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# Opportunities for Sustainable Development in Global Value Chains:

A Case Study of the Myanmar Garment Sector

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#### LIST OF ABBREVIATIONS

AGOA African Growth and Opportunity Act
BSCI Business Social Compliance Initiative

CAFTA China-ASEAN Free Trade Area

CBI Centre for the Promotion of Imports

CMP cut-make-package
CMT cut-make-and-trim
EBA Everything But Arms

EU European Union

FDI foreign direct investment

FOB free on board

GSP Generalized System of Preferences

GVC global value chain

ILO International Labour Organization

LDC least developed country

MGMA Myanmar Garment Manufacturers Association

NES National Export Strategy

NGO non-governmental organisation
OBM original brand manufacturing
ODM original design manufacturing
SDG Sustainable Development Goal

SEZ special economic zone

UK United Kingdom
US United States

WTO World Trade Organization

#### **EXECUTIVE SUMMARY**

It has been estimated that two thirds of global trade is driven by global value chain (GVC) production. The garment value chain has often been a driver of early export-led industrialisation for both developed and developing countries, requiring abundant cheap labour and relatively simple production technologies.

The notion of Myanmar being the last economic frontier, abundant with natural resources and investment opportunities, now dominates the narrative on foreign trade. Indeed, in the last few years, together with Ethiopia, Myanmar has been singled out as the new kid on the block, the "new hot spot or rising star" among least developed countries (LDCs) entering the industrialisation process (Staritz at al. 2016).

This paper analyses the garment value chain in Myanmar, with a focus on implications for sustainable development. The Myanmar garment sector has experienced a renaissance since sanctions were lifted in 2013. Foreign investors are driven by preferential market access to Western countries, such as the EU's Everything But Arms scheme, access to low wage unskilled labour, and risk diversification against social and political risk in countries such as Bangladesh. In Myanmar, the industry is not only contributing to the country's transition from a centrally directed economy to a market-oriented one, but it is also underwriting poverty alleviation and employment creation for young uneducated women, as well as generating significant export earnings for the country.

Myanmar's garment exports increased from US\$340 million in 2010 to around US\$1.6 billion in 2016, with 420 firms members of the Myanmar Garment Manufacturers Association (MGMA) in early 2017. The European Union (EU) is the largest (and fastest growing) export market, followed by Japan and South Korea. The government wants to tap into these opportunities to diversify an economy heavily concentrated on agriculture and extractive resources. It is relying heavily on foreign direct investment (FDI) to achieve "inclusive growth" via industrialisation. The government has earmarked the garment sector as an important engine of growth as part of its 2015 five-year National Export Strategy (NES). The NES provides Myanmar with a detailed framework and decision-making instrument to guide the country's trade development and boost its export competitiveness, so as to create "sustainable export-led growth and prosperity for an emerging Myanmar." However, implementation has been partial and results over the brief period to date have been mixed. Among other factors, the insufficient capacity and capabilities of the government itself have been often pointed out as an obstacle in the innovation process by our interviewees. Uncertainty and instability are still main concerns for foreign investors.

We also believe that Myanmar's potential lies in its nascent industrialisation and diversification, particularly in terms of absorbing information and inputs on sustainable investment and social upgrading. There is a huge appetite in the country for adopting change and for ameliorating factory conditions. There is also an opportunity for gender issues and female empowerment to become part of the sector's competitive advantage.

On the other hand, the nascent stage of Myanmar garment industry is evident in the many difficulties of doing business in the country, such as an immature legal system, both in terms of comprehensive legislation and on-the-ground enforcement, poor hard and soft infrastructure, and lack of supporting functions, all causing long lead times.

The sector works on a cut-make-package (CMP) pricing model, i.e. the primary stage within the value chain. The CMP pricing model implies that Myanmar accrues very little value added

and economic rents,<sup>1</sup> and develops very little upgrading capabilities. This is not only the result of deficiencies in the local operating environment, but also of the strategies of transnational actors, acting as coordinators between lead firms and Myanmar manufacturers, limiting transfer of knowledge and upgrading opportunities.

As in the typical "triangular manufacturing" production process, the relationship between Myanmar manufacturers and international buyers is usually managed by transnational agents—mostly of Asian origin, and only rarely through retailers' head-office buying teams liaising directly with the factories. The agent often manages the relationship with the input supplier too. This makes the former a very powerful player in the market as both factories and brands are reliant on them for orders.

There are some exceptions to CMP, though. Some exporting firms, usually large companies, either wholly foreign-owned or operating through joint ventures with branches outside of Myanmar, are de facto pursuing a free on board (FOB) production modality, albeit, for tax reasons, they are registered as CMP with the relevant local authorities. They have the capacity to operate on an FOB basis thanks to their regional embeddedness and linkages, optimising their dispersed production and distribution network. These firms are "local industry leaders" in terms of machinery, production quality, management, and labour conditions, as confirmed by our field work.

Focusing on minimum wages across the region and its competitors, Myanmar's cost/price advantages remain clear, when compared to China, Cambodia, and Vietnam. However, low wages do not fully make up for longer lead time due to poor infrastructure, higher costs for sourcing input (which also contributes to longer lead times), and, more importantly, low productivity.

We found two important features of the exporting value chain in Myanmar which impact the upgrading trajectory and level of embeddedness of manufacturing firms: end markets and ownership.

End market segmentation is characterised by clear differences between the European and the North American markets and the Japanese and Korean ones, with different impacts on the shop floor, directly speaking to decent working conditions and sustainable growth. European buyers focus more on social and environmental compliance and require adherence to international standards. European buyers, unlike Japanese buyers, require shorter runs, quicker response and larger batches, as well as expecting suppliers to contribute to design and product development, a push towards the FOB modus operandi. This has positive impacts on upgrading with regard to processes, quality, skills, and products. Japanese and Korean buyers mostly emphasise quality over anything else.

The majority of companies in Myanmar are foreign-owned (226 companies) or joint ventures with foreign partners (32 companies)—comprising around 60 percent of the total. As the sector expanded, firms also grew in size, employing a larger number of workers. In the period 2014-16, firms' size increased from an average of 400 to 750 employees, driven by an increase in foreign investments. Ownership generates different upgrading opportunities, with local ownership facing the greatest hurdles to grow and to upgrade. Myanmar-owned firms are disproportionally affected by a shortage of skilled middle and top management, lack of technical know-how, a poor financial infrastructure, limited capital investment capacity, and a low level of workers' efficiency.

<sup>1 &</sup>quot;Rent describes an environment of scarcity in the context of demand. The holder of rent benefits from an absence (relative or absolute) of competition, protected by one or more barriers to entry. The more desired the scarce attribute, and the higher the barriers to entry, the higher are the resultant incomes." (Davis, Kaplinsky, and Morris 2017, 3).

The most substantial impact of the growth of the garment industry in Myanmar on the sustainable development goals (SDGs) has been in relation to employment. Over 300,000 workers are employed in the sector, and women comprise around 91 percent of that workforce. Garment sector experts notice that social upgrading has been significant in the last five years or so across the board, with players in the garment sector reporting improved working conditions and better adherence to SDG 8, decent work and economic growth. To have access to European and United States (US) brands, certifications, such as the Business Social Compliance Initiative (BSCI), are often necessary. The BSCI supports the continuous improvement of the social performance of suppliers, covering thirteen performance areas, such as working hours, compensation, child and forced labour, and health and safety. The BSCI also requires a strict and independent third-party checking system that is also pushing for better implementation of the laws. However, vulnerable working conditions persist: child labour, lack of training, excessive overtime, poor working conditions, poor health and safety, as well as flouting of the country's new minimum wage.

To address the challenges posed by these two determinants of competitiveness, i.e. end markets and ownership, to upgrade in the exporting value chains and to empower the indigenous work force and capital, the paper puts forward eleven policy recommendations:

- 1. Provide support to expand relationships with "Western" buyers (US, EU) and "Eastern" buyers (Japan and Korea) as well as lead transnational garment firms. The garment industry is playing an important role in both income generation and poverty reduction, contributing not only to the employment of women in urban areas, but also enabling remittances to workers' families in rural areas. The sector is contributing to the economic transformation of the country, through learning, skills development, and exports. To achieve the targets of the National Export Strategy, the sector needs to grow exponentially. This can be done through adopting a GVC industrial policy approach with the government and trade associations working together to attract more manufacturing investors, as well as approaching buyers to encourage their suppliers to manufacture in Myanmar.
- 2. Enhance cooperation and provide support to attract Chinese foreign direct investment in the garment sector. China has a significant role in the garment industry. As well as being an important location for main brands' favourite suppliers and transnational actors, it is also the source of most inputs. It is, thus, essential for the government to build a bridge between the two economies.

There is great opportunity to benefit further from the "sourcing proximity" between the two countries as they share a border. To facilitate this, it is recommended that Myanmar seizes the infrastructural opportunities of China's One Belt One Road initiative to facilitate unimpeded trade. Furthermore, Chinese-Myanmar initiatives, such as the Bangladesh-China-India-Myanmar Forum for Regional Cooperation, should also be strengthened to facilitate trade.

- 3 Encourage local production and developing technical capacity and knowledge base. This sector requires greater entrepreneurial and management skills. It is critical that government and donor development organisations work together to offer training in technical production skills at all levels of employment. However, we believe particular focus and efforts should be directed towards training of supervisors and management.
- 4 Support unique indigenous design skills. The local market provides an excellent opportunity to build unique design capacity, as complex skills and unique "indigenous" designs exist and can be leveraged for export. New product designs are aiming at fusing "Western" style clothing with Myanmar traditional dress. Given the right customised training in input sourcing, design,

- and branding, there is an opportunity for Myanmar to go beyond the "low wage, low skill, preferential market access" destination.
- 5 Support a GVC perspective in the policy dialogue between public and private sectors. This has been identified as a major impediment to growth in the sector. Educational workshops should be established bringing together the different stakeholders involved in the industry, from both central and local government, manufacturers, trade associations, and buyers, in order to jointly discuss key challenges facing this sector and identify solutions.
- 6 Access negotiation and mediation capacity building for both government and trade unions (formal and informal). Effective cooperation between capital and labour needs to be built. Working with donor development projects and local and international non-governmental organisations (NGOs) who support training for labour rights professionals will be key. They could also help build institutional structures to involve the trade unions in developing an industrial strategy for the sector, to channel this activism in a constructive direction.
- 7 Change a specific element of tax law. The separation between CMP/FOB in the country's tax laws needs to be eliminated. CMP producers obtain tax exemptions on import duties for imported inputs (fabrics) to produce exports. Producers registered as FOB do not receive these exemptions. The law itself acts as a legal deterrent to functional upgrading.
- 8 Improve the financial system to be responsive to the needs of this industry. Local firms cannot access foreign exchange and capital to operate their business. This acts as a key deterrent to graduating from CMP to FOB. To help local firms, the financial system needs to be improved to allow all manufacturers to access trade credit. There is the need to liberalise and deregulate the banking system and the foreign exchange market.
- 9 Improve soft and hard infrastructure. Roads, ports, Special Economic Zones, power, telecommunications, all need development. In relation to soft infrastructure, recommended steps to improve productivity and unleash Myanmar's economic potential include simplifying procedures and licensing for trade and investment, building institutional capacity in trade-related government agencies, and ensuring broader ownership of reforms across society, including disadvantaged groups.
- 10 Raise awareness on sustainable development goals, together with partners. Harness the strong presence of donor and international organisations in the country to cooperate with the government, transnational actors, and foreign investors, lead buyers, and civil society to make the empowerment of women and social upgrading a key competitive feature of Myanmar's exporting value chain.
- 11 Raise early awareness of environmental issues across the industry. Such an action would also speak directly to SDGs, such as the need for clean water for all, the development of clean energy, or issues related to climate change more generally. It is essential that the regulations to deal with the disposal of waste products are put in place prior to their growth in this and other industries. This would also let Myanmar leapfrog some of its competitors, positioning itself further ahead in the race of "sustainable production."

