export tariffs.

#### Challenges

- Infrastructure is poor.
- Supporting functions are lacking.
- Lead times are long.
- There is a need to move up the value chain from CMP to OEM activities.
- Doing business in Myanmar poses general difficulties.
- Non-negligible macro risks relate to domestic politics.

Source: Adapted from information from the organization's website and related materials (<http://www.myanmargarments.org/>).

<sup>8</sup> These figures take the assumption that subcontractors from East Asia are included in the NEMs.

**Box 4. Why did Just choose Myanmar? (Just Co., Ltd.)**

Just Co., Ltd. (Just-fashion) is a Japanese apparel maker producing suits, jackets and coats for men and women. Established in 1951, the company has developed as a men's apparel maker, expanding its production system to take advantage of rapid customer growth and an increasing number of retailers.

The company decided to set up operations overseas in the 1990s when it was in the growing phase. In China, Just-fashion established a joint venture to produce suits for men in Beijing in 1992 and another to produce casual jackets in Shanghai in 1994. In 2001 Just-fashion established Asian Just Co., Ltd. in Myanmar in order to diversify its inter-country risk. The president of Just-fashion identified the following attractions of Myanmar as the reasons for setting up a factory in the country:

- A nation friendly to Japanese people
- A huge pool of cheap labour
- Abundant natural resources
- Abundant agricultural and marine resources
- Favourable import and export tariffs

Asian Just Co., Ltd., started as a private Myanmar company. It was the first Japanese-affiliated company to start producing suits for men in the country. In the start-up phase, as a private local company Asian Just co. enjoyed various benefits, such as low prices for oil and electricity, and a low tax rate. The company also provided dormitories for its workers. As the business in Myanmar matured, the company shifted to a joint venture with a local company.

The company's main products are OEM suits. In 2017 it employed 2,000 workers with a staff turnover rate of about 2.5 per cent monthly.

Source: Adapted from information from company's website and related materials (<https://www.just-style.com/>).

China's workforce shortage in garment factories in the East and rising wages accelerated the relocation of Chinese garment firms from China to the CLMV countries. Despite sourcing most materials from China, total production costs in Myanmar are still lower than costs in China. Exporting firms enjoy import duty exemptions in Japan as Myanmar enjoys the Generalized System of Preferences because of its status as a least developed country. Just Co., Ltd. (box 3), enjoys stable revenue because its production does not depend on seasonal demand in Japan, since its main product is suits for men and the company has strong links to major Japanese mass retailers of business suits.

The garment industry is one of Myanmar's most dynamic export sectors and has played a critical role in creating jobs, especially for women. Although the industry accounts for only about 300,000 workers, equivalent to 1 per cent of the labour force, about 85 per cent of those workers are women. Workers in the garment industry are primarily young with limited formal education, although they are literate. According to a report from the International Labour Organization (ILO),<sup>9</sup> the median age of workers in Myanmar is just 27 years, although male workers (33 years) tend to be much older than female workers (26 years). Notably, four in five have less than a primary education or at most an ordinary degree.

<sup>9</sup> Asia-Pacific Garment and Footwear Sector Research Note, Issue 6, November 2016 (ILO).



## (2) Subcontracting: IT-BPO

Two types of business activities in Myanmar are associated with IT-BPO: IT software development and BPO data entry services. Software companies take care of creating, implementing and maintaining applications. With developments in ICT, companies can outsource some activities related to IT application programming. There are many technologies that help support offshore software development.

BPO data entry businesses are conducted through outsourcing, the contracting out of a business function to an external provider. Data entry usually involves extracting key facts from dense documents, compiling and updating databases, and converting numbers into workable statistics, among other things. The source company can save time and money to focus more on core activities. In IT-BPO services, client firms or user firms offshore a variety of businesses, such as call centres, data entry, engineering, software development, game application development and R&D to local firms or foreign subsidiaries in a host country (table 5).

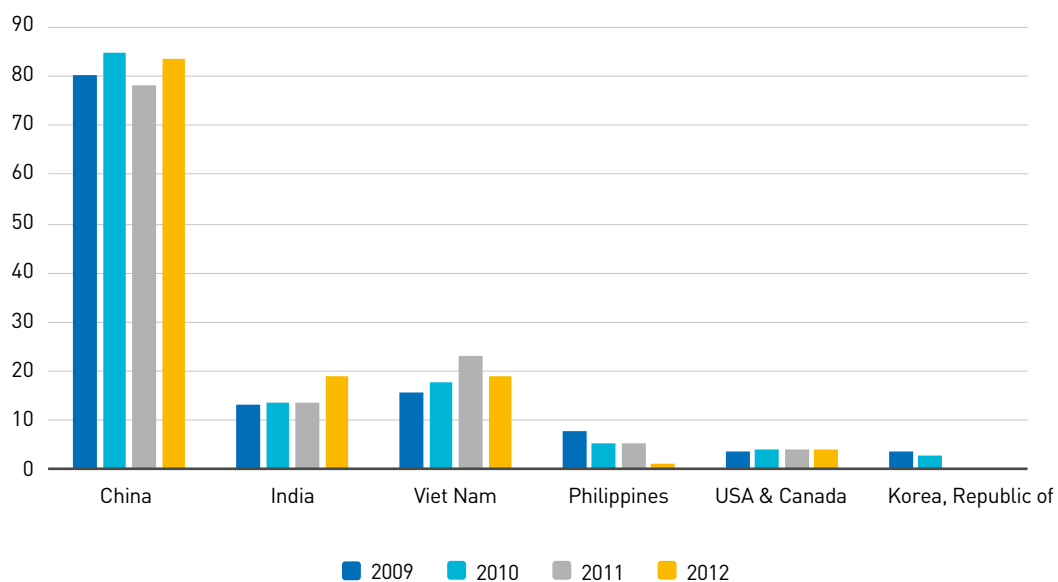
Table 5. Outsourcing and offshoring by activity type

| Mode    | Location                     |                    |                      |
|---------|------------------------------|--------------------|----------------------|
|         | Home                         | Abroad             |                      |
| Control | <i>Internal (equity)</i>     | Domestic operation | Captive offshoring   |
|         | <i>External (non-equity)</i> | Outsourcing        | Offshore outsourcing |

Source: AJC.

The development of Myanmar's IT-BPO industry started after the transition to civilian control of government. There is strong demand in Japan for good-quality cross-border IT engineers, as well as IT human resources in offshore countries. For example, according to Japan's IT HR white paper, offshore development by Japanese companies amounted to about \$920 million from 2009 to 2012. Approximately 84 per cent of Japan's offshore development of IT-BPO in 2012 went to China, followed by India (19 per cent) and Viet Nam (19 per cent) (figure 3). A 2014 survey showed that Myanmar has become an important offshore development destination for Japanese IT companies (table 6). Case studies of Japanese companies (boxes 5-7) provide direct insight into strategic operations related to the outsourcing of IT-BPO services to Myanmar.

Figure 3. **Offshore development order destination from Japan, by country, 2009–2012**  
(Per cent)



Source: IT HR white paper 2013.

