

# **Effects of Minimum Wage on Manufacturing Workers and Firms in Myanmar: Initial Evidence and Policy Implications**

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After two years of tripartite consultations across Myanmar following the 2013 Minimum Wage Law, the government of Myanmar set the minimum wage at MMK3,600 (USD3.25) in June 2015. After a year of enforcement, a rapid assessment was undertaken by the Centre for Economic and Social Development (CESD) in cooperation with the Yangon University of Economics (YUE) to observe the effects of the minimum wage on labour-intensive manufacturing industries in Hlaing Tharyar Industrial Zone in Yangon, the largest industrial estate in the commercial capital of Myanmar. The primary objective of this research was to understand the initial effects of implementing the first minimum wage since independence from Britain in 1948. The survey was a semi-structured interview administered to 525 workers from food-processing and garment factories.

This paper analyses the survey results on wages, working conditions and income redistribution after the enforcement of the minimum wage, as well as perceptions and attitudes of workers towards the minimum wage. The study finds that 49 percent of respondents in food-processing factories and 57 percent in garment factories earned less than the official minimum wage prior to the enforcement. Within a year of the enforcement of the minimum wage, not only their daily wage but also monthly income improved above the minimum wage level, reported by 96.0 percent of the surveyed garment workers and 90.5 percent of the surveyed food processing workers. At the same time, the rest of the respondents who were already above the market-clearing

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levels all received higher wages. The majority of respondents had a positive attitude towards the enforcement of the minimum wage. However, 14 percent suggested that the minimum wage was still not enough to meet their family needs and 13 percent reported that the number of overtime opportunities – where they should receive twice the normal hourly rate – were reduced while other benefits such as transport and food allowances were curtailed after the minimum wage law came into force. The paper concludes that the minimum wage enforcement has had positive effects on employment welfare. However, it recommends that the government urgently needs to promote an enabling environment and labour productivity for SMEs in Myanmar to maintain positive industrial relations and inclusive growth. This study also recommends a number of concrete measures to improve the minimum wage system and social security provisions for workers and their families when there is a large gap between what workers need and what employers afford to pay them.

## 4.1 Introduction

The minimum wage system is practiced in almost 190 countries around the world, with all ASEAN members except the two richest countries, Singapore and Brunei, having minimum wage systems. With the adoption of the United Nation's Sustainable Development Goals in 2015, member states reaffirmed their commitment to global efforts to address global issues. Goal 8 requires states to implement labour market reforms to meet "sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all." The goal highlights the importance of achieving equal pay for work of equal value, and protecting labour rights. In achieving this goal, many countries are implementing a minimum wage and the International Labour Organization (ILO) has been providing technical assistance and policy guidance with regard to minimum wage fixing mechanisms.<sup>1</sup>

Myanmar was one of the earliest countries in Southeast Asia to promulgate a minimum wage, with the Minimum Wage Act in 1949, following its independence in 1948. It was an attractive policy tool for the post-independence government to address deep-seated poverty as well as the growing urban income gap between the rich and the poor. More importantly, the Act recognised the important role of the labour movement during the independence struggle.

However, Myanmar's actual attempts to enforce the minimum wage failed; this was despite the formation of the Minimum Wage Council in 1953, and attempts to set rates for the agriculture sector and cigarette-manufacturing companies throughout the 1950s (Than 2007, 83–84). In 2013, President Thein Sein's government reintroduced a new law on minimum wage, 64 years after the first was introduced, as a key component of economic and social reforms. In June 2015, the rate was set at MMK3,600 or approximately USD3.25.<sup>2</sup> At the same time, the government also promulgated the Labour Organisation Law and the Settlement of Labour Dispute Law, opening a new chapter on the country's tripartite consultation processes between workers' representatives, employers and the government. The minimum wage and related laws were motivated by the need to demonstrate the government was respecting and promoting labour standards – a statutory condition required by the United States to lift its sanctions on Myanmar.

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<sup>1</sup> ILO has specific provisions for minimum wage setting (see ILO 2014). ILO also advised the use of social dialogue and collective bargaining to help strike a balance between the legitimate needs of workers and enterprises.

<sup>2</sup> The National Minimum Wage Fixing Committee proposed a rate of MMK3,600 for an 8-hour day at the end of June 2015, when the prevailing exchange rate for USD1 was MMK1,110. The Committee announced it nationwide and waited 60 days for public feedback and questions. The government issued an official notification on 28 August 2015.

Unlike Myanmar's earlier bitter experience of its first highly contentious minimum wage and the eventual collapse of the system due to political pressure, the recent experiences of tripartite dialogue on minimum wage suggest a rare success of inclusive consensus making. While other comparative experiences from neighbouring countries showed highly conflictual and often violent outcomes during minimum wage setting, Myanmar avoided such negative backlashes and maintained cooperative bargaining among key stakeholders.

In Myanmar, the minimum wage supposedly affected all formally registered firms with a minimum of 15 workers in any industrial sector across the country. During that enforcement in 2015, the government took no additional policy measures that could significantly affect the operations of small or medium-sized enterprises (SMEs) in the country. Macroeconomic conditions were stable while the government's fiscal and monetary policies were neutral on real variables. The country had very competitive elections in November 2015; however, the legally prescribed transition period took some time and the newly elected government led by President Htin Kyaw was inaugurated on 30 March 2016. The new government took a major initiative in reorganising and reducing the number of ministries, including the merger of the Labour and Immigration ministries into the Ministry of Labour, Immigration and Population. The government was able to announce the 12-Point Economic Policy on 30 July 2016; however, the policy did not outline priority sectors or specific action plans to shape the prevailing economic trends of the country. In light of this policy, this study assumes that the minimum wage policy pronouncement was mostly likely a causal variable of firm-level outcomes such as wages, employment and sales.