#### 1. INTRODUCTION

The Asian garment industry is the largest regional garment industry in the world, with China alone responsible for 37 percent of global clothing exports by value in 2016 (WTO, 2017). Of the leading exporters of clothing in the world by value, eleven of the top fifteen are Asian countries.

Bordering Bangladesh, China, India, the Lao People's Democratic Republic, and Thailand, Myanmar has great, unexploited economic potential. The government wants to tap into this potential to diversify an economy heavily concentrated on agriculture and extractive resources, relying predominantly on foreign direct investment (FDI) to achieve "inclusive growth" via industrialisation.

The Myanmar government has earmarked the garment sector as an important engine of growth and job creation as part of its 2015 five-year National Export Strategy (NES). The garment industry is labour-intensive; it has the potential to provide extensive employment opportunities for women, and help people move out of subsistence agriculture which still employs 40 percent of the Myanmar labour force.

Since the lifting of sanctions in 2013, the garment sector has been experiencing a new renaissance, growing exponentially. Currently, it is, in actual fact, the only manufacturing sector which is part of a global value chain (GVC), able to connect with global and regional production and distribution networks.

Myanmar's textiles and garments industry dates back to the years of the Socialist Republic of the Union of Burma (1962-88). In 1988, the military junta opened the country to foreign investment and the industry grew on the back of a few joint ventures between state-owned and military-

related enterprises and Korean and Hong Kong firms. Wholly foreign-owned investments were not allowed until 1995, when the first wholly foreign investor, a global Hong Kong company, established its first plant.

At its peak, in 2000, the industry encompassed between 300 to 400 active factories, employing around 300,000 workers and generating an export volume of US\$600 million. The share of garments out of total exports was between 30 to 40 percent in 2000, compared with 2.5 percent in 1990. The sector was exporting globally, but its biggest markets were the United States (US), with 54 percent of total garment exports, followed by the European Union (EU) with 37 percent. Despite the increased FDI flow, the sector was dominated by domestic firms, accounting for around 90 percent of total production.

Since 2001, sanctions imposed by the US and EU led to a dramatic fall in exports.<sup>2</sup> Other factors, such as the 10 percent export tax introduced in 2003 and tightening of regulations by the Myanmar government, also contributed to the garment sector's recession. The negative cycle was then reinforced by the emergence of fierce competition from Bangladesh and China and difficulties in financing on the back of the increasing isolation of the country. Only around 130 factories survived during the sanction era and they were mainly supplying Japanese, Korean, and Taiwanese buyers.

Japan, was the only large economy that did not place any trade sanctions on Myanmar, becoming the biggest single market for Myanmar's garment industry, replacing the US.<sup>3</sup> This coincided with Japanese demand shifting from products "made in China" to those made in Southeast Asia, with the onset of disputes between the two countries in 2005.

<sup>2</sup> Sanctions against the military regime were slowly introduced by the US in 1990 and afterwards by the EU. However, the turning point was 2003, when the US restricted imports of *any* goods from Myanmar. EU sanctions significantly tightened from 2000.

<sup>3</sup> Kudo 2012 reports that in 2008 34 percent of all garments were exported to Japan, 24 percent to Germany, 14 percent to Spain, 10 percent to the United Kingdom (UK). As such, Japan was the most important single recipient of Myanmar garment products, although the EU as a whole was the most important destination market.

The dominance of Japanese orders had a profound impact on quality control and skills upgrading. On the shop floor, Japanese investors and managers taught local employees the importance of the quality of the product and of piece-by-piece inspection. At times, they drove changes in the layout of the production process, increasing efficiency and effectiveness, also through introducing the Japanese 5S production approach.<sup>4</sup> Furthermore, the Japanese presence in the Myanmar garment sector led to a switch from knitwear to woven garment production, on the back of Japanese regulations rather than Myanmar local factors.<sup>5</sup>

Since democratic reforms began in 2011, the operating environment for the industry improved dramatically, including economic reforms such as the abolishment of the export tax in 2012, and the US and EU lifting sanctions on Myanmar exports. The EU reinstated Myanmar to the Generalized System of Preferences (GSP) in 2013, after the International Labour Organization (ILO) stated that the country had made progress in enforcing labour rights. As a least developed country (LDC), Myanmar benefits from the most favourable regime available under the EU's GSP, the Everything But Arms (EBA) scheme.

Abolishing US sanctions was done in stages. Only in September 2016, the US government announced that all remaining sanctions would be lifted and that, as of 13 November 2016, Myanmar would be reinstated into the GSP programme.

The notion of Myanmar being the last economic frontier, abundant with natural resources and investment opportunities, now dominates the narrative on foreign trade. Indeed, in the last few years, together with Ethiopia, Myanmar has been singled out as the new kid on the block, the "new hot spot or rising star" among LDCs entering the industrialisation process.

The objective of this paper is to offer a "case study" exploring how the garment sector in Myanmar developed, to analyse the related development impacts and, through policy recommendations, to propose how Myanmar's participation in the garment value chain can sustain economic and social developments in future.

The empirical research on firms in the garment export industry reported on here is based on trade and national industry data, as well as interviews with representatives of garment firms and institutional actors conducted largely in March and June 2017. Methodologically, we applied a GVC approach to our data collection, by tracing the different actors in the value chain, such as owners, managers, and buyers' representatives, as well as supporting industry organisations and representatives of the local government and of workers.

In total, we interviewed owners, managers, and workers from thirteen factories situated in the Yangon industrial zones and in the Thilawa Special Economic Zone (SEZ). These cover a range of enterprises—five of the companies visited were fully Myanmar-owned firms, five were foreign-owned firms, and three were joint ventures. On average, we interviewed up to ten workers per factory, across different level of skills and job descriptions. We used a combination of structured and semi-structured interviews. Firm interviews were conducted on site at the factories, but when we interviewed workers about work conditions, this was done away from the factory premises to ensure the safety of the workers. We also interviewed workers outside their factories when they were picketing the factory premises and striking against poor working conditions.

<sup>4</sup> The 5S production approach is a Japanese workplace organisation method to enhance efficiency and effectiveness based on five concepts: *seiri* or "sort," *seiton* or "set in order," *seiso* or "shine," *seiketsu* or "standardise," and *shitsuke* or "sustain." The decision-making process usually comes from a dialogue about standardisation, which builds understanding among employees of how they should do the work.

<sup>5</sup> Under the Japanese preferential tariff regime, woven products, not knitted, enjoy a free tariff rate. For this reason, woven garment manufacturers use low-cost fabric imported from outside Myanmar, such as from China, to export to Japan under the preferential tariff regime. On the other hand, in the case of knitted clothing, the final product has to be processed in the beneficiary country from textile yarn to knit fabric and finally to knit garment (Tanaka 2016).

## 2. CONTEXTUALISING GARMENT GLOBAL VALUE CHAINS AND SUSTAINABLE DEVELOPMENT

In today's globalised world, the garment industry is dispersed, with developing countries being incorporated into global value chains "governed" by lead firms in the developed world. Governance and upgrading are driving concepts in GVC analysis.

Governance is defined as "authority and power relationships that determine how financial, material, and human resources are allocated and flow within the chain" (Gereffi 1994). The lead firm determines what is to be produced, where, by whom, and at what price (Gereffi et al. 2011). The garment value chain relies on international standards to coordinate the activities of suppliers. Success for manufacturing firms lies in their ability to meet buyers' specifications, as well as the buyers' technical, social, and environmental standards.

Relationships between firms and the chance to upgrade through learning and innovation resulting from these links take centre stage in GVC analysis. This is important as firms accrue different rents along the chain. Learning is what allows firms to become more competitive, to upgrade, and, in turn, to earn more (Lundvall 2002, Nelson and Nelson 2002, Gereffi 1999). Understanding the differential distribution of rents becomes key to understanding the opportunities and limitations facing LDCs in this chain (Pietrobelli 2008).

The literature identifies different types of upgrading: (1) process upgrading (the transformation of input to output is made more efficient by reorganising the production system or introducing superior technology); (2) product upgrading (moving into more complex, sophisticated product lines); (3) functional upgrading (acquiring higher value-added activities, such as marketing and branding, and relying less, or abandoning completely, lower value-added activities such as manufacturing or assembly); (4) supply chain upgrading (establishing domestic linkages, particularly backward linkages to input sectors); and (5) end market upgrading (diversifying to new buyers or geographic and product markets) (Staritz and Morris 2015).

Myanmar carries out the lowest value-added activities: cut-make-package (CMP), also known as cut-make-and-trim (CMT). Typically, a foreign buyer pays contracting fees to a garment factory in Myanmar to carry out the labour-intensive tasks of cutting the textile fabric in line with the pattern supplied, sewing garments together according to design specifications, and packing the garment for export to international markets.

The CMP pricing model implies that only a small proportion of the actual value of the good produced is retained in the country. Critical decision-making power and higher-value functions are located abroad and controlled by the lead firm. This includes input sourcing, product development and design, logistics, merchandising and marketing, and the direct relationship with buyers.

A step up the value chain is manufacturing under the free on board (FOB) system, where manufacturers are responsible for producing the garment in its entirety and arranging for shipment. The main difference between CMP and FOB is that manufacturing firms must have upstream logistics capabilities, including procuring and financing the necessary raw materials, piece goods, and trim needed for production.

Further up the chain, FOB is followed by original design manufacturing (ODM), a business model that includes design in addition to manufacturing. Finally, original brand manufacturing (OBM) incorporates branding of products, in addition to, or in lieu of, design and manufacturing.

Not all upgrading opportunities are available to LDC manufacturers. The garment industry is buyer-led, marked by power asymmetries between the producers located in LDCs and the lead buyers or lead firms, mostly located in Europe, Japan, and the US. These outsource the manufacturing process to a global network of differentiated suppliers, who holds most of the information and control its flow to the manufacturers. Furthermore, as we found in Myanmar, access to learning and upgrading for local firms varies because of the different end markets and governance structures of the lead firms involved.

Where products are sourced from is decided by many factors. Preferential market access, such as facilitated by the US's African Growth and Opportunity Act (AGOA) and the EU's Everything But Arms (EBA),<sup>6</sup> is key, as tariffs still play a central role in the garment industry (Staritz and Morris 2015). Location is also key for lead buyers, who are willing to "diversify" the countries they source from to reduce dependence risks on any of them.