Table 6. **Offshore development: Destination prospects of Japanese companies**

| Rank | Change | Country   | 2012 response | 2014 response |
|------|--------|-----------|---------------|---------------|
| 1    | ↗      | Myanmar   | 8             | 11            |
| 2    | →      | Viet Nam  | 11            | 10            |
| 3    | ↘      | China     | 16            | 9             |
| 4    | ↗      | Malaysia  | 4             | 6             |
| 5    | ↗      | Indonesia | 6             | 5             |

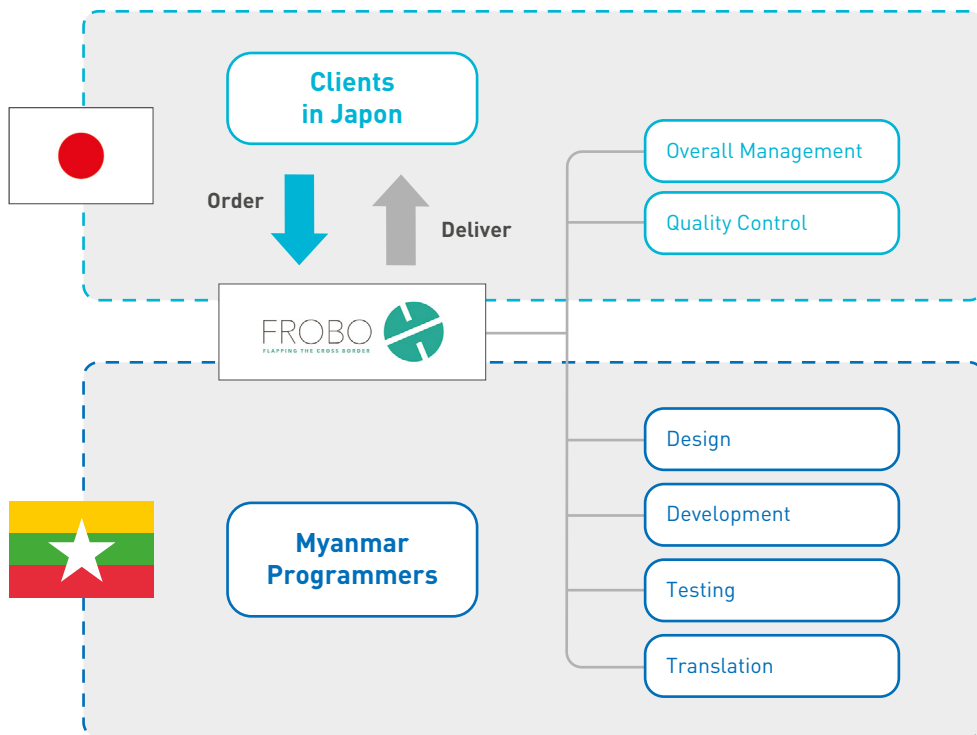
Source: JISA Global Business questionnaire (February 2014).

**Box 5. FROBO Myanmar: offshore development in Myanmar**

FROBO Myanmar is a Japanese IT company operating in Yangon. Established as a 100 per cent foreign capital company in April 2015, the company develops bridge systems with FROBO Japan, which takes orders from Japanese clients and delivers the products by managing the production schedule and doing quality control.

Currently, FROBO Myanmar has 30 employees, including a Japanese representative and a Japanese system engineer and 28 Myanmar programmers. Fixing design specifications, Japanese and Myanmar system engineers work together in the process of development, testing, and translation of systems.

**Box figure 5.1. Offshore development system of FROBO**



In addition to orders from Japan, FROBO Myanmar responds to requests from Japanese companies in Myanmar. In order to upgrade engineers' IT skills, the company dispatches them to FROBO Japan regularly.

Source: Adapted from company's website and related materials (<https://www.frobom.com/en/>).

The hub institutions involved in producing engineers and technical personnel in Myanmar are universities and private IT schools. In 2017 there were 27 universities that offered IT-related education courses, producing 6,000 graduates a year. However, educational capabilities in Myanmar are insufficient to train world class IT engineers, at the levels achieved in India and China. Unstable electrical power supply in Myanmar has restricted the running of IT courses, which require good connectivity and coordination of information over the internet. In most of the universities, students' desktop computers are not connected with local area networks and because most lack batteries for back-up, system crashes occur often due to the frequent power outages in the country.

Although the penetration rate of mobile phones has dramatically expanded, from 13 per cent in 2013 to 89 per cent in 2016, the share of internet users in 2015 had grown to only a little more than 20 per cent. Comparing this figure with other countries, such as 50 per cent in Viet Nam, and 70 per cent in Malaysia, Myanmar has much room for improving the IT infrastructure. This seems to have a correlation with the low penetration of computer users.

In addition, the lack of IT lecturers and instructors in universities and institutions has created a serious bottleneck in the training of IT engineers. The situation is also unfavourable for learning new skills and knowledge in the field, which has progressed at a rapid speed. In order to develop the industry, the Myanmar government has to solve this problem.

#### Box 6. NTT DATA Myanmar: offshore and system development in Myanmar

NTT DATA Myanmar is a foreign subsidiary of NTT DATA, a Japanese systems integration company. Established in November 2012, the company conducts bridge system development with NTT DATA Global Technology System Japan (NTT DATA GTSJ), which takes orders from Japanese clients, jointly develops the system and delivers.

Currently, NTT DATA Myanmar has 200 employees and a plan to increase the staff up to 500 in order to respond to the Financial Network System ordered by the Central Bank of Myanmar (CBM Financial Network System) and orders from Japan. The company office is located in the Myanmar Information and Communication Technology Park (MICT Park), in the Hlaing campus of the University of Yangon.

There are two main reasons that NTT DATA set up its office in Myanmar: to establish a new software development base and to enter a future market. When it became difficult to obtain low-cost resources sustainably at its main offshore base in China, the company found it necessary to have a new software development location, in addition to those it already had in India and Viet Nam. Looking ahead to a sluggish Japanese market, NTT DATA was confronted with a choice to expand its sales overseas. It was significant for the company to secure the local base in order to respond to IT investment by official development assistance.<sup>10</sup>

To recruit quality IT engineers, the company opened an endowed chair at the University of Computer Studies Yangon. It also opened the NTT DATA Myanmar Professional SE Academy.

Source: Adapted from the company's website and related materials (<http://www.mm.nttdata.com/>).

<sup>10</sup> Besides the CBM Financial Network System, NTT DATA has developed the Myanmar Automated Cargo Clearance System used at major customs ports in Myanmar.

The rapid growth of the outsourcing industry and its division of labour has reached Myanmar. Foreign companies that operate BPO businesses have started operation in the country. The low labour costs and available human resources are attractive for foreign companies, making their moves to Myanmar possible.

#### Box 7. Myanmar RECOMM Co., Ltd.: operation of BPO centre in Myanmar

Myanmar RECOMM is a foreign subsidiary of RECOMM, a Japanese sales solution company that conducts sales and maintenance of office appliances and BPO services. RECOMM opened a call centre in Dalian, China, in 2003 and started a call centre business for Japanese companies. The company expanded into customer service and customer care services in voice BPO as well as human resources management, financial and accounting services, procurement purchasing and data entry in non-voice BPO.

With the business expansion, the company established Myanmar RECOMM in December 2014 as its third overseas BPO base, followed by Dalian and Changchun in China. Myanmar RECOMM started to engage in the BPO business in Myanmar in May 2015 by training data entry personnel and improving the infrastructural communication environment.

Myanmar RECOMM is handling data entry services, responding to orders from Japan. In order to recruit excellent workers who can understand Japanese, Myanmar RECOMM has requested a Japanese language school to train staff in order to achieve the necessary language level for work.