In essence, the setting of the minimum wage was undertaken in accordance with twin objectives of the law: "to meet the basic needs of working families engaging in production, trade and service sectors as well as to strengthen productivity and competitiveness of work force in these sectors" (Union of Myanmar 2013, Preamble). Since the minimum wage was set in 1949, enforcement has been applied nationwide without differentiating between regional or sectoral variations. At the same time, firms that employed less than 15 workers were exempted from minimum wage enforcement in order to help the informal sector gradually adjust to labour regulations (NCMW 2015). In terms of industrial relations, the social dialogue on the minimum wage tended to focus on consignment manufacturing process (cut-make-pack) industries as they employ large numbers of low-wage workers. In this regard, the garment industry became the main beneficiary of the policy where the enforcement of the minimum wage was geared towards protecting the most vulnerable group of workers – female rural migrant workers – as well as reallocating

compensation patterns in these low-wage sectors to boost labour productivity initiatives.

The rest of this research paper is structured as follows. The first section focuses on the historical context of the minimum wage during the colonial and postcolonial periods, particularly workers' contributions to political movements. The literature review presented in the second section gives an in-depth analysis with scholarly references of the effects of the minimum wage. The third section describes the research methods and frameworks that were employed for this research study as well as the limitations of the study. Following this is the results section, which provides an overview of the survey findings, including the effects of the minimum wage, characteristics of minimum wage workers and the state of the minimum wage before and after minimum wage policy intervention. Finally, the paper offers some key policy recommendations that will help facilitate the effective implementation and regulation of the minimum wage.

This paper examines the effects of Myanmar's minimum wage on SMEs in the country through an empirical study involving a worker survey undertaken in the largest industrial zone in the former capital, Yangon. The survey is supplemented by analysing the dataset of the World Bank's 2016 Enterprise Survey on SMEs across major urban centres in Myanmar. The findings suggest that the effects of the minimum wage are more consequential in garment industries that tend to comply with minimum wage regulations without causing the regulators additional monitoring or enforcement costs. In these industries, the most vulnerable group of workers – rural migrant women on the lowest wages – benefited immediately from the enforcement while industry leaders also appeared committed to improving the system. There was a reputational incentive for employers to improve industrial relations as the minimum wage seemed to have attracted larger investment in labour-intensive industries, with many SMEs experiencing significant improvement in both employment and revenue positions.

## **4.2. The context**

### ***4.2.1 The road to a minimum wage***

Myanmar was exposed to the concept of a minimum wage under the British colonial administration in the first half of the 20th century, when the growing extractive sectors employed several thousand workers. The idea of a minimum wage was first raised in 1938, when 300 Myanmar oil field workers organised strikes against the British Oil Corporation for a basic wage, an 8-hour working day, paid overtime, the right to medical leave,

and the provision of living quarters for workers' families – fundamental labour rights that remain a global topic of concern and protest to this day. As the protests grew into the general strikes popularly known as the “1300 Revolution” (Maung 1976), labour activism became a turning point for the country's independence struggle.

Labour activism also played a major role in resisting socialist rule in Myanmar. In the mid-1970s, labour strikes against the rising price of food and basic consumer goods, reinforced by student activism, brought a series of protests against the socialist regime. The momentum of student, labour and political activism in the decade escalated into the popular uprisings in 1988 that eventually brought down the government, placing labour activism at the forefront of political movements in the country. In short, the early history of the labour movement was “quite militant and workers were incorporated into party politics.” (Lwin 2014, 137) However, when the military regime took power in 1988, they jailed many protest leaders to suppress the popular movement that had developed.

Under the military government, labour activism came to the forefront of the pro-democracy movement. Many labour activists joined together to form the Federation of Trade Unions of Burma (FTUB) in 1991, which actively lobbied human rights organisations and sought international support. The FTUB brought the deteriorating working conditions in the country to the attention of the ILO and became a powerful lobby for labour rights in Myanmar. FTUB returned from exile to establish the Confederation of Trade Unions of Myanmar in 2013, in accordance with Labour Organisation Law promulgated in 2011. Likewise, many other workers associations followed suit and established workers associations across the country, registering some 400 primary trade union organisations (ITUC 2013).

During the period of political liberalisation that began in 2011, “networks of local trade union activists working as part of the international trade union movement ... played a crucial role in setting the agenda for political change ... and taking advantage of new opportunities to organise workers into trade unions as a force for further political and economic change” (Henry 2015). Together with the Labour Organisations Law, the government adopted the new Settlement of Labour Dispute Law on 28 March 2012, which provided dispute resolution mechanisms through conciliation and arbitration. However, confrontations between the workers and employers have instead risen, as “agreements reached between employers and workers through the conciliation process are not always respected and are not enforced as binding agreements” (ITUC 2013, 23).

According to the 2016 survey report by NGO Action Labour Rights, there were 447 garment worker strikes nationwide between 2012 and 2014. The majority of the strikes occurred in garment and food-processing factories. As the government came to realise that the majority of strikes were for better wages, rather than political, the Ministry of Labour became more resolved to address the minimum wage situation in accordance with the law promulgated in March 2013.<sup>3</sup> As the 2015 elections approached, labour movements became even more political as they forged coordinated action with political parties and mobilised factory walkouts and street protests to seek attention from the government. In short, throughout Myanmar's post-independence, the relationship between the government and labour movements was never straightforward and cooperative, giving rise to a contentious climate of distrust surrounding the final negotiations on the setting of the minimum wage in 2015.