The garment industry is undergoing profound changes. The roles and relationships between national and global lead firms, their manufactures and intermediaries has become "blurred" in recent years following the removal of the Multi Fibre Agreement's quotas in 2005, increased competition, and the 2008 financial crisis (Gereffi and Frederick 2010). Supply chain rationalisation is taking place and lead firms are confining their relationships to their most reliable and capable suppliers, typically located in Hong Kong, Taiwan, China, and Korea. They are rationalising the size and scope of their supply chains.

lead firms consolidate the As number of wholesalers they source from, some transnational Asian suppliers and manufacturers, faced with high demands on price, quality, lead times, and changing order volumes, have positioned themselves as "coordinators" of networks with a global supply base (Staritz et al. 2016). These transnational firms or agents in turn "coordinate," organising production through their own foreign direct investment, joint ventures schemes, or contract manufacturers in labour-abundant countries such as Myanmar, Bangladesh, Cambodia, and Vietnam (Gereffi et al. 2011). This is termed "triangular manufacturing."

For firms to upgrade, they need to be able to access knowledge and learning in their own national and local institutional environments. Opportunities to upgrade arise particularly if there are strategic and comprehensive sector-specific policies and workforce intervention programmes. The GVC approach, for example, is helpful in assisting policy makers in linking industry-specific trajectories of economic upgrading to the most important skills or workforce development requirement at each stage of the upgrading process (Gereffi et al. 2011).

This puts the spotlight on national systems of innovation (Lundvall 1992), such vocational centres, universities, developmental programmes, technology and research centres, in supporting firms to upgrade in the chain. At the firm level, learning can also take place through horizontal links between firms (Humphrey and Schmitz 2002), as well as through firms' own search activities to acquire and seek knowledge (Morrison et al. 2008). Granovetter (1985) and Becattini (1990) have further highlighted the "social embeddedness" characteristic of learning. Other work has also supported this view by showing how firm ownership and ethnicity are important determinants of different types of learning for manufacturing firms (Morris and Staritz 2014).

Coinciding with supply chain rationalisation and supply chain risk diversification, the importance attached to "social upgrading" and sustainability is increasing rapidly. Lead firms are demanding social and environmental compliance from their manufacturers. Following the Rana Plaza disaster in 2013, many companies boosted their focus on building maintenance and fire safety, whilst collaborating with NGOs to develop and implement relevant safety measures.

<sup>6</sup> AGOA significantly enhances market access to the US for qualifying sub-Saharan African countries, expanding the benefits under the Generalized System of Preferences program. The EBA scheme gives the 49 LDCs duty-free access to the EU, except for arms and ammunitions.

Social upgrading is taking centre stage in large part due to final consumer demands and the work of advocacy groups. Around the world, consumers are increasingly basing their purchasing decisions on their perception of a company's sustainability performance, and the sustainable development goals are influential

in strengthening this trend. The introduction of these targets should be seen as a powerful instrument to focus the efforts and policies of governments and international institutions to achieve sustainable development and economic upgrading in the context of deepening global integration (Kaplinsky 2016).

### 3. MAPPING THE DEVELOPING DYNAMICS OF THE MYANMAR GARMENT GLOBAL VALUE CHAIN

In our paper, we focus on exporting garment manufacturers in Myanmar. However, it is worth noting that beyond this class of manufacturers, there is a significant number of companies that focuses only on the domestic market. Within this subgroup, Myanmar has a very small upmarket indigenous fashion design niche, which is slowly developing international linkages and presence of its own, based on the "fusion" of local fabric, traditional dress, and "Western" style clothing (Gelb et al. 2017).

These companies appear to operate independently of the exporting sector, suggesting that some design and marketing capabilities do exist in Myanmar, something that is not the case in some other garment CMP hubs globally. We believe that building further on such unique design capacity provides an excellent opportunity for development into a new larger-scale production chain for exports, alongside the already existent exporting VC. Further analysis and field work is, however, required to establish the full potentials of such a niche market.

The key actors in the Myanmar exporting garment sector value chains are: (1) international lead firms or buyers (in Myanmar these are mostly from the EU, Japan, and Korea, and only recently from the US) and (2) transnational agents or "coordinators."

As in the typical "triangular manufacturing" production process, the relationship between Myanmar manufacturers and international buyers is usually managed by transnational agents—mostly of Asian origin, and only rarely through retailers' head-office buying teams

liaising directly with the factories. The agent often manages the relationship with the input supplier too. This makes the former a very powerful player in the market as both factories and brands are reliant on them for orders.

#### 3.1 Export Developments

The total value of Myanmar's garment exports increased from US\$340 million in 2010 to around US\$1.6 billion in 2016 (UN Comtrade). Garment exports accounted for 10 percent of the country's export revenues in 2015, according to the Myanmar Garment Manufacturers Association (MGMA), the most important business association for the sector, set up by the government in 2002 and now under the Ministry of Commerce.

To give some perspective in relation to Myanmar's competitors, Bangladesh recorded US\$27 billion and Vietnam US\$23 billion of garment exports in 2015, and Cambodia US\$7 billion in 2016. Thus, while Myanmar is experiencing rapid growth, it still has a long way to go to reach similar levels.

The European Union is the fastest growing export market for clothing made in Myanmar, becoming an increasingly important driver of the industry. Using mirror data on imports from Myanmar, the European Union is now also the main export destination for Myanmar garments, as Table 1 shows. Based on Eurostat import data, the EU has quadrupled the amount of garment imports from Myanmar between 2013 and 2016, to US\$764 million in 2016. Within the EU, Germany has historically been the most important market.

<sup>7</sup> Myanmar economic data are partial and inconsistent. Mirror data from trading partners and international institutions only partially offset such shortcomings. For instance, the "Total" values reported in Table 1 are the sum of import data from Myanmar garment sector main export destinations, due to the lack of a reliable time series of export data from the UN Comtrade database.

Key		Export destination markets									
years for Myanmar garment	EU- 28	Of which:					Japan	South Korea	US	China (inc.	Total
sector*		Germany	France	Spain	Italy	UK				HK)	
1995	23	7	6	1	0	4	1	0	70	0	94
2000	278	47	29	11	13	20	5	1	437	2	723
2001	351	75	42	16	19	39	8	3	437	2	801
2005	242	82	20	15	11	36	54	7	0	1	304
2011	185	72	1	41	6	32	347	232	0	11	775
2016	766	184	66	73	55	96	648	346	80	52	1,892

Table 1: Myanmar garment main export destinations (1995 to 2016, US\$ million)

Source: UN Comtrade, Eurostat; supplemented with import data from Myanmar garment sector main export destinations.

The second most important market is Japan, followed by South Korea. As the Table 1 shows, at the time of writing, the US is not a key destination for Myanmar garment productshaving re-opened the market only at the end of 2016. That said, growth rates have been significant and growth expectations—of the MGMA and the government-heavily rely on fulfilling its potential.

To foster development, the government has earmarked the garment sector as an important engine of growth as part of its 2015 fiveyear National Export Strategy (NES). The NES provides Myanmar with a detailed framework and decision-making instrument to guide the country's trade development and boost its export competitiveness, so as to create "sustainable export-led growth and prosperity for an emerging Myanmar."

It aims to deal with the issue of low-quality exports and the need for the industry to become more competitive, by moving up the value chain from its CMP status to FOB.

It is Myanmar's first comprehensive economic strategy for exports and services and it has been praised by domestic trade societies as a model of legislative competence. However, implementation to date has been partial, and results are mixed, notwithstanding the short time elapsed. Among other factors, the insufficient capacity and capabilities of the

government itself have been often pointed out as an obstacle in the innovation process by our interviewees.

In the 1990s, the government introduced a scheme of industrial zones, establishing 18 zones in nine states and regions. Growth has been slow during the year, but particularly concentrated around Yangon, thanks to more developed transport and infrastructure facilities than other areas. At present, the Myanmar Industries Association lists 20 industrial zones around the capital. These zones have attracted a mixture of domestic and foreign investment.

However, the MGMA reports that foreignowned factories are currently hesitant to set up in Yangon due to high land costs, such that several overseas investors have struck up joint ventures with local partners. This is despite the advantages of Yangon: abundancy of skilled garment sector workers, better electricity supply, and the vicinity to three main ports.

Subsequently, the government set up three Special Economic Zones, to facilitate and attract foreign investments, in particular for export: Dawei SEZ in the south east of the country near the Thai border, Thilawa SEZ, 25 kilometres south of Yangon, and Kyaukphyu SEZ in Rakhine state. Thilawa, for instance, is a project between the Japanese and the Myanmar governments started in 2014, launched in late 2015. As of date, within Thilawa's list of

<sup>\*</sup> Years chosen for the following reasons: In 1995 the Myanmar government allowed fully foreign-owned operations in Myanmar; 2000 and 2001 are the peak years pre-sanctions; 2005 is the trough of the cycle, as sanctions hit; 2011 sets the beginning of the new cycle of reforms by the government; 2016 is the most recent data point available.

approved investors (82 in total, either domestic or foreign), there are five garment factories.

In terms of legislation, governance, community involvement and dispute settlement, and the presence of labour unions, the SEZs have special rules and sets of benefits. The Special Economic Zone Law, enacted in 2014, grants businesses in SEZs several tax exemptions, from corporate tax exemptions for the first five to seven years, customs duties or other commercial taxes exemptions, and tax deductions for training and longer land leases. Moreover, the SEZs are envisaged to be a "one-stop" shop, to facilitate the set up and management of business in Myanmar.

However, this law is problematic in that it overrides all other legislation, meaning that the national legislation may not apply in SEZs. The lack of transparency of laws and regulations, and land disputes that have emerged following the (slow) set-up of the SEZs, have driven away some investors, as confirmed during our interviews and by other reports.<sup>8</sup>

#### 3.2 Myanmar Garment Manufacturers

The number of factories grew from 130 during the sanctions period (Kudo 2012) to the 420 listed by the MGMA in Q1 2017. The majority of these companies are foreign-owned (226 companies) or joint ventures with foreign partners (32 companies)—making up around 60 percent of the total. Chinese investors, followed by the Koreans, are the most prominent, both they fully owning the company or running a joint venture with a local partner.

The remaining 160 companies, or 38 percent of the total, are fully Myanmar-owned. Within this group, slightly more than half of them produce for export (82 companies), versus 39 companies

who produce for the domestic market; the remaining 39 companies have not specified their destination markets. Overall, the MGMA estimates employment in the garment sector to have stood at 296,725 in Q1 2017.

With the recent restoration of the US's Generalized System of Preferences (GSP), the MGMA anticipates the garment sector will experience exponential growth in the years ahead, employing around 1.5 million workers by 2024 and generating over US\$12 billion in export value by 2020, up from its current US\$1.6 billion. These forecasts are based on new markets opening—the EU and US following the end of the sanctions—and the expansion of existing ones. Preferential market access is playing a key role: the EU's and US's GSP are a necessary condition for growth, as are other trade agreements such as the China-ASEAN Free Trade Area (CAFTA).<sup>10</sup>

That said, the garment industry still employs a small proportion of the labour force, 16 percent of all employed in manufacturing. As reported by the ILO (2016 and 2017), the size of the garment and textile workforce is roughly comparable to that in Cambodia—both employing around 750 thousand people (or 31 percent of the population working in the manufacturing sector in Myanmar and 60 percent in Cambodia), but it is merely a fraction of that in Bangladesh and Vietnam with nearly 5 million workers (52 percent of manufacturing workers) respectively around 3.5 million (18 percent of all manufacturing workers).

As the sector expanded, firms also grew in size, employing a greater number of workers. In the period 2014-16, firms' size increased from an average of 400 to 750 employees, driven by a greater role of foreign investments. Small-size factories (with less than 200 employees)

<sup>8</sup> SOMO 2017 reports that the clothes retailer H&M will not work with factories located in SEZs in Myanmar, as the development of SEZs is associated with land rights issues.