The Myanmar BPO base responds to demand for low-end services while the BPO bases in China respond to demand for middle and high-end services. The company expects Myanmar RECOMM to advance to higher-level services through the development of human resources and infrastructure.

Source: Adapted from the company's website and related materials (<http://www.mm.nttdata.com/>).

Despite the growing importance of IT-BPO services in Myanmar, there are no industry associations specialized in IT-BPO in the country. Compared with the industry in the Philippines, it seems to face two inter-related problems: standardizing services and upgrading technology. Traditionally, particularly in the voice, non-voice, and management process outsourcing industry, IT-BPO companies used to train their own employees because standardized skills are required. In-house training provides good results for employees. However, employees who acquire higher skills from in-house training tend to leave the company. For example, at a United States IT-BPO company in the Philippines, its non-voice centre segment has a rather high turnover ratio of 40 to 45 per cent every year, with 70 per cent recorded in certain years. As a result, the overall skill level of employees has not improved and has remained low, even though companies have invested significantly in training. Officials in Myanmar should be wary of this possibility.

From a technological point of view, continuous investment is required in this industry. Once competition becomes severe, companies try to differentiate themselves by having more advanced IT technology, to attract overseas customers. For example, in order to support software development, massive data need to be synchronized with customers overseas. The Myanmar government must develop the IT infrastructure to stimulate the growth of IT-BPO services.

### (3) Licensing and management contracts: Hotels

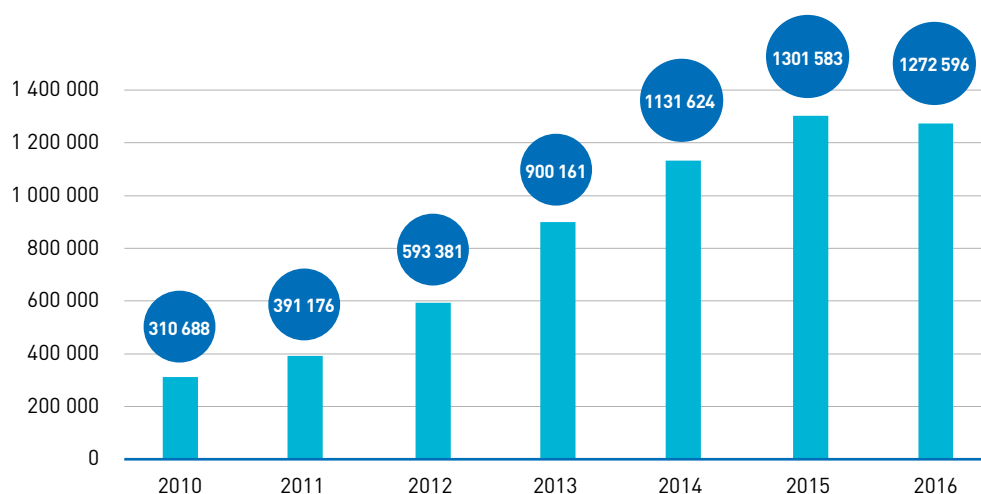
International hotels are operated in many countries, including Myanmar, using different types of contracts and different types of entry modes (table 7). Since the inward FDI policy of Myanmar does not allow foreigners to own private land, international hotels are operated either by NEMs through management contracts or franchise agreements or through long-term lease of land on which hotels can be built with equity investments.

**Table 7. Hotel operations by type of NEM**

|                                    | FDI   | Management contract                                    | Franchise agreement                     |
|------------------------------------|---|--|---|
| Ownership of the land and hotel    | Owns hotels   | Without ownership interest                             | Without ownership interest              |
| Management control                 | Direct control  | Direct leadership by expatriates from the headquarters | Management training through the manuals |
| Contract fees                      | Not applicable  | Tend to be higher (10% or more of profit)              | Lower (less than 10% of profit)         |
| Scale and speed of the hotel chain | Slow, smaller scale   | Faster, medium scale                                   | Very fast, larger scale                 |
| Hotel categories                   | First stage of hotel chain, 5-star hotel, independent hotel | Mostly 4 star class                                    | Mostly 3-star class                     |

Source: Adapted from Shinomiya (2016).

**Figure 4. Number of visitors to Myanmar, 2010–2016**



Source: Ministry of Hotels and Tourism.

Myanmar has managed to attract tourists from all over the world. The number of foreign visitors has grown steadily, especially since the transition to civilian rule in 2011 (figure 4). Table 8 shows the number of accredited hotels and the number of rooms in the different regions.

**Table 8. Number of hotels and rooms by region, 2016**

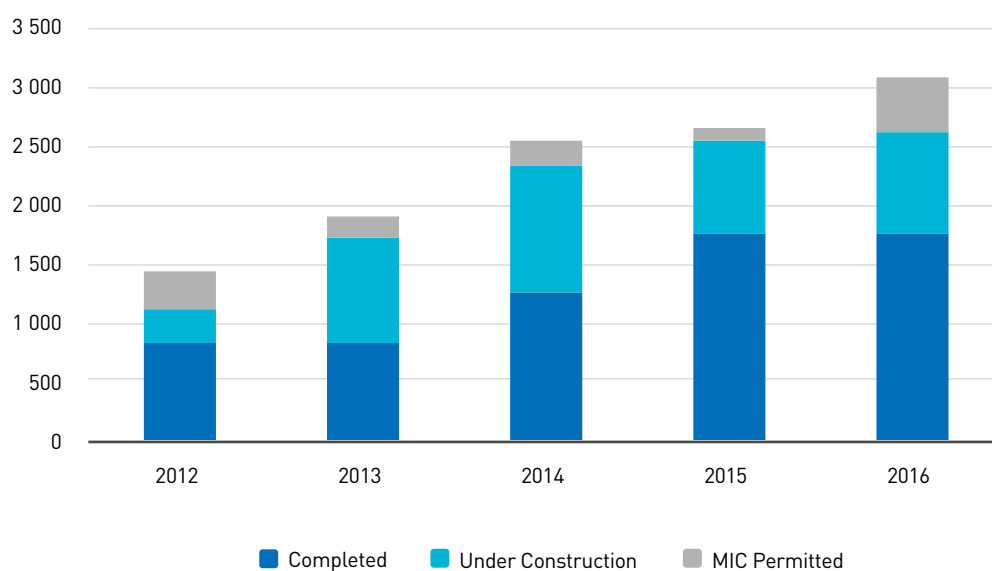
| State/Region             | Number of hotels | Number of rooms | Major places          |
|--------------------------|------------------|-----------------|-----------------------|
| Chin State               | 4                | 99              | Kanpatlat, Mindat     |
| Kachin State             | 26               | 733             | Bhamaw, Myitkyina     |
| Kayah State              | 19               | 713             | Lashio                |
| Kayin State              | 20               | 706             | Hpa-an, Myawaddy      |
| Mon State                | 43               | 1 442           | Kyaikhto, Mawlamyaing |
| Rakhine State            | 66               | 1 896           | Ngapali, Pyay         |
| Shan State               | 286              | 8 941           | Kalaw, Nyaung Shwe    |
| Ayeyarwady Region        | 63               | 2 559           | Chaungtha, Ngwesaung  |
| Bago Region              | 40               | 1 027           | Bago, Taungoo         |
| Magway Region            | 27               | 685             | Magwe, Pakokku        |
| Mandalay Region          | 359              | 12 414          | Bagan, Mandalay       |
| Sagaing Region           | 22               | 816             | Kalay, Sagaing        |
| Taninthayi Region        | 36               | 1 451           | Dawei, Myeik          |
| Yangon Region            | 356              | 17 763          | Yangon                |
| Naypidaw Union Territory | 65               | 5184            | Nay Pyi Taw           |
| <b>Total</b>             | <b>1 432</b>     | <b>56 429</b>   |                       |

Source: Adapted from Shinomiya (2016).