#### ***4.2.2 Enterprise and employer conditions***

In Myanmar, successive governments have emphasised industrialisation as the cornerstone of their economic policies. Starting with the post-independence government in the early 1950s, Myanmar joined other third world countries in adopting a strategy of import-substitution industrialisation as it drew an ambitious master plan known as the Pyidawtha Plan. The socialist government followed through this strategy under more isolationist policies better known as the “Burmese Way to Socialism.” Despite 40 years of state-led industrialisation under both democratic and authoritarian regimes, Myanmar's economy experienced very little structural change, with industry's share of GDP standing at less than 20 percent by the 1990s. By contrast, in the same period, other Southeast Asian countries achieved impressive industrial growth. (Figure 4.1) While the shortcomings of Myanmar's industrial strategy and plans, and the political instability and economic uncertainty in the late 1950s, contributed to feeble industrial performance, excessive state control and autarkic economic policies during the socialist period brought industrial development to a standstill (Than 2007).

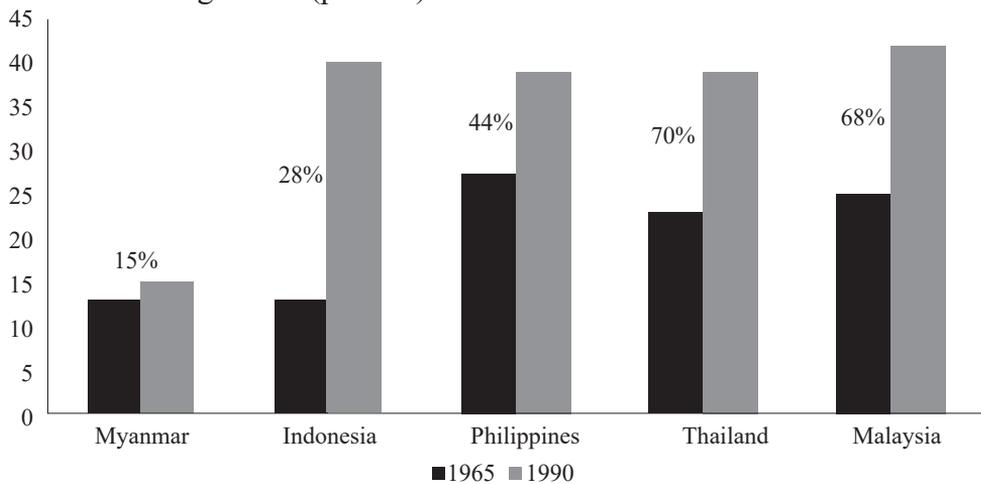
Concerns about lagging behind other Asian countries prompted the military government to introduce several initiatives in an attempt to revive the industrial sector after taking power in 1988. It promulgated a number of supportive laws; the Foreign Investment Law in 1988, the Private Industrial Enterprise Law in 1990, and the Promotion of Cottage Industrial Law in 1991. In 1995, the government

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<sup>3</sup> According to an interview with the Permanent Secretary of the Ministry of Labour, Immigration and Population, most of the strikes and disputes in the period 2012–15 were related to low wages. See CESD's Minimum Wage Documentary, 2016.

rolled out an ambitious plan to develop industrial zones in major cities to boost manufacturing firms, agro-processing factories and other base industries, as well as to attract foreign direct investment (FDI) to create conditions for transition to an industrialised economy (Lin and Linn 2014).

Figure 4.1: Structural change of Myanmar in comparison with ASEAN neighbours (percent)



Note: The ratio of industrial sector greatly improved during the five-year tenure of President Thein Sein, achieving a growth rate of 30 percent, from 26.5 percent in 2010 to 34.5 percent in 2015.

Sources: ADB Key Indicators for Asia and the Pacific 2017; Kyi et al. 2000

With the formation of the Myanmar Industrial Development Committee in 1995, the government initiated the setting up of 18 industrial zones in the capital cities of almost all states and regions across the country. Seven industrial zones were also planned, particularly in the remote border regions. Within a year, the government also established the Myanmar Industrial Development Bank to finance the relocation of SMEs to these industrial zones. Despite such an ambitious undertaking, there were several weaknesses in the actual planning of industrial zones in terms of spatial planning, logistics, and many other hard and soft imperatives critical to effective and efficient operations. More importantly, there was very little consideration of the social aspects of industrial zones, which became a major bottleneck across the country as they were primarily hosting labour-intensive industries. Despite efforts made under the regime of President Thein Sein in 2011 to reform the industrial sector, the conditions of the infrastructure and existing social tensions presented several challenges (Lin and Linn 2014).

According to the report on the state of industrial zones in Myanmar (Lin and Linn 2014), the majority of zones suffer from unreliable electricity supply,

poor transport links, skills shortages, frequent bouts of labour unrest, weak environmental safeguards, land speculation and ghost factories, and sparse backward and forward linkages with local firms. The government fully funded the development of these zones and subsidised the sale of land plots to SMEs in order to help the private sector to industrialise; but a lack of spatial and cluster planning as well as industrial policy now hinder many of these zones from capitalising on the promised industrial development. Moreover, zone management is assigned to self-help style committees elected by the firms operating within the zones. Token fees collected from each firm go to provide minimal security and emergency services.<sup>4</sup> The relatively high rates of crime and theft, often perpetrated against the predominantly rural female migrant workers, combined with high transport and housing costs, have exacerbated stress levels among the workforce, particularly in the congested zones around Yangon.<sup>5</sup> Such adverse conditions undermine nascent industrial relations between workers and employers. Indeed, the government's responsibility for addressing these concerns was a major concern of key stakeholders during the minimum wage negotiations.

Since the government of President Thein Sein took office in 2011, there has been a rapid change in the political, social and economic landscapes in Myanmar. The election followed the adoption of the new constitution, drafted in 2008. Thus, the new government was obliged to fulfil basic workers' rights and welfare (Constitution 2008, Chapter 1 Article 24). At the same time, the government was also conscious of the need to restore international legitimacy; it therefore swiftly enacted additional laws to reinforce the protection of workers' rights in line with international standards.<sup>6</sup> Nevertheless, workplace conditions and the unfavourable environment surrounding industrial zones further confounded government efforts to restore the confidence of both workers and employers in the tripartite dialogue.