<sup>9</sup> The remaining two companies are identified as "co-op" by the MGMA.

<sup>10</sup> In November 2015, for instance, ASEAN countries and China concluded an upgraded agreement on CAFTA that is expected to raise bilateral trade to US\$1,000 billion, from about US\$480 billion in 2014, and ASEAN-bound FDI to US\$150 billion by 2020. Such an increase in trade of goods and services as well as technological cooperation is expected to give an extra push to Myanmar's garment industry in the mid-to-long term, including further relocation of China-based garment manufacturers to the country.

represented 24 percent of the total, middlesized ones (between 200 and 800 employees) 41 percent, and larger companies 35 percent.

Gelb et al. (2017) suggest the industry is highly concentrated in terms of exports, with a few large players exporting a significant share of total exports. However, due to the lack of data, their statement is based on 2012/13 data. Such a picture is no longer representative of

current conditions, in our view. The garment sector has nearly tripled in size over this period, growing at an extremely rapid pace, with many new entrants in the markets. During our interviews, we were told that the export industry is characterised by large investments from perhaps 50 companies and smaller investments by perhaps another 200 to 300, not suggesting a high industry concentration in terms of exports.

Table 2: Ownership, employment distribution, and end market destinations of the Myanmar garment sector (2017)

Number	Number of factories, divided by									
of emplo-		Ownersh	ip		End market destination					
yees per	Myan-	Foreign	Joint	Exports		of which:			n/a	Total
factory*	mar	loreign	Venture	Exports	Global	Eastern	Western	stic	II/a	
0-200	81	27	6	45	16	19	10	33	36	114
200-400	34	37	6	60	14	25	21	6	11	77
400-600	15	40	6	52	18	16	18	2	7	61
600-800	5	29	5	34	18	6	10		5	39
800-1,000	8	35	2	43	24	13	6		2	45
1,000-	12	17	2	29	12	7	10	1	1	31
1,200	12	17		27	12	,	10	'	ı	31
1,200-	1	16	1	18	9	8	1			18
1,400	•	10		10	,		•			10
1,400-	2	10	0	8	4	2	2		4	12
1,600	_				•	_	_			
1,600-	4	9	1	12	4	4	4		2	14
1,800										
1,800-	2	5	0	6	2	4			1	7
2,000										
2,000-	1	9	2	11	5	5	1		1	12
3,000										
3,000-	0	4	1	5	3		2			5
4,000										
Total	165	238	32	323	129	109	85	42	70	435
(% of	(38%)	(55%)	(7%)	(74%)	(30%)	(25%)	(20%)	(10%)	(16%)	433
total)										

<sup>\*</sup>The MGMA counts 420 companies as its members, but 435 factories, in as much as 10 of these companies own more than one factory. For the employment distribution data, we used figures at the factory level.

Source: MGMA (2017)

Table 2 shows the employment distribution in relation to the ownership structure and end markets of the Myanmar garment sector in 2017. Domestic-owned factories are generally smaller and are prevalent only in the very small firm cluster (less than 200 employees). That said, the average work force of domestic-owned factories is in fact around 400 employees, thanks to a few domestic large factories with more than 1,000 employees—15 percent of all domestic-owned plants.

Foreign-owned and joint venture firms tend to be much larger than domestic-owned firms, with factories double the size, on average. Of the foreign-owned firms, 33 percent have more than a thousand employees with a maximum size of 4,000 workers. As Table 2 shows, medium-to-large companies (employing more than 400 workers) are foreign-owned in around two thirds of the cases. Table 2 also shows that smaller companies tend to focus on the domestic market, while as the size increases the focus shifts to export, indicating that export-oriented firms, regardless of their ownership, are larger than domestic-oriented companies.

Furthermore, analysing the distribution and the specifications of the garment companies as reported by the MGMA, the size of a company is somewhat correlated to the export market destination.<sup>11</sup> Medium-size exporting companies, with between 400 and 1,000 employees, generally focus on the global market and less on either Western or Eastern markets. Across the larger export companies, on the other hand, end market destinations appear more evenly split between worldwide destinations or solely Eastern or Western markets.

Of the 160 Myanmar-owned garment firms, 82 specified that they export, 39 specified they cater only for the domestic market, and the remaining 39 did not specify a destination market (Table 3). Despite the recent increase in exports to Europe, the main export markets for domestic firms remain Japan and Korea. Out of all domestically owned companies listed by the Myanmar Garment Manufacturers Association, 40 percent export only to markets in Asia. From our interviews, it also emerged that, even when the focus is shifting to Western markets, the order flows are generally still "little" and that Myanmar owners, without the certifications required by European lead firms, such as the Business Social Compliance Initiative (BSCI), struggle to break that particular barrier.

Table 3: Locally owned factories' export destinations (2017)

Export destination of locally owned companies	No. of factories	Share of the total		
Mix of Eastern and Western markets *	27	33%		
Eastern markets only	33	40%		
of which: a mix of Eastern destinations	17	21%		
of which: Japan	9	11%		
of which: Korea	6	7%		
of which: China	1	1%		
Western markets only	18	22%		
of which: Europe	10	12%		
of which: Europe and US	5	6%		
of which: US	3	4%		
A mix of domestic market and export	4	5%		

<sup>\*</sup> Due to the lack of data, we were unable to establish accurate proportions of production for specific export markets and their share, at the firm and sector level. The same holds for the proportion of production allocated to the domestic and export market, when a mix of the two is reported.

Source: MGMA (2017)

<sup>11</sup> Due to the lack of data, we are unable to establish a relationship between EU orders and companies' ownership and size.

Myanmar-owned companies are locked into a particular set of low value-adding assembly processes, not only as a result of deficiencies in their operating environments, but also as a result of deliberate strategies by the transnational agents, acting as coordinators between lead firms and Myanmar manufacturers. Upgrading is limited by different endogenous and exogenous factors, as we detail in section 4.

Locally owned exporting companies all operate on a strict CMP basis. They are thus dependent on transnational agents: they are "captive" suppliers. The Myanmar-owned company has very limited independent decision-making scope, and performs cutting, sewing, and packaging under strict specification and supervision from the transnational actors. As we were told by a Myanmar factory owner: "We are just the tailors."

Their integration into garment value chains triangular manufacturing through Asian networks still limits the possibility for taking over higher value-added functions, as these functions are safeguarded by transnational agents on a regional or global basis. These, mostly mainland Chinese based on our field surveys, have full control of the value chain process, with no incentive to pass on much information to local producers beyond the sample provided to replicate. Supply linkages happen mostly outside of Myanmar, limiting spillover impacts. Any spillovers of information on costing, market trends, etc. from the top-i.e. from the transnational agent or the lead buyer itself-are narrow and restricted in nature, limited to technical know-how and some managerial training

That said, a critical role of the Chinese transnational agents has been to improve skills and know-how of the Myanmar-owned manufacturers they work with in terms of social compliance and the implementation of better working standards. Chinese agents, acting on behalf of Western lead firms, are thus having a positive impact on working conditions and social upgrading on the shop floor. At times, they also help in process upgrading, raising the level of competitiveness of the plant, in a

similar fashion to a foreign investor acting in joint ventures or to foreign-owned companies.

Myanmar owners themselves are greatly aware that they lack knowledge and information about final markets to successfully achieve functional and end market upgrading and create forward linkages. As per our interviews, local owners typically do not have direct contact with the lead firm and have only a few opportunities to access international buyers. These opportunities are usually part of donor development-sponsored programmes (such as SMART Myanmar or programme by the Centre for the Promotion of Imports (CBI) from developing countries, for instance). It is difficult for local owners to secure long-term relationships with end market firms, as they are not embedded in their clients' networks and lack the necessary capability, like sourcing or marketing departments.

Limited knowledge about input sourcing—resulting from total dependence on the transnational agent—is another obstacle to upgrading. From our field work, we were told that none of the people involved have a say on input sourcing decisions—this holds for joint venture companies too, while it is less of an issue for bigger foreign-owned companies.

Joint venture and foreign-owned companies face less stringent limitations to upgrading than their domestic competitors. However, the opportunities for the indigenous workforce and knowledge spillovers vary significantly among joint venture or foreign-owned factories. Anecdotal evidence from our interviews highlighted cases of local employees being in a similar "captive" state as in domestic-owned factories. In other cases, knowledge spillovers are wider in range, with the transnational actor or the foreign investor exerting a less tight grip than in wholly Myanmar-owned companies. There are examples where the foreign investor plays an active role on the shop floor leading to process and functional upgrading, via implementing more efficient layout or providing Myanmar workers training to advance to line operators, line supervisors, middle and top managers. We have witnessed

this first hand in a number of Chinese joint venture companies.

At the other end of the spectrum, we visited one of the top factories currently operating in Myanmar. The latter de facto operates on a FOB basis, able to leverage its different operations in neighbouring countries: a case of deep regional embeddedness. The factory visited is regarded to be within the top five percent in terms of policies and practising an extensive level of embeddedness in the local community via in-house training well beyond the actual requirements of the job. 12 In terms of technology and efficiency, the factory is considered to be in the top 10 percent range. The capital stock is new and well above the average across the sector. Use of automation is extensive compared to other factories visited and a constant effort and investment is made in process and functional upgrading.13 The management is keen to adhere to top international standards and the factory is currently on track to obtain the top ISO certificate to best cater to the US and European markets. The company is also at the forefront in terms of waste management, again, well ahead of current standards in Myanmar.

The foreign element, be it an expat workforce and/or investors, introduces an extra level of complexity due to communication and cultural issues. Hany firms in Myanmar have foreign managers, mostly to bring in technical experience. There are reports of fairly frequent communication difficulties between foreign management and domestic workers. During our interviews, it was suggested that a foreign-based company would benefit from "a very strong local HR head" who can break

down barriers. However, the lack of capable local top management, as we discuss below, is a serious weakness of the Myanmar garment industry.

There is also some evidence that foreign technicians are protective of their knowledge and, if they aim to keep working in Myanmar, they can be reluctant to share it with the local workforce, hampering indigenous capacity building and limiting the spillovers of knowledge.

On the other hand, there are cases, as in two of the factories we visited, a fully Myanmarowned and a joint venture, where there is a clear strategy for the foreign management and investment to be temporary.<sup>15</sup> There, the local management and ownership focus on leveraging the expats' knowledge for a defined period of time and then run the company on their own.

Cultural differences are common in the work environment, and this makes it even more important to develop domestic managers who can manage firms but also have a good understanding of the cultural context. However, to date, this issue has not been specifically pursued by the different programmes aimed at assisting the garment sector.

In summary, as Morris and Staritz (2014) note, differentiating ownership of supplier firms can show how they are linked to global production and distribution networks and the extent to which firms are locally or regionally embedded. In Myanmar, the relatively high percentage of locally owned exporting companies, together with joint ventures, points to a relatively high

<sup>12</sup> General health and safety training courses, as well as basic family finance training courses, are made available to all the workforce.

<sup>13</sup> The company, for instance, is investing in a one-year project to introduce bar coding and top monitoring systems within the production process. They are working with local companies on its implementation, allowing a high degree of skill spillovers and local embeddedness.

<sup>14</sup> A few of our interviewees, however, mentioned communications difficulties not only between local and foreign staff but also tensions within the Myanmar workforce of different ethnic backgrounds.