According to the Myanmar Tourism Master Plan, 2013-2020, Myanmar has set a goal to receive 7.5 million international tourists annually by 2020. Consequently, total tourism receipts are expected to increase from \$534 million in 2012 to \$10 billion in 2020. Considering the current tourism infrastructure, especially for the quality of the hotels and local airports, the target seems to be too ambitious. While Myanmar tourism has room for growth, the WTTC reported that the total contribution of tourism amounts to 6.6 per cent of Myanmar's GDP (\$4.5 billion) in 2016, and it is forecast to rise by 7.5 per cent per year to 7.0 per cent of GDP (\$9.7 billion) by 2027, which has led to Myanmar tourism being ranked second in the world in terms of long-term growth (forecast 2017-27).

In 2016, an influx of \$3 billion in FDI went to the development of hotel and tourism-related commercial complexes (figure 5), which amounted to 11,207 rooms across 56 projects, of which 59 per cent have been completed, 20 per cent were under construction, and 21 per cent were approved by the Myanmar Investment Commission. Between 2012 and 2016, growth in the number of rooms with foreign investment increased 66 per cent while the total amount of investment increased by 118 per cent.

Figure 5. FDI flows into hotels and commercial complexes, 2012–2016 (Millions of dollars)



Source: Myanmar Ministry of Hotels &amp; Tourism.

Table 9. Foreign investors operating hotels in Myanmar

| Hotel brand | Name of hotel in Myanmar            | Open year | Local partner                                 |
|-------------|-------------------------------------|-----------|---|
| Hilton      | Hilton Mandalay                     | 2017      | Eden Group (management agreement with HH&RP)  |
|             | Hilton Nay Pyi Taw                  | 2014      | Eden Group (management agreement with HH&RP)  |
|             | Hilton Ngapali Beach Resort         | 2014      | Eden Group (management agreement with HH& RP) |
| Waterfront  | Kempinski Mandalay                  | 2014      | JL family                                     |
|             | The Heritage Hotel Kempinski Yangon | 2016      | JL family                                     |
| Dusit       | Dusit Yangon                        | 2020      | Myanmar V-Pile Group of Companies             |
| Melia       | Melia Yangon                        | 2016      | HAGL Group (Long-term build-operate-transfer) |
| Shangri-La  | Sule Shangri-La                     | 1996      | Shangri-La International Hotel Management     |

Source: AJC.



The hotel industry links with other industries, such as online booking services, restaurant services, food and beverage services, linen services, and furniture and decoration industries, as well as transport services and tourism businesses. These linkages contribute to employment creation and the development of related industries in the country.<sup>11</sup> The tourism industry has been identified as one of the priority sectors for development in many states and regions, such as Shan, Rakhine, Ayeyarwady and Mandalay. Most branded hotels are concentrated in Yangon and Nay Pyi Taw (table 9), where they cater to commercial demand and government requirements. There is limited presence of international hotels in the leisure destinations, as these markets have only recently been opened and are not very well known among foreign travellers. The hotel industry has contributed strongly to employment and rural development because of its labour-intensiveness and community-based activities.

One of the most critical factors affecting TNCs' decision to choose NEMs in Myanmar is local regulations, which favour NEMs over FDI. Hotel management and operations are constrained by land ownership conditions, and hence, foreign investors engage in management contracts, offer franchises or undertake a long-term lease. However, despite its forecast long-term ranking for tourism growth, Myanmar ranked only 140th in 2016, whereas Indonesia, Thailand, and Viet Nam ranked 14th, 20th and 26th, respectively, according to the WTTC. Since the hotel industry in Myanmar has the potential to grow, the government must promote the use of TNCs as a springboard to stimulate NEM operations in the country.

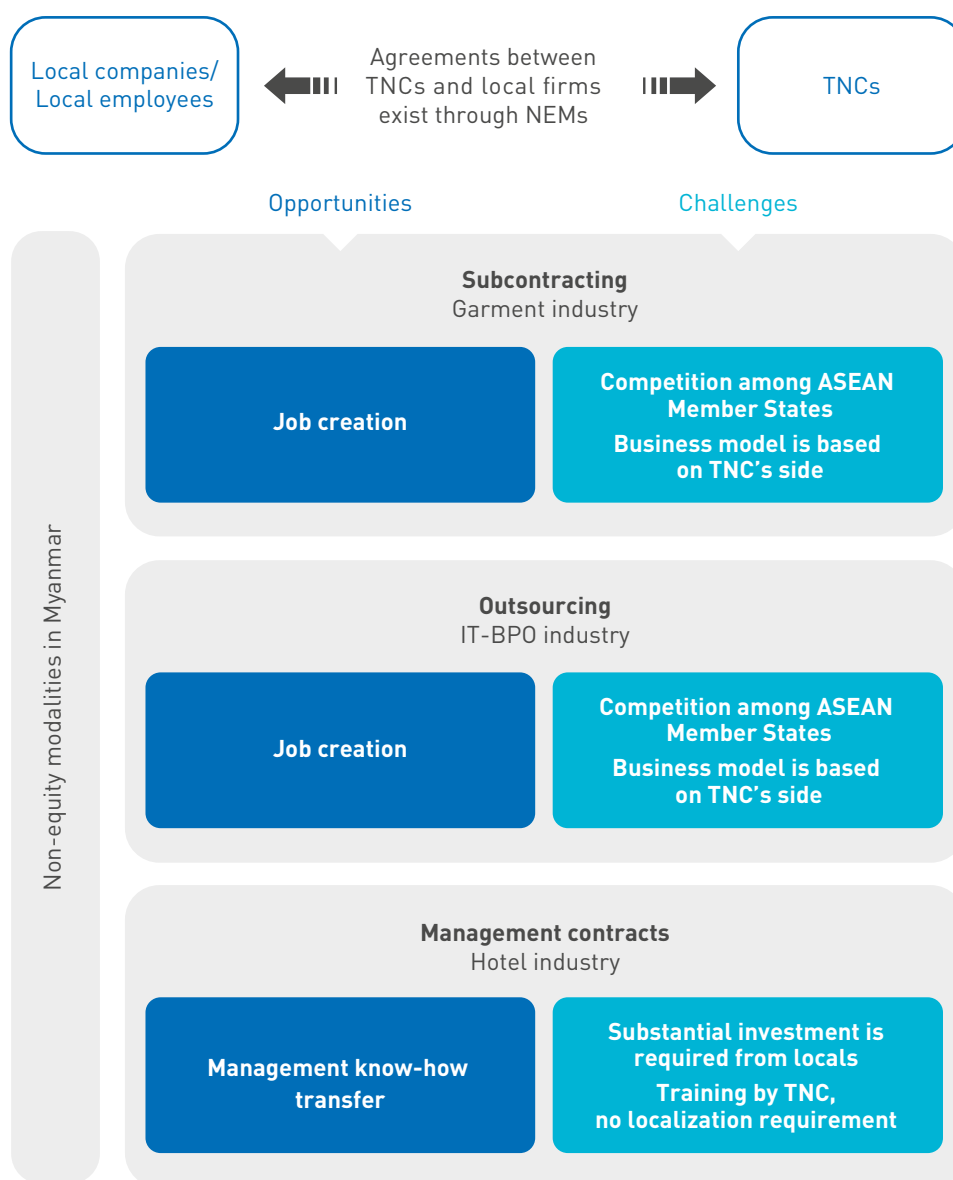
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<sup>11</sup> According to PSC (2014), there were 416,942 people engaged in accommodation and food service activities, and total income reached \$8.9 billion. The breakdown of employment is as follows: accommodation activities (91,843); restaurants and mobile food service (290,535); event catering and other food service (7,791); and beverage serving activities (26,773).