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<sup>4</sup> Although the government took responsibility for overall supervision, and responsibilities for closer supervision were delegated to regional governments, no proper regulatory framework had been developed to solve the many problems in the industrial zones. Weaknesses in such "software" aspects of zone management are a more serious anomaly than issues concerning hard infrastructure.

<sup>5</sup> The authors recently conducted a rapid assessment of the chances of garment workers' strikes inside industrial zones in Yangon and those outside the zones in nearby Bago and found that the incidences are much lower in Bago despite unfavourable infrastructure services in the latter. Initial interviews suggest that the workers are happier, citing cheaper rental or dormitory prices, free transport (because the city does not have public transport) and close proximity to their families as some of the reasons.

<sup>6</sup> The Labour Organisation Law (2011), the Social Security Law (2012), the Settlement of Labour Dispute Law (2012) and the Employment and Skill Development Law (2013) were enacted to promote the rights of workers.

### *4.2.3 Evolving mechanisms on fixing minimum wage*

When Myanmar attempted to set the minimum wage, it did not have mature experience of collaborating in technical assistance or policy support programs with either development partners or international labour institutions. A major challenge was a lack of labour statistics that countries usually rely on when they estimate living wage figures and other labour market conditions. Due to international sanctions imposed on Myanmar in the 1990s for non-observance of the Forced Labour Convention, the ILO could not provide any technical cooperation or policy assistance to Myanmar until 2011. Even when the restrictions were lifted in 2012, it was not until 2015 that the ILO provided technical assistance for the labour force survey, leaving Myanmar with very weak technical capacity and scant data for setting the minimum wage.

In the absence of international technical assistance, Myanmar had to rely on formal mechanisms under the tripartite National Minimum Wage Committee, comprising five worker representatives, five employer representatives, 12 government representatives and five independent experts, to determine an acceptable wage rate for both workers and employers. The government requested the Centre for Economic and Social Development, an independent Myanmar thinktank, to fill the data gap concerning prevailing market prices by undertaking a rapid assessment survey of wages and living conditions in Yangon, Mandalay and Bago. Based on these initial findings, the Department of Labour also conducted household surveys in all 15 states and regions to understand household expenditure and living conditions. These findings were presented to the committee with parallel social dialogue sessions hosted regularly by the ministry for worker and employer representatives.

At the initial stage of consultations in 2014, the workers demanded MMK8,000 (about USD7.2) while employers proposed MMK1,500 (USD1.35). The release of the findings about living wage estimations and workers' living conditions led employers to propose a more generous offer in response. A comparative analysis of minimum wages in the region, mainly of Myanmar's close competitors such as Bangladesh and Cambodia, also made the union leaders more pragmatic in their demands. Eventually, in August 2015, after a year-long series of tripartite meetings, the committee agreed to fix the minimum wage at MMK3,600 (approximately USD3.25) for an 8-hour work day. The law came into effect on 1 September 2015.<sup>7</sup> Myanmar's minimum wage was the lowest among ASEAN countries, followed by Laos at almost USD4 and Cambodia at over USD4.50 as of 30 June 2017.<sup>8</sup> As required

<sup>7</sup> Notification on Minimum Wage, unofficial English translation [www.pwplegal.com/documents/documents/b7bc4-Employment---Notification-on-Minimum-Wage.pdf](http://www.pwplegal.com/documents/documents/b7bc4-Employment---Notification-on-Minimum-Wage.pdf).

<sup>8</sup> [www.nwpc.dole.gov.ph/pages/statistics/stat\\_comparative.html](http://www.nwpc.dole.gov.ph/pages/statistics/stat_comparative.html).

by law, the National Minimum Wage Committee must review Myanmar's minimum wage every two years (Minimum Wage Notification 2/2015). In this way, this study provides further evidence on the impact of the minimum wage on workers and enterprises.

#### *4.2.4 Lessons learned from ASEAN experience*

Cambodia's minimum wage setting process in 2014 was much more tumultuous than Myanmar's. Leading up to the minimum wage setting in Myanmar, a few peaceful protests took place. By contrast, in Cambodia, tensions between the government, unions and workers led to tension, after the Labour Advisory Council and the Ministry of Labour raised the monthly minimum wage from USD80 to only USD95. This was despite the fact that the Garment Manufacturers Association in Cambodia had suggested a significantly higher monthly wage of USD160. Immediately after this decision was made public, the president of the Cambodian Confederation of Unions encouraged workers to strike in order to put pressure on the Ministry of Labour and the Labour Advisory Council to revise their decision. The protests spread across various zones in and around Phnom Penh. At the centrally located Freedom Park, there were clashes between protesters and municipal security guards and law enforcement officers. Overall, dozens of people were arrested (Teehan and Quinlan 2014).

#### **Box 1: The case of Indonesia and the effects of a minimum wage**

Alatas and Cameron (2008) studied the effects of minimum wage changes in Indonesia between 1990 and 1996, prior to the Asian financial crisis, on the employment of production workers in clothing, textiles, footwear and leather firms in greater Jakarta. They found a negative employment impact in small firms, but not in large firms. Harrison and Scorse (2010) found that a 10 percent increase in real minimum wages in Indonesia reduced production worker employment by an average of 1.2 percent in foreign-owned export firms in the textiles footwear and apparel sectors. They also found reduced investment, falling profits, and increased probability of going out of business (at least in the formal sector) for smaller firms, but not for large firms.

Similarly to the minimum wage process among stakeholders in Cambodia, Myanmar also experienced some tension and challenges. Over the two years between the passing of the law in 2013 and its enforcement in 2015, debates between employers and workers' associations mediated by the National Minimum Wage Committee were not always cordial. Moreover, some factory owners expressed concern that a generous minimum wage might harm their access to international markets. In the end, after the announcement of the minimum wage, the unions, including the International Trade Union Confederation, and employees both criticised the proposed figure.