<sup>15</sup> Due to lack of data, we were unable to establish any correlation between the strategy of having a temporary presence of expats and ownership or end market destination.

level of local embeddedness, with a fair share of companies with roots in the social and economic fabric of the country, part of local economic and social networks.

Local linkages are also evident in some forms of subcontracting. During our interviews, subcontracting was described as an option, when orders are too large, although mostly on the condition that the buyer or transnational agent should be notified and/or approve the subcontract. There is some evidence of illegal subcontracting too, of orders placed by foreign buyers with their regular suppliers who then subcontract production to other production facilities where there is less oversight. Moreover, the lack of a clear certification of subcontracts creates a grey area where this practice is able to exist. Yet subcontracting also allows for a certain level of embeddedness within the local community and spillovers of knowledge.

On the other hand, borrowing from Hess (2004), we found that local owners have so far not been able to achieve a high degree of "network embeddedness [...] regarded as the product of a process of trust building between network agents." Local owners are often "captive" suppliers of transnational agents who govern the relationships with lead firms and international buyers and suppliers of raw material, displaying very little forward and backward linkages.

### 3.3 Cut-Make-Package: The Dominant Pricing Model

As noted, the Myanmar garment exporting value chain follows a quintessential triangular business model and mostly operates on a CMP basis. A tax exemption for CMP production strongly favours it over FOB, which does not receive such tax exemption. Accordingly, none of the 420 companies that were members of the MGMA in 2017 have categorised themselves as FOB, a distortion created by the local tax system.

That said, the predominance of the CMP model is also due to other factors, among them the strategies of international lead firms and transnational agents or coordinators. As in other garment-producing LDCs, foreign-owned firms prefer to perform CMP functions in LDCs countries, as higher value-added functions, such as design, branding, or sales, are located in their head-quarters.

The CMP pricing model means that Myanmar factories only retain a small proportion of the actual value of the good produced. Poor value retention is exacerbated by the industry importing all inputs used in manufacturing from overseas, such as zips, buttons, trims, fabric, and thread. This is due to the poor quality of local inputs and the inferior quality of the fabric produced in Myanmar which does not adhere to export standards or tastes. As of now, we have not found any backward linkages in Myanmar.<sup>16</sup>

From a policy perspective, however, it is worth noting that backward integration is time and capital intensive; it may be accomplished over many years, with a low potential for short-term impact. Moreover, it may not be a practical commercial option for Myanmar, which imports most of its input. Indeed, backward integration is limited by the sheer economies of scale enjoyed by regional competitors such as China, from where the quasi-totality of input is coming from. Backward integration of the Myanmar industry is possible, but it faces a number of significant obstacles to which the government and any potential investor must give serious consideration.

There are some exceptions to CMP, though. We found that some exporting firms, usually large companies, either wholly foreign-owned or operating through joint ventures with branches outside of Myanmar, are de facto pursuing a FOB production modality, albeit, for tax reasons, they are registered as CMP with the relevant local authorities. They have the

<sup>16</sup> On backward linkages, our interviews reported only one Chinese foreign investor registered by the Myanmar Investment Commission as having a spinning and dyeing mill, likely serving, among others, the Chinese investor's second investment, a factory in central Myanmar called "Magic Link", registered as a textile factory.

capacity to operate on an FOB basis thanks to their regional embeddedness and linkages, optimising their dispersed production and distribution network. These firms are "local industry leaders" in terms of machinery, production quality, management, and labour conditions, as confirmed by our field work.

Furthermore, our interviews show that the local companies focusing solely on the domestic market (around 10 percent of the companies for which a destination market is specified) are operating on a de facto FOB or OBM basis.

### 3.4 The Minimum Wage Law and Productivity

Following two years of negotiations, the Minimum Wage Law came into force in June 2015, setting the bar at 3,600 MMK per day (2.7 US\$) or US\$80 per month. The law also stipulates a biannual reassessment of the minimum wage. The Ministry of Labour already announced that an increase is in the pipeline, even if just to compensate for inflation. However, at the time of writing, further details are lacking.

From our interviews, an employee's monthly salary is usually made up of a combination of the minimum wage (MMK 108,000 or US\$80) and overtime (approx. MMK 45,000 or US\$33), totalling 153,000 MMK a month (US\$112), plus a mix of performance and "loyalty" related bonuses. The monthly salary for a line operator ranges from 160,000 MMK (US\$117) for a grade C operator/trainee to 230,000 MMK (US\$169) for a grade A line operator. Supervisors' wages range from 240,000 MMK to 400,000 MMK (US\$175-293).

It is worth noting that these salary levels are well above the strict monthly minimum wage, fixed by law at US\$80. This is true even taking into account the actual working hours

allowed by law.<sup>17</sup> With a maximum of two hours of overtime a day and the remuneration of overtime at double the hourly rate, as set by Myanmar law, workers should normally earn 5,400 MMK a day (US\$4). Including payment for one day off a week, a "minimum" monthly wage, including overtime, should be slightly below US\$120, according to the law.

Focusing on minimum wages across the region and its competitors, Myanmar's cost/price advantages remain clear, when compared to China, Cambodia, and Vietnam, where wages are higher (Figure 1)—even accounting for a hypothetic future increase of the minimum wage.

However, we were clearly told by foreign investors, government officials and NGOs, that low wages do not fully make up for longer lead time due to poor infrastructure, higher costs for sourcing input (which also contributes to longer lead times), and, more importantly, low productivity. During our field work, poor levels of efficiency on the shop floor have been unanimously reported as a significant problem, regardless of factory ownership and end market destination. And, away from the Yangon industrial district, in places such as the new Thilawa Special Economic Zone, for example, the issue of lower productivity is even made more acute by the difficulty to find of experienced workers.

Based on anecdotal information from our field work, we found that reject rates at the end of the production line and rework rates can be astonishingly high. Process upgrading is leading to higher efficiency and lower reject and rework rates. However, during our interviews it was noted that, when changing a style, adaptation time is longer than in other countries: workers take a longer time to learn the new style than elsewhere.

<sup>17</sup> The Factories Act of 1951, amended in 2016 sets the following rules on working times: the cap for standard working hours is set at eight hours per day and 44 hours per week; a 30-minutes' break every five hours; the maximum working time is set at ten hours a day; working days should not exceed six days per week and workers should be granted one holiday each week; overtime (in excess of the 44 regular working hours) must not exceed 16 hours, so that the working week does not exceed 60 hours. That said, as we highlight below, other studies have highlighted widespread unpaid overtime.

235 China\* Cambodia 140 Vietnam\* 131 80 Myanmar Bangladesh 67 US\$ 0 50 100 150 200 250

Figure 1: Minimum wage in main Asian garment manufacturers (monthly average, 2013/16, US\$)

\*National average figures. In China, given the size and diversity of the economy, different minimum wages apply: the lowest minimum wage is in Guangxi while the highest in Shanghai. In Vietnam, the government sets four regions for which different minimum wages apply.

Note: Bangladesh: 2013 data; Myanmar: 2015 data; Cambodia and Vietnam: 2016 data; China: 2015 and 2016 data, depending on regions.

Source: Philippine Department of Labour and Employment, <a href="httml"><u>www.nwpc.dole.gov.ph/pages/statistics/stat\_comparative.</u></a>

Unfortunately, we lack reliable data sets for reject rates at the firm and sector level. Generally, these rates appear to be lower at larger, mostly foreign-owned firms with effective quality control and quality assurance systems. At one of such factory visited, we were told that reject rates had been as high as 30 percent at the beginning. After two years of constant training and investment, reject rates had fallen to three percent. In other conversations with factories' owners and managers, reject rates

of around three percent were reported as the norm. However, anecdotal evidence from our interviews points to generally higher rates. Measurement methods are also problematic, to the extent that they often do not adhere to international standards.

Local owners lament the quality of their intellectual capital and the level of know-how versus foreign investment enterprises, as factors hampering productivity too.

#### 4. DIFFERENT UPGRADING OPPORTUNITIES

"The lead firm has a significant impact on the shop floor." <sup>118</sup>

Two factors determine the economic and social upgrading opportunities or limitations facing firms in Myanmar's exporting value chain: end markets and ownership. From a sustainability point of view, they also relate to different levels of implementation and adherence to sustainable development goals, in particular to SDG 8, on workers' rights, decent working conditions, and living wages.

#### 4.1 Economic Upgrading

Our field work identified that ownership type (locally owned, joint venture, or foreign-owned) is a powerful indicator of the opportunities for economic upgrading, and particularly functional upgrading (from CMP to FOB), as well as process and product upgrading in the value chain for manufacturing firms and their workers. Locally owned firms find it most difficult to acquire new upgrading opportunities, to learn about end markets and inputs, and to access the financial resources and support to move from CMP to FOB.

Product upgrading. There is a common view that Myanmar's export presence during the past decade in the Japanese and Korean markets, with their high emphasis on quality, has contributed to significant improvements in production capabilities in the country. The key categories exported are down jackets and outerwear, trousers, shirts (knit and woven), workwear, hoodies and sweatshirts, and lingerie. We were told cashmere products are also making an appearance in Myanmar, evidence that some product upgrading is under way. We found that only a few factories exclusively produce the most basic range of garment products.

We found that firms that manufacture for Japanese and Korean markets produce a higher value-added and complex product range which requires higher skills. The additional skills appear to be correlated to the higher degree of quality control exerted by Japanese buyers. One factory visited, for instance, mentioned that while for the Japanese the quality control requirements are "very strict," European buyers are "more flexible: they accept seven major faults and seven minor faults for each 100 garments."<sup>19</sup>

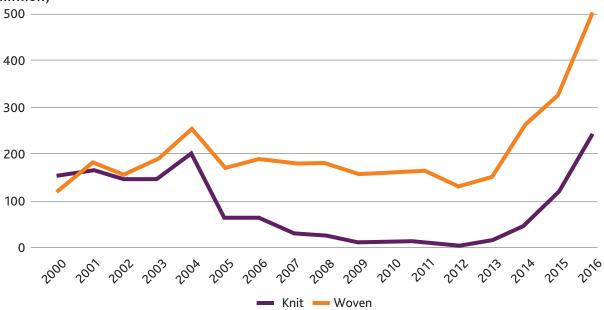
Firms selling to the European market generally focus on relatively less complex products and the focus on quality control is not as tight as for Japanese orders. Anecdotal evidence shows that Europeans buyers are favouring Myanmar, attracted by its long history of producing garments and the high-quality legacy of the Japanese and Koreans. This was confirmed by a former H&M executive and by recent reports, such as SOMO (2017). Garment workers are trained to produce a consistently high quality of workmanship that can easily comply with the quality levels of high-end EU buyers. This is particularly true for outerwear jackets produced for the European market.

Another example of product upgrading and of a certain degree of flexibility of the Myanmar garment sector, is the return of knit garment production, as the focus shifts from Japanese and Korean markets to European and US markets. The knit garment requires a different set of skills and different machines or configurations are used. Three of the factories visited thought that skills upgrading was not an issue, in as much as knit-related skills are viewed as easy to acquire, as somewhat "interchangeable" with woven-related skills, as stated by one of the mangers interviewed. The recent expansion of knit products, alongside woven products, creates new opportunities to develop multiple skills.

<sup>18</sup> Interview on 23 May 2017 with international NGO.

<sup>19</sup> Interview with Myanmar factory owner on 16 June 2017.