### 3. OPPORTUNITIES AND CHALLENGES

This section provides an analysis of the opportunities and challenges faced by Myanmar in promoting and utilizing NEMs. There are a number of opportunities each industry will benefit from by establishing NEM agreements with TNCs (figure 6). However, there are also challenges for local firms, particularly because of the characteristics of NEM.

Figure 6. Opportunities for NEMs in Myanmar



Source: AJC.  
 Note: Major industries only.

### 3.1 Local capabilities

In the absence of direct operations by fully or jointly owned foreign TNCs, local firms can take advantage of potential opportunities, but this will not come easily as there are challenges. TNCs typically make decisions on whether to produce in-house or to subcontract out on the basis of a wide range of factors. One key factor is the existence or potential emergence of competent suppliers. TNCs are likely to contract out supplies to local firms if they benefit economically from outsourcing relative to producing them in-house. Such contractual arrangements can benefit host countries, as most of the profits arising from the operations are most likely to stay within the host country. Thus, there are potential opportunities for national firms in the garment, IT and hotel businesses, as well as other industries, to have contractual agreements with TNCs. However, such opportunities can only be leveraged effectively if the local firms acquire and develop the requisite capabilities to participate in such contract relationships. Such capabilities include management, inventory and quality control systems, and production technology. There will also be a pressing need to sustain rapid technological upgrading among national NEMs for them to remain connected to GVCs, as well as to enjoy movement to higher value added activities. This is how Foxconn from Taiwan Province of China managed to transform its link with Apple from OEM to taking control of the design and R&D of certain components it supplies (Sturgeon, 2002). Also, unless national NEMs succeed in remaining competitive, for example in hotel franchising, TNCs will switch suppliers or terminate their brand recognition. In hotels, established brand holders such as Hilton and Sheraton have terminated contractual agreements with host-owners when their standards are not upheld. NEMs are often vulnerable to the vicissitudes of volatile demand fluctuations. In industries such as garments, TNCs often engage a few suppliers at the same time so that orders from successful upgrading firms can be stepped up to cover for orders terminated from poorly performing firms.

### 3.2 Relationships between NEM modalities and industries

As noted earlier, NEM modalities differ with each industry, and in some cases with the host country. Myanmar's garment industry is dominated by local manufacturers who use CMP operations to supply TNCs abroad and foreign contractors operating in the country. In the IT-BPO/BPM industry TNC-owned subsidiaries still dominate as both internet penetration and IT infrastructure are poorly developed. These subsidiaries create offshore outsourcing with TNCs' vendors. This type of modality creates opportunities for local employees to be integrated with subsidiaries' business activities. However, it does not provide opportunities for capacity-building in local firms. Initiatives to start local IT-BPO/BPM firms through contract agreements with TNCs (especially Japanese ones), can stimulate offshore outsourcing. TNC affiliates also have a modality through captive offshoring, which is done through FDI (non-NEM) operations, but it could be a good way for Myanmar to stimulate NEMs in IT-BPO/BPM operations. Because IT-BPO/BPM is a complementary industry that supports all industries, it is important that the government promote local IT firms that can then connect with TNCs located abroad.

Different types of modalities are also seen in the hotel industries. Most brand holders use management contracts and franchising modalities. There are a few five-star hotels owned by foreigners in Myanmar. Examples include the Sule Shangri-La hotel, which is owned by Robert Kuok from Singapore. The management contract and franchising modalities should be promoted in Myanmar, as foreign brand holders have demonstrated strong global marketing ability to attract tourists worldwide to Myanmar and to their hotels. However, since brand holders impose stringent conditions to protect their branding, local owners will have to maintain high operating standards to remain attractive to them. Indeed, throughout ASEAN, management contracts and franchise agreements are the typical

modalities engaged in by TNCs in the hotel industry, though there are also hotels that are owned and managed directly by foreign hoteliers (e.g. the Shangri-La). The achievement of tourism synergies from the promotion of NEMs in the hotel industry will also require that the government improve infrastructure (including IT support) and security throughout the country.

### 3.3 Ownership and control

Although foreign firms have no direct ownership in NEMs, more often than not they control the operations of NEMs. Control can take the form of buyer firms dominating pricing decisions, quality assessments and determination of lead times. In garment manufacturing, for instance, buyers determine even the suppliers of inputs under CMP arrangements. Under free (or freight) on board (FOB) operations, Myanmar NEM firms have the autonomy to determine such sources but are completely reliant on buyers with respect to lead times, specifications used and materials sourced (Myint and Rasiah, 2014). Similarly, in hotels, franchise holders determine the terms and conditions under which NEMs must operate. The positive side of these conditions include the pressure imposed by TNCs on NEMs to upgrade, though NEM firms that remain suppliers will always remain exposed to contract termination whenever TNCs are not satisfied with their supplies or if more capable suppliers emerge. Such circumstances often arise when TNCs' operations evolve to high value added activities that require their suppliers to also upgrade. Such circumstances can also emerge if the TNCs find other supplier bases located in other countries to be more efficient. Nevertheless, NEM firms that catch the wave of competition offered by major export markets to upgrade enjoy the opportunity to move up the value chain, and in some cases, such as in the Republic of Korea and Taiwan Province of China, to leapfrog incumbents. Samsung and Taiwan Manufacturing Company, respectively, now lead the memory and logic chip value chains (Rasiah and Yap, 2015; Yap and Rasiah, 2017). Yet, Samsung Semiconductor and TSMC started operations only in 1975 and 1987 respectively.

If TNCs' buyer subsidiaries are located in the host country, the control exercised can be stronger than otherwise. In a number of cases such TNCs will train the workforce of host-country NEM suppliers or sometimes invest in skills development centres to develop the host country's human resources or implement rooting strategies for their own self-expansion (Rasiah, 1995). The host government often plays a leveraging role to initiate and coordinate such developments. Singapore's Economic Development Board and the Penang Development Corporation successfully played such a role (Rasiah and Yap, 2015a, 2015b). Also, this is how TNCs got together to jointly finance the Penang Skills Development Centre in 1989, which is viewed by experts as a world class training centre (Rasiah, 1995). The garment and IT-BPO/BPM industries in Myanmar can benefit from adapting such a framework. TNCs often adopt such a function to strengthen their value chain globally.