### 4.3 Literature review

The ILO defines a minimum wage as “the minimum amount of remuneration that an employer is required to pay wage earners for the work performed during a given period, which cannot be reduced by collective agreement or an individual contract”.<sup>9</sup> This provision emphasises protection for low-paid workers, often the most vulnerable in their employment sectors, by shifting the earning distributions in their favour; as Freeman (1996, 639) suggests, “The goal of the minimum wage is not, of course, to reduce employment, but to redistribute earnings to low-paid workers”. Although minimum wages can affect only formal covered sectors, they also send a signal to informal uncovered sectors, often rural labour markets, the so-called “lighthouse” effect. (Boeri, Garibaldi and Ribeiro 2010)

In many countries, the minimum wage has an influence on increasing wages in the informal sector, despite the fact that the system does not cover informal sector workers. Souza and Balta (1979) coined the term “lighthouse effect” after they discovered how the minimum wage in Brazil also affected workers in small enterprises and the informal sector even though they were barely inspected. Moreover, they also discovered that self-employed workers used the minimum wage as a point of reference (ILO 2017). In fact, Myanmar authorities carefully considered the balance between allowing adequate coverage of the minimum wage for all workers and the need to allow SMEs to adjust their labour costs.

Having intervened in industrial wage distribution with good intentions to protect workers, governments unintentionally allow minimum wages to cause dis-employment effects, thus hurting the low-paid workers they are supposed to protect. The theoretical explanation for this effect has to do with setting the minimum wage above the market equilibrium rate, subsequently forcing firms

<sup>9</sup> [www.ilo.org/global/topics/wages/minimum-wages/definition/WCMS\\_439072/lang--en/index.htm](http://www.ilo.org/global/topics/wages/minimum-wages/definition/WCMS_439072/lang--en/index.htm).

to lay off low-paid or unskilled workers first. An example of this effect happened in Colombia, where the minimum was set relatively high and led to job losses on the bottom rungs of the labour market while also improving the earnings of families in the middle and upper parts of the income distribution. Arango and Pachón (2003) and A. Freeman and R. Freeman (1996) found minimum wages substantially lowered employment in Puerto Rico. Likewise, Maloney and Mendez (2003) found similar results in other Latin American countries.

Compared to many Latin American countries, Southeast Asian countries were late in implementing a minimum wage system, while wealthy Brunei and Singapore do not have one.<sup>10</sup> In Thailand, the minimum wage increases actual wages, doing so more for young workers and older workers than for prime-aged employees (Carpio, Messina and Sanz-de-Galdeano 2014). In Indonesia, Harrison and Scorse (2010) found that the minimum wage is positively associated with higher wages. In Vietnam, Nguyen (2010) reports that the minimum wage brought about a 19.9 percent increase in monthly wages between 2004 and 2006 for workers in the formal sector. There was also wage growth of 4 percent for workers who moved from the informal to the formal sector and a 26.1 percent increase in wages for those moving from the formal to the informal sector.

In terms of employment, in Vietnam, Nguyen (2010) reports that an increase in the minimum wage led to unemployment in the formal sector. In the Philippines, Lanzona (2014) reports that the minimum wage led firms to minimise their costs, mostly by cutting training and reducing recruitment of young and less skilled workers. Findings by Paqueo and Olivar (2015) point to the same trend of a significant negative impact on labour force participation in the Philippines, especially of young, inexperienced and less educated workers and female workers. The rationale behind focusing on dis-employment as a potential consequence of setting the minimum wage too high is to ensure that Myanmar does not make a similar mistake. According to Kuddo, Robalino and Weber (2015), the impact of a minimum wage on formal sector employment is not clear. However, some studies show reductions in formal employment to levels below the employment-maximising level, and shifts of workers (and firms) from the formal to the informal sector, especially when minimum wage rates are too high and regulatory enforcement is weak. However, when set at more moderate levels, minimum wages do not lead to significant dis-employment effects, and impacts on worker earnings and on poverty tend to be minimal (Rutkowski 2003). Therefore, it is important to ensure that

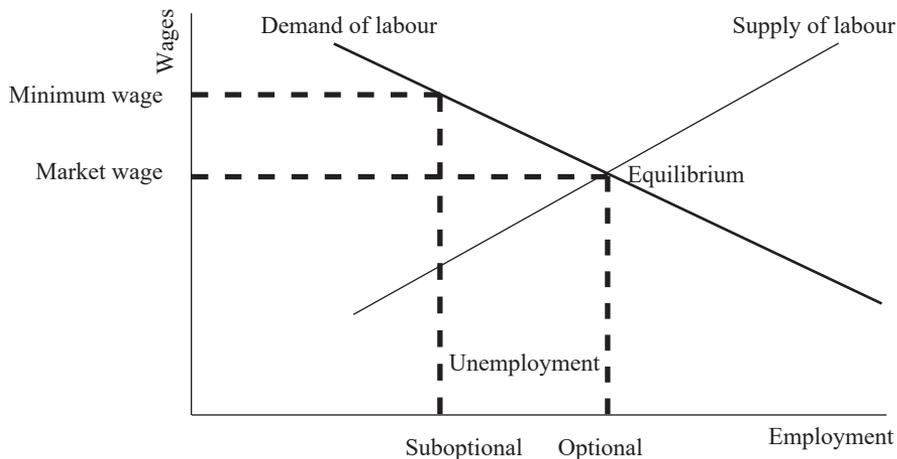
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<sup>10</sup> [www.aseanbriefing.com/news/2016/02/05/minimum-wages-in-asean.html](http://www.aseanbriefing.com/news/2016/02/05/minimum-wages-in-asean.html).

the minimum wage is set at such a level that it avoids the dis-employment effect and related detrimental economic effects.