Figure 2: Myanmar garment exports to the EU: knit versus woven products (2000-16, US\$ million)



Source: Eurostat

Process upgrading. The focus on quality control by Japanese buyers goes hand in hand with longer production processes, as additional steps are required. Three of the factories visited, for instance, mentioned the need for needles-checking using metal detectors to pass the buyer's quality control tests. Furthermore, attention to detail at all stages of the manufacturing process makes for less repetition of functions and greater interaction among workers at the different stages, also promoting learning via interaction.

On rework rates, SMART Myanmar reports they can be as high as 30 percent. In a 2015 report, SMART Myanmar showed that in six of the 10 factories cited, following a series of improvements adopted under their guidance, rework rates dropped significantly, depending upon the type of improvement measures adopted, and resulted in enhanced overall productivity. Due to bad management and/or control systems, factories accept high rework rates as a fact of manufacturing. SMART Myanmar helped to change that management culture in these case studies and achieved

significant results, which could be replicated elsewhere.

Furthermore, anecdotal evidence shows that European buyers, as opposed to Japanese buyers, are looking for shorter runs, quicker response, and larger batches. The focus on shorter lead time is forcing Myanmar manufacturing firms to process upgrade to achieve greater efficiency levels. This is, however, proving difficult. Overall production time in Myanmar still ranges from between six to eight weeks, 20 implying that manufacturers are currently unable to support the requirements of "fast fashion" which demands a guaranteed delivery time of four to five weeks. This is often reported as a barrier by retailers, such as H&M, who are increasingly relying upon just-in-time purchasing and are keeping the risks related to long-term purchasing down to a minimum, as far as they can.

Myanmar's poor infrastructures is also contributing to long logistic times. Timesensitive buyers, such as Adidas or Hugo Boss, may source some orders in Myanmar only

<sup>20</sup> During our field work, we were often told that production time is around four weeks. Import and delivery of raw materials usually takes on average twenty-one days, compared with other countries such as Vietnam where lead time is seven days.

when air freight is involved, because shipping to/from Myanmar takes too long. Speed, for European lead firms, is increasingly of the essence.

Japanese and Koreans buyers are less stringent on lead time, also because they benefit from closer geographical proximity compared buyers in Europe or America. The latter has the longest lead time, and the lowest level of "proximity sourcing."

Functional upgrading. EU buyers are also expecting suppliers to contribute to design and product development, a push towards the FOB modus operandi. Moving from CMP to FOB is key to fully exploiting the potential of the European market. We found that these buyers are bringing significant changes, from the product mix in Myanmar, to greater efficiency to match shorter lead time orders, to the focus on additional functions to be added to CMP operations. These have positive impacts on upgrading with regard to processes, quality, skills, and products.

This is less the case with US buyers, who nominate specific fabric and input suppliers and are generally less interested in supplier designs, generating fewer functional upgrading opportunities for Myanmar than European buyers. Also, US orders tend to be larger in volume, but of simpler products. While beneficial for short term employment, such requirements do not usually facilitate upgrading and, as such, would need to be coupled with carefully planned economic policies towards upgrading.

At the time of writing, though, the importance of the US market remains marginal, with a share of Myanmar's garment exports of only four percent in July 2016 (based on data from Myanmar's Central Statistical Organization, or CSO). Only three companies out of the 309 exporting companies that are members of the MGMA export just to the US and five companies to both the US and Europe. As such, the impact of US lead firms is so far still unclear, but it is worth monitoring in the future, as orders from the US grow.

To summarise, we found that end market destinations matter for upgrading opportunities. At the time of writing, we believe EU markets facilitate such opportunities the most, pushing for product and process upgrading on the ground more than other end markets. Japanese and Koreans buyers, due to their longer history, appear to be satisfied with Myanmar's current standards and cheap production, not seeking much further innovation. As for the US market, extrapolating from trends elsewhere, US orders of larger but simpler products would not be ideal to maximise upgrading chances in Myanmar.

### 4.2 Social Upgrading and Sustainable Development Goals

Our research has identified that the end market destination of the exporting value chains, whether EU/US or Japan/Korea, has a direct impact on the upgrading potential within the chain, and particularly on social upgrading and working conditions.

Japanese/Korean buyers care mostly for "quality" and "neatness," and less for social compliance (child labour, overtime, or training, for instance) than their European and American counterparts. In spite of the differences in their requirements just noted in section 3.1, European and American brands, such as H&M, C&A, Adidas, Gap Inc., Marks & Spencer, Primark, tend to expect higher working condition standards and a higher level of social and environmental compliance than their Eastern counterparts.

Employment. The first socio-economic impact of the growth of the garment industry in Myanmar has been on employment, directly speaking to the first of the seventeen sustainable development goals: "no poverty". The growth of the industry implies that a substantial number of people, especially women, have found industrial salaried employment.

**Gender.** Entry into garment global value chains generally has a positive impact on female

employment, providing an important step towards economic independence. Women's employment in the export-oriented garment industry has narrowed the gender gap in many spheres, achieving important steps towards the success of SDG 5: "achieve gender equality and empower all women and girls". There is an opportunity for gender issues and female empowerment to become part of the sector's competitive advantage if factory owners, lead buyers, civil society, donor development projects, and government collaborate on this. A number of existing donor development initiatives could be harnessed for this, such as SMART Myanmar (EU), Pyoe Pin (UK implemented by PriceWaterhouseCoopers), the Centre for the Promotion of Imports or CBI (Netherlands), the Foreign Trade Association of German Retail Trade (AVE), and the German Corporation for International Cooperation (GIZ).

Despite this largely positive dynamic, problems remain, in particular the gender wage gap, where women are paid less than men for doing the same work. This is a wellknown issue not only in Myanmar and other LDCs, but across the world. That said, our field work revealed a low degree of concern about gender inequality as exemplified in wage gaps. In Myanmar, the percentage of women working in the garment sector is particularly high, with a female presence all the way to management positions, in contrast to women's conditions in other countries.<sup>21</sup> From our surveys, women employed in the garment sector seemed to be more concerned about the absolute level of compensation and a decent working environment (SDG 8).

Working conditions. We interviewed eighteen workers from three separate Korean and Japanese companies away from their work premises as we were not given access to them there without a manager being present. They described vulnerable labour arrangements, child labour, lack of training, excessive overtime, poor working conditions, poor health and safety, as well as flouting of the country's new minimum wage.

Our interviewees reported cases of continuous use and abuse of the apprenticeship period, for instance, "rolling over" apprenticeship contracts rather than replacing them with standard contracts, as required by law.<sup>22</sup>

Our interviews also draw attention to the low reputation of companies owned by Asian investors and focusing on the Asian markets. The report "Under Pressure" by Action Labour Right (2016), which focuses on Korean companies, reports significant non-compliance issues on the part of many Korean-owned factories, particularly on working hours and overtime. Almost 30 percent of the factories surveyed failed to abide by the maximum 16 hours weekly overtime limit. Nearly two thirds of workers surveyed (62 percent) reported being unable to refuse working excessive hours. The report also showed cases of compensation illegality, general poor health and safety conditions, and discrimination against trade union leaders and activists.

This does not mean that all firms selling to European and American buyers have perfect social compliance standards. A recent study by SOMO (2017), for instance, bases it findings on interviews with companies, both Myanmar

<sup>21</sup> Morris et al. 2016 stress how in Lesotho, for instance, men occupy the majority of lower management positions, with hardly any women climbing the income ladder. In Bangladesh, the female workforce represents 56 percent of the total garment sector workforce, reflecting the wider challenge of low female participation in the overall economy (ILO 2017). In Myanmar, however, women comprise around 91 percent of the garment workforce (ILO Labour Force Survey 2015). As such, worker empowerment means women's empowerment.

<sup>22</sup> For newly hired employees, the Minimum Wage Law allows workers to be employed as apprentices for the first three months. During the apprenticeship period, employers may pay 50 percent of the minimum wage (1,800 MMK a day or US\$1.3). After the apprenticeship period, employers may hire workers on a probation period for another three months while paying them 75 percent of the minimum wage (2,700 MMK a day or US\$2).

and foreign-owned, who only supply European lead firms. Among their main findings are the abuse of the minimum wage law, excessive or unpaid overtime, limits to the freedom of association, and extensive use of "daily labour."

Yet anecdotal evidence shows that, in some cases, European or American lead firms tend to push for better working conditions. To have access to European and US brands, certifications, such as the Business Social Compliance Initiative (BSCI), are often necessary. The BSCI is a European social monitoring system for ethical sourcing, based on ILO labour standards. It supports the continuous improvement of the social performance of suppliers, covering thirteen performance areas, such as working hours, compensation, child and forced labour, and health and safety. The BSCI also requires a strict and independent third-party checking system that is also pushing for better implementation of the laws.

This was also corroborated by our factory visits, where employees reported relatively better salaries, good standards of cleanliness, appropriate canteen and toilet facilities, the presence of health centres, and health and safety training. In one factory visited, changes of layout to achieve better efficiency but also to improve working conditions were driven by the BSCI requirements. In another one of the factories, the manager is working to achieve the highest level of ISO certification, further promoting better and safer working conditions, that "will open huge opportunities in the US market."

The US government's responsible investment report requirement is another example. Since US companies were allowed to re-enter Myanmar in 2013, those investing more than US\$500,000 were requested to submit annual "responsible investment reports" detailing

information about their investment with "respect to human rights, workers' rights, environmental stewardship, land acquisition, and other key areas for human rights due diligence in the Burma context."<sup>23</sup> From mid-2016, the requirements were modified, and reporting is now compulsory only for US companies investing in the oil and gas sector or for those investing more than US\$5 million.

Garment sector experts notice that social upgrading has been significant in the last five years or so across the board, with players in the garment sector reporting improved working conditions and better adherence to SDG 8. Labour protests may have played a role too. Following the reforms undertaken by the 2011 government of President U Thein Sein, Myanmar experienced a significant growth in labour protests across the country.

The Research Department of the Ministry of Labour reported 447 workers' demonstrations at garment factories between 2012 and 2014. Workers seek better wages, an end to the use of forced overtime, improvements in health and safety, and recognition of their rights to collective bargaining and freedom of association. Recently, labour protests have been less frequent. It might be attributable to improved working conditions, an improved legal and policy framework, and/or an increased number of buyers entering the market with a focus on ethical sourcing.

Living conditions. The highly competitive garment value chain is a principal source of economic growth, wealth, and jobs, but it does not automatically lead to an improvement in living conditions. The different positioning of a company within a value chain can reinforce or undermine sustainable development goals. As we found in Myanmar, different ownership structures and end market destinations have a significant impact on the opportunities to improve working conditions and reach

<sup>23</sup> For example, since entering Myanmar in 2014, GAP Inc, the first US garment brand sourcing in Myanmar, has filed disclosures about its business with the US State Department, even though the company was not required to do so because it is not directly investing in the country.

sustainable growth, with different trajectories towards the reaching targets of SDG 8, for instance.

Better conditions *inside* factories, however, do not go hand in hand with better conditions *outside* factories. Actually, anecdotal evidence suggests the opposite. Urbanisation is going hand in hand with industrialisation. And like industrialisation, urbanisation is generating its own set of issues that needs to be addressed for a sustainable growth of the garment sector and of the whole economy.