Given that linkages with foreign TNCs can never be taken for granted, local NEM firms will have to take advantage of the opportunities to launch new businesses, which will then stimulate sales growth, job creation and exports. Governments often initiate promotional mechanisms to support entrepreneurial synergies in both rich and poor countries. In addition to basic infrastructure, governments also need to develop the science, technology and innovation (STI) infrastructure to stimulate entrepreneurial synergies. However, the limited capacity of local NEM firms to enter such high-technology activities in Myanmar has remained a challenge.

### 3.4 Localization strategies

ASEAN governments have often launched localization strategies when foreign TNCs are engaged in manufacturing for the domestic market. This is how Indonesia, Malaysia and Thailand initially promoted local suppliers in the automobile industry (Rasiah, 2009). However, such initiatives have been rationalized since the launching of the ASEAN Free Trade Area in 1992 and the World Trade Organization in 1995. Nevertheless, governments can still promote linkages with local NEM firms without infringing the Trade-related Investment Measures (TRIM) instrument of the WTO, which prohibits differential trade treatment on the basis of national ownership (Rasiah, 2014). Linkage strategies can ensure that the government can use its bargaining strength to impose conditions for TNCs to train national workers and to source from capable NEM firms, especially when the TNCs enjoy incentives or benefit from sales in the domestic market in Myanmar. The garment, hotel and related industries can be targeted for development of NEMs as suppliers, which can then also export once they have developed sufficient capabilities. However, the challenges include the need to stimulate human capital development and the need for local firms to undergo massive technological upgrading to meet international standards.

Foreign TNCs can outsource a part or the whole of any goods or services, or even part of their GVCs to Myanmar's local firms when the government uses its leverage to call for localization. Also, TNCs supplying the domestic market may also seek NEM suppliers to reduce transport costs and to coordinate effectively the implementation of just-in-time inventory control systems. This is why foreign TNCs have evolved proximate suppliers in the automobile industry, though unless local capabilities are developed foreign suppliers often fill the void. In the garment industry, Myanmar NEM firms can improve the quality of their cotton fibre and textile manufacturing activity to supply TNCs both in the country and to export. That way the clothing industry can build stronger linkages backward to the harvesting of cotton in the country. Local NEM firms should take initiatives independently to integrate their operations and activities with TNCs' overall production networks and GVCs.

### 3.5 Local NEM firms

The issues faced by Myanmar firms range from those related to contractual agreements to those related to industry characteristics and TNC strategies. Both opportunities and challenges can be found for each category, which can be grouped into issues of (1) continuity, (2) NEMs' characteristics, (3) capacity-building and (4) local firms' initiatives and local embeddedness (table 10).

Local NEM firms in Myanmar will face not only opportunities but also challenges if they can strategically utilize TNCs' know-how and technological skills by linking with them. They can also build capacities to deal with these challenges and even expand their businesses by use TNCs' GVC networks. In addition, local NEM firms can also use their supply experience with TNCs to eventually export directly to foreign markets. However, there must eventually be a strong focus on the development of the STI infrastructure to stimulate innovation synergies among NEM firms.

Table 10. Opportunities and challenges for local firms engaged in NEMs

| Opportunities   | Typical industries concerned | Challenges   |
|---|------------------------------|--|
| <b>Continuity (footlooseness) problems</b>  |                              |  |
| Easier to find TNC partners, both in and outside the country through, for example, matching events (since TNCs do not directly invest in the business).   | IT-BPO<br>Garments           | NEM firms are vulnerable to termination of contract agreements while long-term contracts are seldom available. Also, major low-cost competitors in the IT-BPO industry exist in India and the Philippines.   |
| <b>NEM's characteristic issues</b>  |                              |  |
| Easier to enter new market or new area even though demand is not present in the country. Skills, talents or resources that are available in the country but not required in the country can be usefully utilized outside the country. | IT-BPO<br>Garments<br>Hotel  | Demand and markets are outside the country (e.g. customers of the IT-BPO/BPM industry, hotel industry and subcontracting products such as garments are outside Myanmar).<br><br>Demands of TNCs may change depending on the interest and taste of their clients (e.g. changes in trends in tourism destinations, trends in clothing tastes).       |
| <b>Capacity-building issues</b>   |                              |  |
| Easier for local employees to work with the business activities in the IT-BPO/BPM industry and the garment industry because of low skills   | IT-BPO<br>Garments<br>Hotel  | Not easy for local firms to build further capacity apart from receiving orders from customers as they receive only relevant know-how at most (e.g. upgrading value chain activities only through local firms' efforts is not easy).  |
| <b>Initiatives and local embeddedness issues</b>  |                              |  |
| Local firms adapt to foreign design and management and do not need to think about local values and localization strategies (quicker for local firms to make profit by using TNCs' business model).                                    | IT-BPO<br>Garments<br>Hotel  | Local firms may lose their initiative, design ability and traditional values, apart from designing for limited products in the garment industry (e.g. local firms may follow TNCs' business models in the IT-BPO/BPM industry and hotel industry as they do not need to implement a localization strategy).  |
| Local firms need to be localized, so it takes longer for local firms to make profits. Therefore, they need initiatives for their operations or activities leading to embeddedness.  | (Food) <sup>12</sup>         | In the short term, franchisees or local firms may face difficulties to adopt TNCs' original strategies to localize taste and need to learn through experience only before they become part of the community (e.g. in the food industry, franchisees need to localize their strategy to meet local customers' demands of which TNCs are not aware). |

Source: AJC.

<sup>12</sup> In this paper, the food industry in Myanmar is not examined, as there is little foreign franchise food business in Myanmar: however, there is contractual farming in the agricultural sector, or the upper chain of the food industry.

## 4. POLICY IMPLICATIONS

The intra-ASEAN trade and investment openness established since the turn of the millennium may have potential influence against anti-globalization and protectionism movements. ASEAN countries as a whole are among the most open and integrated regions in the world, with rapid expansion of trade and FDI inflows and outflows, though several members have faced volatile fluctuations in such flows.

Typically, firms owned fully or jointly by local and foreign TNCs that are reliant on export markets in ASEAN have been the most vulnerable to external shocks, as experienced by Malaysia, the Philippines, Singapore and Thailand during the global financial crisis of 2007-2008. More important, since TNCs often repatriate their profits to their home countries, local NEM firms – as domestically owned firms – can help reduce the wholesale repatriation of profits. The development of resilient NEM firms will also help deepen the reservoir of domestic capital for national expansion. Hence, government policy should consider strongly the promotion of NEMs as one of the critical economic growth strategies. The government can focus on the following broad institutional changes.

### 4.1 Enhancing capacities of local firms

Local firms' capabilities in both technological and managerial skills should be enhanced so that they can meet TNCs' current and potential demand, as well as to eventually export directly. Once these necessary capabilities have been attained, they can have more business initiatives or autonomy in their operations; they can find potential customers through networks; and independently from TNCs in terms of autonomy or initiatives, local firms can then create their own business activities in the long run. The government needs to support the development of local firms' overall capabilities, at two levels – the individual firm and the industry.

At the individual firm level, the government needs to support these efforts:

- Implementation of continuous internal training for employees in local firms. Local firms need to train their employees for higher-skilled jobs. If there is some direct or indirect financial support for training, it will help local firms focus on internal training tailored to their needs, including that required to meet client TNCs' demand.<sup>13</sup>
- Establishment of a local business advisory centre where local firms can learn NEM operations or activities. Local firms need to be aware of the big picture of changes or future demand in the industry rather than focusing only on their current operations. The government can support this by being facilitators for connecting individual firms – horizontally and vertically – in the industry. The centre should cover all aspects of NEM establishment – forming, executing and evaluating contracts, as well as increasing knowledge about NEM operations.
- Creation of a conducive environment for local firms to facilitate their globalization strategies and localization strategies. Local firms need to familiarize themselves with TNCs' changing strategies to be able to connect and evolve in their value chains. Individual firms need to learn their customers' strategies – buyers, sellers and organizations supporting their activities. Thus, the government should offer support for different types of strategies in different industries at the individual firm level, without focusing solely on the overall industry level.