Figure 4.2 shows that in a competitive market setting where wage levels are established by market forces, employment levels are optimal (equilibrium point). When the minimum wage is set above the market clearing wage and employers are not able to set a wage level that is appropriate, they are forced to cut back on production, or they may substitute workers for machines when possible. Such a leftward shift in employment, from the optimal employment level to a suboptimal employment level, leads to unemployment (Ehrenberg and Smith 2003)

Figure 4.2: Minimum wages in a competitive labour market



Source: World Bank 2014

When the minimum wage does not cause major dis-employment effects, it probably has positive effects on household welfare, often measured in terms of consumption. In Thailand, household per capita consumption improved in all wage groups except the very top after the minimum wage was increased in 2011. The minimum wage also helped households in Vietnam to increase consumption, particularly expenditure on education (Carpio and Pabon 2014). However, others point out that the minimum wage caused inflation, leading to higher input costs and prices hampering businesses because least-skilled workers were paid at the expense of more productive and capable workers, and industries shutting down because of higher labour costs (Parker 2013). Cambodian garment workers face the same situation, with an increase in the minimum wage followed by rising commodity prices, rent, electricity and transport costs, as reported by garment workers (Hoekstra 2017).

Firms use working times per worker as an instrument to respond to minimum wage policies, meaning that the minimum wage can affect workplace conditions as well (Couch and Wittenburg 2001; Linneman 1982). In Cambodia, some factory managers have been accused of using pressure tactics to meet increased production quotas after the minimum wage was raised, adding greater workload and work stress (Hoekstra 2017). Depending on minimum wage provisions, firms often attempt to reduce costs by reducing working hours and increasing work intensity. When a monthly minimum wage standard is set, firms can dilute hourly pay by increasing monthly working hours. In China, minimum wage adjustments have significantly reduced working hours, especially for women, as employers suppress wage increases for the weakest group of workers (Sun, Wang and Zhang 2015).

It is important to understand the extent to which setting a minimum wage affects the level of FDI that flows into a country. According to Rama (1999, 2001), doubling the minimum wage in Indonesia in the 1990s led to a 2 percent decrease in employment and a 5 percent decrease in investment. Moreover, Chan and Ross (2003) note that some countries use incentives to lower wages in order to attract foreign investment. However, the opposite effect is observed in other countries that have shown positive causality between higher minimum wages and increased FDI. For example, in both 2012 and 2013, Malaysia's minimum wage increased by an average of 19 percent, yet FDI reportedly increased by 16.2 percent. This indicates how in some countries an increase in minimum wages can have a positive effect on FDI. Moreover, a report published by the Organisation for Economic Co-operation and Development in 2008 found evidence that multinational enterprises tend to promote higher pay in the countries in which they operate in order to project their corporate social responsibility to raise labour standards (Hijzen and Swaim 2008). Even so, the positive wage effect tends to be concentrated among workers that are directly employed by those multinational enterprises. This stresses the importance of considering other factors when trying to understand whether there is a causal relation between minimum wages and FDI.

In short, minimum wage systems in developing countries have different impacts on different groups of workers in a variety of ways. Firms try to minimise costs in any way possible; therefore, it is always important to monitor firms' compliance with the minimum wage and other labour standards. This is a lesson learned from the experience of minimum wage systems in ASEAN countries, where "simplicity in the minimum wage policy helps increase compliance and reduces monitoring burdens" (Carpio and Pabon 2014, 6). Enforcing compliance often requires large amounts of resources and coordination within the government (Gindling, Mossaad and Trejos 2010).

The experience of Thailand and the Philippines confirms that these countries assign only limited resources to monitoring, making it difficult for labour inspectors to monitor many firms. In this regard, the effectiveness of any minimum wage system depends as much on enforcement and compliance as it does on minimum wage setting.

#### 4.4 Research methodology and description of the surveys

The paper relies on data from two sources: a worker survey conducted by CESD and YUE, and the World Bank Enterprise Survey 2016–17 across five major urban centres in the country. The worker survey was conducted at Hlaing Tharyar, the largest industrial zone in Myanmar in both size (about 1.4 million acres) and in the number of firms it hosts (500 firms employing over 50,000 workers), providing scope to randomly select sample firms. Its location in Yangon provides immediate access to Yangon Port, the largest port in the country, which handles about 90 percent of Myanmar’s overseas trade. With close proximity to abundant rural labour in the neighbouring Ayeyarwady region, most industries within the zone are labour-intensive and the majority produce export commodities such as garments, footwear and electronic parts (Aung and Kudo 2012). More importantly, the zone is relatively successful with little infrastructure and logistics disruption. In this regard, the survey could control for the endogeneity of other causal effects on firms’ wage and recruitment decisions. The survey used a purposive sampling method, selecting 525 respondents from garment and food-processing factories that employ more than 50 workers. These two industries represent 70 percent of all the firms within the surveyed zone, and the firms surveyed are representative of the average size of firms in those industries.

Table 4.1: Number of workers and enterprises in Hlaing Tharyar Industrial Zone, 2015 and 2016

Sir. No	Type of business	No of workers in 2015	No of workers in 2016	No of enterprises in 2015	No of enterprises in 2016
1.	Foodstuffs	10,629	12,322	171	157
2.	Textiles and garments	65,011	71,699	121	175
3.	Engineering works	3,189	3,521	34	59
4.	Chemical products	3,137	3,175	38	61
5.	Stationery and printing	1,122	1,275	15	20
6.	Forestry products	1,170	1,486	39	42
7.	Metal and oil products	1,424	870	35	26
8.	Packaging	4,613	-	19	-
11.	Miscellaneous	29,803	35,926	446	503

Source: Hlaing Tharyar Labour Exchange Office and Industrial Management Committee 2016

The worker survey was conducted by 400 final year economics students from YUE guided by 20 economics lecturers from the same university and 12 experienced survey researchers from CESD. The survey was administered to randomly chosen garment and food-processing factory workers and comprised three groups of questions:

- Workers' entitlements to the minimum wage as well as any changes in their wage levels and wage structures.
- Changes in workplace conditions as well as the state of industrial relations covering rights of association and dispute settlement mechanisms.
- Workers' general attitudes towards the implementation of the minimum wage, and their aspirations.