The share of people living in urban centres in Myanmar was 35 percent in 2016, three points higher than the average of least developed countries, but well below the average of lowand medium-income economies, which stands at 49 percent (World Bank). On the back of the "explosion" of the Yangon suburbs, where most of the garment factories are located, living conditions for garment factories' workers are generally poor. The World Bank ranks Myanmar number 145 (out of 188 countries) for human development.<sup>24</sup>

Housing for the thousands of factories' employees is problematic and is becoming expensive. Infrastructure is not adequate and transport to and from the work place is becoming difficult for workers. In turn, as highlighted by our interviews with workers, security concerns are rising significantly. There has been an increase in the number of crimes. New areas around Yangon expanded at such a rapid pace that the police and security forces have not been able to cope with such growth: "Areas around these factories are not safe during night time, for women and for men too." <sup>25</sup>

#### 4.3 Opportunities to Upgrade

The opportunities that Myanmar offers are reflected in the motivations expressed to us by suppliers, investors, and buyers' agents.

Motivation for entry into this market is driven primarily by the three following factors:

- 1. preferential market access trade policy after the removal of sanctions, 26
- large swathes of low wage unskilled labour to support the growing garment exports to European and US markets, as well as
- the lead buyer's desire for diversification and mitigation against social and political risk in countries such as Bangladesh and the opportunities to grow in the medium to long term.<sup>27</sup>

For Japanese buyers, their continued and growing presence in the country is due to the higher skills they have developed in the factories they source from and/or own.

We also believe that Myanmar's potential lies in its ability and willingness to absorb information and inputs on sustainable investment and social upgrading. There is a huge appetite in the country, unique in the region and due to its activist legacy and history, for adopting changes and for ameliorating factory conditions.

Following the reforms in 2011, there has been an exponential increase in interest in sustainable growth. There has also been a significant inflow of young and foreign-educated and -supported activists and labour representatives, who are helping to achieve important social upgrading

<sup>24</sup> As defined by the World Bank, the Human Development Index, HDI, is "a composite index measuring average achievement in three basic dimensions of human development: long and healthy life, knowledge and a decent standard of living."

<sup>25</sup> Interview with labour representative on 29 March 2017.

<sup>26</sup> In our interview with a leading Hong Kong investor, for instance, we were told that, thanks to Canadian GSP's tariff for Myanmar goods, cashmere garments produced there are 18 percent cheaper than a similar good produced in China.

<sup>27</sup> Other than Bangladesh, other neighbouring producing countries, such as Cambodia, have also showed signs of social unrest, with increased labour disputes and a shortage of labour often reported as an obstacle to growth.

goals. Given current times and the rising level of international scrutiny, this unique civil society richness should be turned into one of the Myanmar competitive advantages, through dialogue, training, and education, for a better inclusiveness of its efforts to become more sustainable in the production process.

However, such activism is also exacerbating industrial relations. Officials and representatives of the government and labour institutions lament a lack of "responsible" actions by labour activists, at times too politicised and focused on international recognition, through sensationalising the

struggle of workers versus the factories' owners.

Overall, the opportunities are clear, and there is no doubt that, if the country can move from CMP, the industry would be able to capture greater rents along the value chain. Yet this is not as straightforward as the government assumes it will be, given the challenges identified in terms of financing, skills, lack of management capability, worker productivity and efficiency issues, high labour turnover in firms which is detrimental to skills capacity building, poor hard and soft infrastructure, and lack of domestically produced inputs.

#### 5. CHALLENGES TO UPGRADING

During our interviews with those involved in f the garment sector and institutional players, the following were mentioned as the main challenges that hold back the sector from product and process upgrading and stop a move to FOB. We found that these obstacles disproportionally affect Myanmar-owned firms, and they are:

- shortage of skilled middle and top management,
- 2. lack of technical know-how,
- 3. a poor financial infrastructure,
- 4. limited capital investment capacity, and
- 5. low levels of workers' efficiency.

Skills challenges. Skills challenges, such as the shortage of capable local middle and top management, have been reported as one of the key obstacles to upgrading—both by local and foreign players. Most of the garment sector's employees are young women, migrating from rural areas, largely untrained and unskilled, despite the pockets of skilled labour within factories that survived the military era and the downturn of the last decade.

Lack of management and HR skills is particularly a problem for line leaders and supervisors. These positions play a crucial role in determining the factories' productivity levels, worker relations, potential for upgrading, and service performance. Managers and supervisors determine the efficiency of the cutting room, sewing operations, quality control, finishing, packaging, and logistics. When an order is late, or a product is not made to specification, or fabric is wanted, it is the management that intervenes to meet targets, ensure delivery, and achieve profitability.

From our surveys, the majority of supervisors and middle to top management are local, particularly in Myanmar-owned companies, where expats are less present, because of tighter financial constraints and poorer understanding of production concepts such as "management" or "productivity." For these workers, there is no formal training, but a continued heavy emphasis on on-thejob training carried out by their supervisors/ managers to address the skills gaps. As such, the level of education is basic; there is no technical or vocational education or training or relevant universities. 28 And what is provided by third parties, such as the MGMA or international non-governmental organisations (NGOs), is often regarded as marginal in face of the needs.

Furthermore, under the military regimes and particularly since 1988, Myanmar has been closed off from exchanges with the international community. The autarkic regime that followed produced a "cultural and managerial impoverishment," due to significant emigration flows because of political persecutions and economic reasons (Brighi 2017).

As of now, there is no evidence of highly skilled expat Myanmar workers returning home, attracted by better conditions than in neighbouring countries, although the MGMA is expecting a migrating workforce, mainly from Thailand, to come back into the country. There is also no evidence of employees in Myanmar quitting to set up independent firms, a crucial mechanism in the evolution of the industry elsewhere.

Lack of technical know-how. Another endogenous limitation is the lack of technical know-how, especially with regard to the wholly Myanmar-owned factories, who are completely

<sup>28</sup> Myanmar ranks 109 in the Human Capital Index (HCI) out of 130 countries and below its main competitors, and only five percent of the population has tertiary education. The HCI ranks countries on how well they are developing and deploying their talent, <a href="http://reports.weforum.org/human-capital-report-2016/files/2016/06/MYA.pdf">http://reports.weforum.org/human-capital-report-2016/files/2016/06/MYA.pdf</a>

dependent on transnational actors. At times, the latter provide some embedded training, by sending over their experts, to oversee production until completion of the order and to provide training. This has been beneficial for basic process upgrading and skills development. In two firms we have visited, for instance, a better shop floor layout was carried out based on agents' suggestions.

To circumvent the lack of local experts, foreign expat workers often get involved. From our interviews, expats are usually Chinese technicians, who are also involved in regular training of the Myanmar workforce, allowing for a certain degree of knowledge spillovers. Indeed, expat top management positions tend to be more technically oriented, while the local ones focus on management and HR duties. The salary range for foreign experts versus Myanmar experts is about 3:1, which often makes it unaffordable for wholly owned Myanmar companies to employ the former. Consequently, in these companies skills upgrading is limited, with a significant impact on their long-term upgrading trajectory.

A silver lining, though, is the significant Japanese investors' long-term presence in the sector and legacy. The government should value and nourish this legacy and work to extend its reach from the few factories in which it exists and not to dilute it now that the sector is growing exponentially.

Beyond some specific technical knowledge transfers, in terms of sewing machine tuning techniques, for instance, the Japanese have instilled in Myanmar factory managers respect for product quality, a feature that should be exploited further. They also passed on respect for the 5S production approach, making for an important example of process upgrading, although implementation has not always been successful. Variety in success in its

implementation was often due to leadership and management commitment and follow through.

Poor financial infrastructure. Our and previous research such as BIF Burma (2016) found that Myanmar's poor and underdeveloped financial infrastructure is a significant constraint for conducting FOB business and for economic upgrading and growth, more generally, in particular for local company owners. We were given several examples.

Lack of adequate financial instruments was often quoted as hampering their opportunities to upgrade, as much as basic business functioning. During our interviews, those involved in the Myanmar garment sector expressed a great degree of frustration about their inability to access proper financing instruments.

For example, during our interviews access to finance was referred to as the main obstacle to upgrading and acquiring the necessary certifications to cater for the European market.<sup>29</sup> Back-to-back letters of credit, a key element for FOB, are also non-existent in the country, making it very difficult for functional upgrading to take place.

The interest rate levied by the banks for local companies is on average around 13 percent, while for joint ventures and foreign-owned companies, international banks are able to provide competitive rates at six percent. National banks do not offer financing to local garment companies to conduct FOB business and in turn do not understand the garment industry's need. They do not have the knowhow, the capability, and instruments to support upgrading the sector as their understanding of GVCs is limited. It is widely believed that banks in Myanmar cannot cope with the growing demand for capital from established businesses and start-ups alike.

<sup>29</sup> We were told by one of the manager visited that an extra investment of around 200 million MMK (US\$150,000) was necessary to be BSCI (Business Social Compliance Initiative) compliant.

That said, even the new banking entrants into the Myanmar market are struggling to bring funds into the country due to outdated local legislation and to banking embargoes still in place by major international reputable banks.<sup>30</sup>

Low capacity for new capital investment. Another key endogenous obstacle to economic upgrading, again disproportionally hindering local companies is new capital investment. This is more limited in fully Myanmar-owned factories as compared to joint venture companies, and of course compared to the new foreign-owned companies. Machines in locally owned company in particular, are generally old and of basic to medium level of technology. One of the interviewees noted that process upgrading happens on the back of an increase in the number of machines and production lines, rather than introducing superior technology.

Due to this, there has been an inability on the side of the local owners, in particular, to reduce costs and improve flexibility by improving their production methods, unlike other ownership structures. We found that this inability to reduce costs, particularly in firms selling only to Japanese and Korean markets, who are mostly locally owned and as such also more financially constrained, meant that when the minimum wage was introduced, raising overall compensation expenses, factory owners did all they could to squeeze their workers. A recent report states that over half of the workers interviewed reported negative impacts of the Minimum Wage Law, including stricter working conditions, greater pressure to complete orders, and the loss of other benefits and incentives (Progressive Voice 2016).

efficiency Low workers' levels and motivational issues. One Chinese and two European buyers have repeated to us that the benchmark for Myanmar is Bangladesh, where the minimum wage is lower, there is still remaining capacity to be used, and the garment sector is more efficiently vertically integrated. Furthermore, the Bangladeshi government is very supportive of the sector and focused in keeping costs of production low, to maintain its competitive edge. We were often told that in Myanmar productivity is 30 to 40 percent lower than in Bangladesh.

As highlighted throughout this case study, we found several factors feeding into the poor productivity issue. Among these, there is lack of training for workers at all levels, a weak legal and financial framework, serious implementation problems, and poor hard and soft infrastructure.

Finally, there are some human aspects to be considered that also curb workers efficiency: the lack of knowledge about concepts like "productivity" by local middle and top management, the high turnover of the workforce, language and communication difficulties that at times slow the transmission of knowledge, and, quite uniquely to Myanmar, a motivational issue. Anecdotal evidence shows that performance bonuses have not motivated workers. The industry is in search of a "new model" for Myanmar as financial incentive models used elsewhere are proving unsuccessful.<sup>31</sup>

<sup>30</sup> According to the rules of the Myanmar Central Bank, basic capital of at least 20 billion MMK (US\$14 million) is required to establish a local bank, but at least US\$75 million is required to set up a foreign bank branch, of which US\$40 million should be deposited at the Central Bank. So far, thirteen foreign bank branches have been allowed to operate in Myanmar. These, for instance, are only allowed to set up joint ventures with domestic banks or to open accounts only for foreign investments and operational transactions. They are not allowed to offer financial services directly to local businesses.