<sup>13</sup> In the 1990s, the Malaysian electrical and electronics industry started. This provides a useful example for Myanmar as well.

At the industry level, industrial or business associations and the government can jointly support these initiatives:

- Creation of an environment for competition and cooperation between local and foreign firms. Individual local firms need to have continuity in their operations or activities by enhancing their capabilities. Although they need to compete among themselves, they will also need to collaborate to solve collective action problems. This is crucial to evolve successful industrial districts (Piore and Sabel, 1984). The presence of TNCs can bring both competition and demonstration effects, to raise the technological capabilities and competitiveness of local firms in Myanmar (Caves, 1974; Rasiah, 1994). Therefore, the government can create a better environment for competition and cooperation so that NEM industries as a whole can become more competitive internationally.
- Promotion of local firms to upgrade gradually within GVCs. Shifts in demand by TNCs and changes in TNCs' GVCs in Myanmar are mostly from TNCs' requests for cost reduction and for improvement of quality and shorter lead times. If local firms can upgrade and raise their value added little by little, higher levels of value chains are created at the horizontal and vertical levels in the country. The government can promote upgrading of local firm capabilities explicitly through support for innovation and technical upgrading activities. Only then may NEMs be able sustain their partnership with foreign TNCs. Achieving this will require the launching and continued upgrading of the STI infrastructure in the country.
- Putting an innovation policy in place for local firms to encourage and protect technologies required to perform as NEM operators. Local firms in Myanmar need to be attractive enough to become TNCs' NEM partners. Innovation policy is required in any event, as Myanmar firms need upgrading to support GDP growth and employment. Innovations tend to flourish only if there is a conducive regime of intellectual property rights in place. Such an effort is still premature, as the country is classified as stage 1 in terms of development, according to World Economic Forum's Global Competitiveness Index 2016-2017.

## 4.2 Developing the basic infrastructure

For NEMs to thrive so that they can contribute significantly to Myanmar's exports, employment and revenue, it is important that the government develop the basic infrastructure in those areas where these firms would potentially locate. Ease of registration, access to finance and skilled personnel, and to water and power, and the provision of security are important to lower the cost of doing business and to operate efficiently. Local administrative agencies must help solve problems that these firms face. Where hotels can benefit from an increase in tourist visits to scenic locations if the infrastructure is good, garment and IT-BPO NEMs can enjoy low costs and quick access to essential services.

Access to the internet will also connect potential customers to hotels, and the various tourist attractions that surround their locations. The cost for installing broadband internet support has fallen dramatically over the past two decades. Since the service it provides is a public good, it can stimulate exponential growth.



### 4.3 Developing science, technology and innovation infrastructure

While efficient basic infrastructure is important to raise efficiency levels of firms, STI infrastructure is critical to stimulate firms' participation in innovative activities. ICT and biotechnology should form the essence of two science parks in the country, to offer complimentary support for a wide range of industries. Although Singapore and Taiwan Province of China are significantly more developed economies, science parks specialized in ICT and biotechnology have played major roles to assist upgrading in firms (Rasiah, 2018).

In addition to helping the local community to address critical problems, science parks provide incubators to scale up innovations and to adapt existing stocks of knowledge for innovation. Linking science parks with national universities and public laboratories will be important to stimulate technological upgrading in NEM firms. Such essential knowledge support will not only ensure NEM firms meet the market demands of contracting TNCs, it will also offer them the opportunity to raise the level of value added.

### 4.4 Promoting connectivity and coordination

The colocation of organizational support for NEM firms is not sufficient to stimulate technological upgrading. There must be strong connectivity and coordination between the basic and STI infrastructure organizations, and NEM firms. Whereas emphasis on basic infrastructure will make possible efficient business practices with short lead times and low costs, the development of STI infrastructure – science parks, industry-university linkages, standards organizations, and good-quality technical and university graduates – will help stimulate and leverage innovation synergies in firms. The latter is critical for NEM firms to upgrade technologically to enjoy participation in high value added activities in GVCs.

The government should form a one-stop agency within the Economic Planning Board, which should be entrusted to play the role of promoting investment, establishing and increasing interactions between firms, organizations and government agencies responsible for providing basic and STI infrastructure services. Basic infrastructure includes security, transport networks and customs control. The broader human resource development organizations, such as schools, technical and vocational education and training institutes and universities should also be connected with firms so that there is a two-way flow of demand-supply coordination between them.

### 4.5 Promoting integration into global markets

External markets offer scale and scope opportunities, and competition and learning effects for NEMs aiming to upgrade to operate with the highest possible efficiency and quality. What this means is that existing NEM suppliers to foreign TNCs operating in Myanmar and those in their nascent stage of exporting should be encouraged to expand exports. Thus, Myanmar's NEM firms should be integrated into ASEAN, East Asian and global markets. The ASEAN Economic Community offers low to zero tariffs in almost all product lines for regional ASEAN firms.

The government can offer double deduction tax incentives on expenditures incurred on the exported value of firms, while seeking ways to lower transaction costs involving export and customs procedures. The government can also hold international exhibitions to promote local firms' exports.

## 4.6 Mainstreaming sustainable development

Given the focus on sustainable development goals advanced by the United Nations, there should be initiatives by the government to shape the conduct of NEM firms so as to mainstream such goals. We focus on two critical goals, namely, workers and human rights, and the environment. Labour and environmental standards have become important in bilateral trading relationships. Like Cambodia, Myanmar will have to observe the critical international labour covenants to convince the United States government to reopen its bilateral trading agreement on garments. This would mean NEM firms will have to allow unionization of workers and freedom of association, among other things. IT-BPO firms should also observe the standards imposed as conditions by TNCs and other buyers. Similarly, established hotel brands require their hosts to observe such standards. Such monitoring by developed-country buyers has increased over the years; many such monitoring systems use telemonitoring with buyers viewing at any time the production flow in NEM firms. According to the UN's guide,<sup>14</sup> due diligence on human rights "should cover adverse human rights impacts that the business enterprise may cause or contribute to through its own activities, or which may be directly linked to its operations, products or services by its business relationship" (p. 17).

Pressure on meeting environmental standards has also mounted as the problems of global warming and climate change have been viewed as the prime cause of rising temperatures and sea levels. Myanmar has ratified the Paris Agreement under the United Nations Framework Convention for Climate Change. Hence, the government should raise awareness, as well as work towards the formation of a major standards organization to coach and certify NEM firms.

The government should consider strengthening the regulatory environment for NEM firms so that they can export, expand employment and upgrade technologically. This initiative should start with a profound evaluation of the critical policy pillars shown in table 11.

Within the overall policy framework of NEMs articulated above, the Myanmar government should consider evaluating the NEMs or NEM-related operations in the country from time to time. Assuming that there is no such evaluation methodology available, the AJC proposes the checklist in table 11. The AJC's proposal is based on the corporate code of conduct of the Tokyo Chamber of Commerce and Industry, with some alterations. It provides some guidelines for the Myanmar government to use to check NEM agreements and operations.