Although the worker survey provides a useful analysis of changing patterns of wages, employee turnover and workplace conditions as possible consequences of minimum wage policy, it was administered to workers only and not to staff who could have provided management-level information such as on employment and performance. To compensate for this gap, the analysis was supplemented with data from the World Bank Enterprise Survey conducted between October 2016 and April 2017. The survey, undertaken in five major cities in Myanmar and administered to firms' management representatives, collected useful information on employment and sales growth, thus providing additional information on firms' performance. Because the survey covers major commercial cities in the country, the effects of the minimum wage can also be observed more accurately at the national level.

Hlaing Tharyar enterprises and many SMEs have high transaction costs, leaving very thin profit margins. As a result, factory owners pay their workers low wages, leading to Myanmar's position as one of the last frontiers of cheap labour among rapidly growing Southeast Asian economies; both the government and employers maintained low wages as an incentive to attract foreign companies to the industrial zones (Kudo 2001). Until the minimum wage was introduced, there was very limited policy intervention to reverse wage suppression and enforce worker protections. Although the government set the minimum wage in September 2015, it did not implement any additional policy measures that could significantly affect SME operations in the country. Macroeconomic conditions were stable throughout 2015 and 2016 and fiscal and monetary policies were neutral during and after the elections in November 2015. The new government prioritised peacebuilding

and public administrative reforms over economic restructuring until it announced the 12-Point Economic Policy on 30 July 2016. In light of this, the study assumes that the minimum wage policy pronouncement was the only substantial instrument and most likely a causal variable of firm-level outcomes such as wages, employment and sales.

#### **4.5 The survey results**

The minimum wage was implemented with the objective of protecting low-paid and often young female workers in labour-intensive industries. The study therefore sought to collect information about workers' characteristics. It is often argued that minimum wages have negative impacts on young female workers. The survey therefore looks at the dynamics of this group of workers and the impacts of the minimum wage on their earnings, workplace conditions and welfare, particularly following the implementation of the minimum wage.

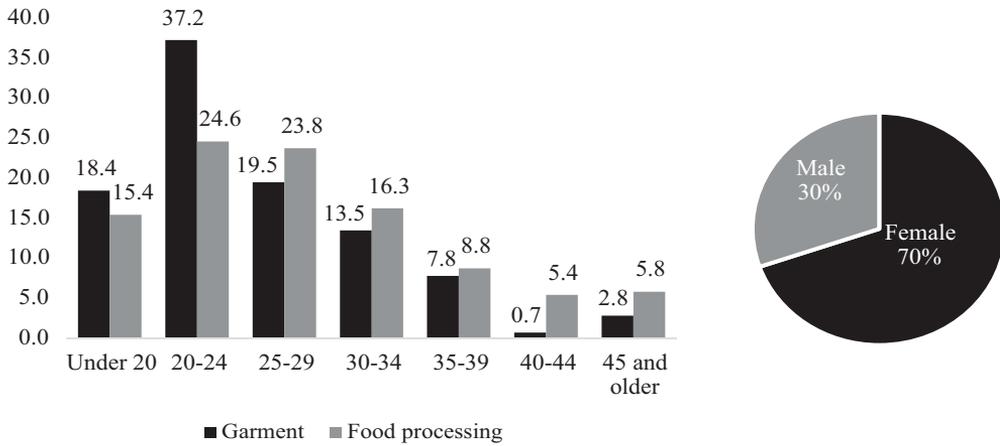
##### ***4.5.1 Age and gender***

The gender ratio of the entire workforce in the survey is overwhelmingly female, representing 70 percent of the respondents, with an average age of 26.7 (25.5 in garment factories and 28.2 in food-processing factories). About 56 percent of the workforce in the garment sector and 40 percent in the food processing sector are under the age of 25. Although the legal age of child labour in Myanmar is above 14 with no overtime for the age group 14–16,<sup>11</sup> a few respondents (2 percent in garment and 3 percent in food-processing factories) fall into the under-17 age group. Despite widespread child labour across Myanmar, with an estimated 1 million child workers recorded in the recent labour census, the survey found the share of the workforce in the 14–16 age group to be negligible, at less than 2 percent. The survey also found a few respondents above the retirement age, all engaged in non-operational jobs such as office staff and security guards.

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<sup>11</sup> In Myanmar, the Shops and Establishments Act of 1951 prohibited children under 13 years old from working in industrial settings. However, as of January 2016, the Factories Act and Shops and Establishments Act was amended and the minimum age for employment was raised to 14.

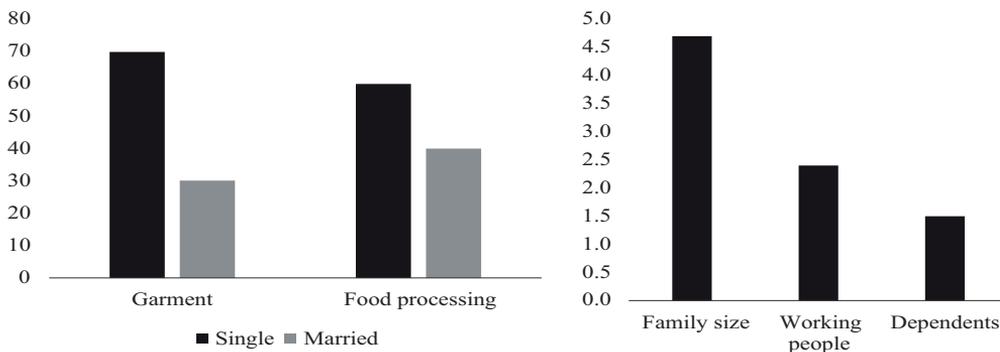
Figure 4.3: Gender and age composition of respondents (percent)



#### 4.5.2 Marital status and family size

Seventy percent of respondents from garment factories and 60 percent of respondents in food-processing factories reported they are single; the majority of respondents in both types of factories are unmarried. The average family size of respondents is 4.7, the same as the nationwide average reported in the 2014 Myanmar population census. There is no difference between the average family size of respondents in garment and food-processing factories. The study found 115 families that had no dependents. It also confirmed that factory workers' income is very low and at least two other household members have to work to meet household daily needs.