<sup>31</sup> The view of management can be summarised by one owner: "[Myanmar people] are not greedy and don't care to earn a bit more money. This is ok but it is a problem for efficiency. At the end, we still need to compete against China and Bangladesh."

The combination of weakness of management skills, poor productivity, and the inability to incentivise and motivate the workforce with performance pay is a major problem. This latter issue, of how to "incentivise" the Myanmar workers as they reject performance-based approaches, is something investors and transnational actors we have interviewed find very difficult. It is also a very peculiar feature of Myanmar that they have not come across with such intensity anywhere else.

There is a growing sense that all of these challenges, and the related frustrations, are beginning to take some of the shine off this "rising star" for some of the companies. That said, in our interviews Chinese investors take a more positive "long-term" view of the country,<sup>32</sup> as they believe that Myanmar will deliver on its "promise" in a few years,

once better infrastructure is in place, such as ports, and when the Bangladesh-China-India-Myanmar (BCIM) Corridor will be built.

Overcoming these challenges requires a sector-specific industrial policy rooted in value chain analysis to strategically identify opportunities for continued upgrading, sustainable development, and employment creation. The government's capability and support will be critical to maximising the learning opportunities along the chain, and to aggressively and proactively avoiding being locked into a low-wage assembling destination by the governance strategy of lead buyers and the strategic choices made by the parent companies of the foreign-owned plants. To date, however, the government's capacity, awareness, and policies for this sector have been unable to overcome these challenges.

<sup>32</sup> A Chinese investor believes it may take up to five years "of constant training" to reach full capacity/productivity targets.

# 6. POLICY RECOMMENDATIONS

- 1. Provide support to expand relationships with "Western" buyers (US, EU) and "Eastern" buyers (Japan and Korea) as well as lead transnational garment firms. The garment industry is playing an important role in both income generation and poverty reduction, contributing not only to the employment of women in urban areas, but also remittances to workers' families in rural areas. The sector is contributing to the economic transformation of the country, through learning, skills development, and exports. To achieve the targets of the National Export Strategy, the sector needs to grow exponentially. This can be done through adopting a GVC industrial policy approach with the government and trade associations working together to attract more manufacturing investors, as well as approaching buyers to encourage their suppliers to manufacture in Myanmar.
- 2. Enhance cooperation and provide support to attract Chinese direct investment in the garment sector. China has a significant role in the garment's industry. As well as being an important location for main brands' favourite suppliers and transnational actors, it is also the source of most inputs. It is, thus, essential for the government to build a bridge between the two economies.

There is great opportunity to benefit further from the "sourcing proximity" between the two countries as they share a border. To facilitate this, it is recommended that Myanmar seizes the infrastructural opportunities of China's One Belt One Road initiative to facilitate unimpeded trade. Furthermore, Chinese-Myanmar initiatives, such as the Bangladesh-China-India-Myanmar Forum for Regional Cooperation, should also be strengthened to facilitate trade.

3 Encourage local production and developing technical capacity and knowledge base. This sector requires greater entrepreneurial and management skills. The government needs to aggressively leverage and build further upon the high skills/high quality which exists in Myanmar due the sector's Japanese manufacturing legacy which required complex skills and a fine attention to detail. It can do so by contracting external consultants, to work with manufacturers with particular emphasis on upgrading their capacity to reach EU standards, in terms of complexity, short runs, and flexibility.

It is critical that government and donor development organisations work together to offer training in technical production skills at all levels of employment. However, we believe particular focus and efforts should be directed towards training of supervisors and management, as also noted by Gelb et al. (2017), highlighting how lack of entrepreneurship and management are "a significant constraint," hampering efficiency, productivity and process upgrading of the sector. Managers and supervisors determine the efficiency of the production lines and need to apply production models that go beyond experience alone: training and education of managers and supervisors is required. SMART Myanmar and the MGMA are offering some training, but they need to work with vocational centres and universities to offer more opportunities for advanced training.

Well-trained local management would be able to build a corporate culture that educates workers on a work culture that will allow Myanmar to be globally competitive. This might also help to alleviate and solve the problem of how to "motivate" the Myanmar workforce and potentially address the high labour turnover issue.

4 Support unique indigenous design skills. The local market provides an excellent opportunity to build unique design capacity, as highly elaborate/complex skills and unique "indigenous" designs exist and can be leveraged for export. New product designs are aiming at fusing "Western" style

clothing with Myanmar traditional dress. Given the right customised training in input sourcing, design, and branding, there is an opportunity for Myanmar to go beyond the "low wage, low skill, preferential market access" destination.

- 5 Support a GVC perspective in policy dialogue between public and private sectors. This has been identified as a major impediment to growth in the sector. Educational workshops should be established bringing together the different stakeholders involved in the industry, from both central and local government, manufacturers, trade associations, and buyers in order to jointly discuss key challenges facing this sector and identify solutions.
- 6 Access negotiation mediation and capacity building for both government and trade unions (formal and informal). Myanmar, due to its political history, has an activist civil society, which is well trained in protest. Many of the activists and labour union representatives we have spoken to have received training overseas but know very little about Myanmar labour laws and regulations. We have spoken to activists who often prefer to shut a project down, rather than improve the working conditions through negotiation.

Effective cooperation between capital and labour needs to be built. Working with donor development projects and local and international NGOs who support training for labour rights professionals becomes key. They could also help build institutional structures to involve the trade unions in building industrial strategy for the sector, to channel this activism in a constructive direction.

7 Change a specific element of tax law. The separation between CMP/FOB in the country's tax laws needs to be eliminated. CMP producers obtain tax exemptions on import duties for imported inputs (fabrics) to produce exports. Producers registered as FOB do not receive these exemptions.

The law itself acts as a legal deterrent to functional upgrading.

- 8 Improve the financial system to be responsive to the needs of this industry. Local firms cannot access foreign exchange and capital to operate their business. This acts as a key deterrent to graduating from CMP to FOB. To help local firms, the financial system needs to be improved to allow all manufacturers to access trade credit. There is the need to liberalise and deregulate the banking system and the foreign exchange market.
- 9 Improve soft and hard infrastructure. Roads, ports, Special Economic Zones, telecommunications, power, all need development. In relation to soft infrastructure, recommended steps to improve productivity and unleash Myanmar's economic potential include simplifying procedures and licensing for trade and investment, building institutional capacity in trade-related government agencies, and ensuring broader ownership of reforms across society, including disadvantaged groups.

The World Economic Forum Global Competitiveness Report (2015-16) ranks the overall quality of infrastructure in Myanmar 135th out of 140.

10 Raise sustainable awareness on development together with goals, partners. Harness the strong presence of donor and international organisation in the country to cooperate with the government, transnational actors, and foreign investors, lead buyers, and civil society to make empowerment of women and social upgrading a key competitive feature of Myanmar's exporting value chain. The sector is ripe to absorb information and inputs on sustainable investment and social upgrading, in particular. There is the opportunity for this to become the "norm." The government is very keen to do so, in response to lobbying by a very strong media sector and active civil society.

11 Raise early awareness of environmental issues across the industry. Such an action would also speak directly to SDGs, such as the need of clean water for all, the development of clean energy, or issues related to climate change more in generally. It is essential that the regulations to deal with the disposal of waste products are put in place prior to their growth in this and other industries. This would also let Myanmar leapfrog some of its competitors, positioning itself further ahead in the race of "sustainable production."

At present, there are a number of washing plants treating garments in Myanmar. As the industry grows, more will be needed to cope with demand. It may well be that a greater variety of finishes and treatments such as stone-washing (enzyme washing) and other chemical finishes are required. There is a vast amount of water wastage in the process of stone-washing, along with issues of chemical disposal and illness caused by toxic dust which contains heavy metals. These issues will need to be addressed if and when the sector grows.

# 7. CONCLUSIONS

This case study has analysed the garment value chain in Myanmar, with a focus on sustainable development and gender considerations. The Myanmar garment sector has experienced a renaissance since sanctions were lifted in 2013. The industry is not only contributing to the country's transition from a centrally directed economy to a market-oriented one, but it is also underwriting poverty alleviation and employment creation for young uneducated women, as well as generating significant export earnings for the country.

Two main factors determine the upgrading opportunities or limitations facing firms in Myanmar's exporting value chain: ownership and end markets. These generate different opportunities for economic and social upgrading and local and regional embeddedness, with a significant impact on the country's sustainable growth trajectory. From a sustainability point of view, they also relate to different levels of implementation and adherence to sustainable development goals.

Myanmar-owned companies are disproportionally hampered in attempting to upgrade compared with joint ventures or foreign companies, as a result of deficiencies in their operating environment and of the strategies of transnational actors to control their access to knowledge—although such access to knowledge for indigenous players is greater in joint ventures.

In terms of market destination, lead firms, being "Western" (EU or US) or "Eastern" (Japan or Korea), have a significant impact on the shop floor, directly speaking to decent working conditions and sustainable growth. The Europeans focus more on social and environmental compliance and require adherence to international standards. The Asians mostly emphasise quality over other considerations.

Growing orders from the US tend to be larger in volume, but of simpler products. Such requirements, while beneficial for employment, do not usually facilitate upgrading and as such will need to be coupled with carefully planned economic policies towards upgrading. As the US presence grows, its impact on Myanmar's garment industry will have to be closely monitored, as it has a differential impact on development opportunities.

Working conditions have improved since the Myanmar government commenced a new wave of reforms in 2011. However, vulnerable labour arrangements and conditions, child labour, lack of training, excessive overtime, poor health and safety, as well as flouting of the country's new minimum wage law are often attested by workers and labour representatives.

Skills upgrading, particularly of management skills, is a key challenge for the growth of the garment sector, regardless of ownership and export destinations. Poor levels of efficiency on the shop floor have been unanimously reported as a key obstacle. Using Bangladesh as the industry's benchmark, Myanmar's productivity is 30 to 40 percent lower.

Lack of mechanisms to motivate and incentivise the workforce are acerbating these productivity issues, a fairly unique feature of Myanmar's culture. Factory owners repeatedly expressed frustration that their workforce is not incentivised by performance-related pay, a view corroborated by union and strikeleaders, too. The government has a major responsibility in this regard, to build the relevant supporting institutions and to help raising corporate culture awareness.

In general, the government is now very much relying on the novelty status of Myanmar and the constant quest for diversification of sourcing markets by lead firms. However, this will not be enough to support upgrading and sustainability in the long term. It is paramount to address deficiencies in industrial policies and the state's implementation capacity, to fully leverage Myanmar's competitive

advantages, such as its geographical location or its Japanese-imparted legacy of quality. A focus on the need for coordinated skills upgrading strategies at all levels will also be key to sustainable growth.

Without further concerted government effort, assisted by international institutions, the benefits of the garment industry in Myanmar will be limited to its direct employment creation, rather than its ability to generate

skills and knowledge spillovers, and greater levels of upgrading and local linkages.

Finally, because of Myanmar's history and its being in a fluid political and transitional economic stage, there is an urgent need to reinforce the dialogue among all the parties involved, leveraging the support of donors and international organisations, but also of transnational agents, foreign investors, lead buyers, and civil society.

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