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<sup>14</sup> United Nations (2011), "Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework", United Nations Human Rights Office of the High Commissioner, New York and Geneva.

**Table 11. Checklist for NEM agreements and operations to maximize benefits from, and minimize costs with NEM**

|   |                             |  |
|---|-----------------------------|--|
| NEM policy of the Myanmar government  | Compliance with laws        | Whether there is an agreement on contract performance  |
|   |                             | Whether there is an agreement on contract terms (durations)  |
|   |                             | Whether there is an agreement on contract termination and its process  |
|   |                             | Whether there is an agreement on contract arrangement (additional contract) and its process  |
|   | Respect for human rights    | Whether there are rules on non-discrimination (ILO covenant)   |
|   |                             | Whether there are rules on basic human rights  |
|   |                             | Whether there are rules on harassment (power balance exists between local NEM firms and TNCs)  |
|   |                             | Whether there are rules on freedom of association (ILO covenant)   |
|   |                             | Whether there is minimum wage legislation (ILO covenant)   |
|   |                             | Whether there are rules against forced labour (ILO covenant)   |
|   | Environmental consideration | Whether there are guidelines on air pollution by local NEM firms   |
|   |                             | Whether there are guidelines on water contamination by local NEM firms   |
|   |                             | Whether there are guidelines on environmentally friendly goods or services by local NEM firms  |
|   |                             | Myanmar submitted Intended Nationally Determined Contribution (INDC) milestones to the United Nations Framework Convention on Climate Change. It has to meet its INDC milestones to reduce carbon emissions and concentration. |
|   | Work environment            | Whether there are employment rules (laws) on ages under the NEM agreement  |
|   |                             | Whether there are employment rules (laws) on gender under the NEM agreement  |
| Whether there are guidelines on a safe and pleasant work environment for local NEM firms              |                             |  |
| Whether there are employment rules (laws) on working environments under the NEM agreement             |                             |  |
| Whether there are employment rules (laws) on working conditions under the NEM agreement               |                             |  |
| Whether there are employment rules (laws) on working hours under the NEM agreement                    |                             |  |
| Whether there are employment rules (laws) on taking holidays under the NEM agreement                  |                             |  |
| Whether there are employment rules (laws) on treatment of absence under the NEM agreement             |                             |  |
| Whether there are employment rules (laws) on maternity related leaves under the NEM agreement         |                             |  |
| Whether there are guidelines on provision of support system of childcare and nursing care             |                             |  |
| Whether there are employment rules (laws) on terminating employment contracts under the NEM agreement |                             |  |

**Table 11. Checklist for NEM agreements and operations to maximize benefits from, and minimize costs with NEM (Concluded)**

|  |  |  |
|--|--|--|
| NEM policy of the Myanmar government     | For local firms' development                 | Whether there is a program which local NEM firms can take to improve their technology or capacity  |
|  |  | Whether there is a program through which local NEM firms' employees can learn  |
|  |  | Whether there is a program which local NEM firms can take to understand NEM policy   |
|  |  | Whether there is a program which local NEM firms can take to understand business environment of the industry                               |
|  | Subcontractors and suppliers                 | Whether there are guidelines for similar NEM policies for local subcontractors and suppliers   |
| For TNCs, required by the Lao government | Earning the trust of customers and consumers | Whether there are guidelines for TNCs to provide correct information on their products or services   |
|  | Mutual growth with partner companies         | Whether there are guidelines for TNCs to respect free and fair trading rules   |
|  |  | Whether there are guidelines for TNCs to provide relevant information required for trading   |
|  | Coexistence with local communities           | Whether there are guidelines for TNCs to develop relationships based on trust with local NEM firms   |
|  |  | Whether there are guidelines for TNCs to establish and maintain a good relationship with local community where NEM local firms are located |

Source: Adapted from "Corporate Code of Conduct, the Third edition", Tokyo Chamber of Commerce and Industry (2013).

## REFERENCES

- Amsden, A.O. (1989). *Asia's Next Giant: South Korea and Late Industrialization*, New York: Oxford University Press.
- IPA (2013). IT HR White Paper 2013. Information-technology Promotion Agency, Japan (IPA), IT人材白書 2013 情報処理推進機構.
- IMF (2017). "Gone with the Headwinds: Global Productivity", Adler, G., Duval, R., Furceri, D., Celik, S.K., Kolovskova, K., and Poplawski-Ribeiro, M., International Monetary Fund Staff Discussant Note, April.
- JISA (2014). Global business questionnaire (February). Japan Information Technology Services Industry Association.
- Kim, L.S. (1997). *From Imitation to Innovation*, Cambridge: Harvard Business School Press.
- Kudo, T. (2012). "How has the Myanmar garment industry evolved?" in Fukunishi, T., ed., *Dynamics of the Garment Industry in Low-Income Countries: Experience of Asia and Africa* (Interim Report), Chousakenkyu Hokokusho, IDE-JETRO.
- Myint, M.M. (2012). "Technological capability building in the garment industry in Myanmar", Doctoral thesis approved by University of Malaya, Kuala Lumpur.
- Piore, M., and Sabel, S. (1984). *The Second Industrial Divide*, Cambridge: MIT Press.
- Rasiah, R. (1995). *Foreign Capital and Industrialization in Malaysia*, Basingstoke: Macmillan.
- Rasiah, R. (2007). "Garment exports from Asian LDEs: Can it be sustained?", *The Least Developed Countries Report 2007*, Background paper no. 8, United Nations Conference for Trade and Development, Geneva.
- Rasiah, R., and Myint, M.M. (2014). "Ownership, technological capabilities and exports of garment firms in Myanmar", *Technological and Economic Development of Economy*, 19(S1): 22-42.
- Rasiah, R., and Yap, X.S. (2016a). "Institutional support, regional trade linkages and technological capabilities in the semiconductor industry in Malaysia", *Asia Pacific Business Review*, 22(1): 165-179.
- Rasiah, R., and Yap, X.S. (2016b). "Institutional support, technological capabilities and domestic linkages in the semiconductor industry in Singapore", *Asia Pacific Business Review*, 22(1): 180-192.
- Rasiah, R., Yap, X.S. and Yap, S.F. (2015). "Sticky spots on slippery slopes: The development of the integrated circuit industry in emerging East Asia", *Institutions and Economies*, 7(1): 52-79.
- Rasiah, R., Shahrivar, R.B., and Yap, X.S. (2016). "Institutional support, innovation capabilities and exports: Evidence from the semiconductor industry in Taiwan", *Technological Forecasting and Social Change*, 109: 69-75.
- Shinomiya, Yukiko 四宮由紀子 (2016). 日本ホテル企業の国際発展とアジア回帰の軌跡; 過去50年間の国際企業行動の変化に関する考察. *アジア経営研究*, 22: 3-15.
- Sturgeon, T. (2002). "Modular production networks: a new American model of industrial organization", *Industrial and Corporate Change*, 11(3): 451-96.
- UNCTAD (2011). *World Investment Report 2011: Non-Equity Modes of International Production and Development*. New York and Geneva: United Nations.
- Yap, X.S., and Rasiah, R. (2017). *Catching Up and Leapfrogging: The New Latecomers in the Integrated Circuits Industry*, London: Routledge.

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