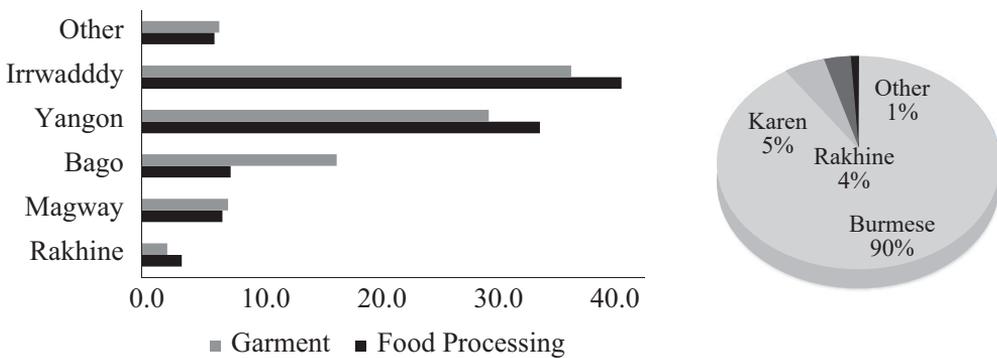
Figure 4.4: Marital status (percent) and family size



### 4.5.3 Migration and ethnicity

Sixty-eight percent of the respondents are migrant workers from other parts of the country and 32 percent are from the Yangon region. More than a third of all migrant workers (39 percent) are from the Irrawaddy region (41 percent in food-processing and 37 percent in garment factories). The remaining migrant workers come from Bago (12 percent), the closest region to Yangon, Magway (7 percent), and other states and regions (6 percent). This finding corresponds with that of the Thematic Report on Migration and Urbanization (Department of Population 2016), confirming the prevailing trend of young rural women seeking work in Yangon's industrial zones.

Figure 4.5: Migration and ethnicity (percent)

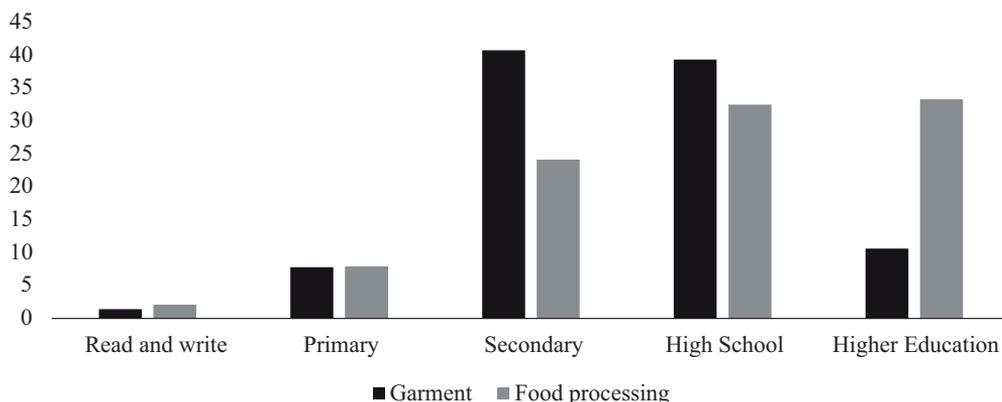


In terms of ethnicity, the vast majority (90 percent) of respondents are of Burmese ethnicity, followed by Karen (5 percent), Rakhine (4 percent) and others (1 percent). Based on these figures, it is safe to conclude that Burmese make up the majority of the labour force in Hlaing Tharyar Industrial Zone. Workers' migration decisions are influenced not just by the availability of jobs in Yangon but also by access to higher, technical and vocational education. Those who had already completed their high school education preferred to come to Yangon as they could attend public universities of distance education or private job skills training courses. Employers seemed to have a somewhat favourable policy of supporting workers' education, as the majority of factories in Hlaing Tharyar provide leave without pay to those who want to sit for the University of Distance Education exam (Aung 2015).

#### 4.5.4 Education

Both the garment and food processing factories have a large share of workers with only secondary education. Almost 41 percent of the workforce in the garment factories has secondary level education while another 39 percent has high school education. One surprising fact is that about 33 percent of respondents from food-processing factories have a university degree. Less than 2 percent of respondents in both garment and food-processing factories are illiterate, due to never attending school. There were no special programs or classes to teach them to read and write, either in their factory or within the zone. The result clearly indicates the need for worker training within industrial zones and firms.

Figure 4.6: Education level of the respondents (percent)



#### 4.5.5 The effects of minimum wage on workers

This section provides some descriptive evidence on the effects of minimum wages on garment and food-processing factory workers in Hlaing Tharyar. There are three reasons for a disaggregated analysis of the effects of minimum wages. First, the minimum wage set in 2015 was much lower than the average wage in the market, so it is unreasonable to expect that setting the minimum wage would have significant effects on aggregate labour markets or productivity statistics. Second, the objective of the minimum wage was to protect low-paid workers; observations of labour market outcomes should be confined to the segments of the population that tend to receive lower wages in urban manufacturing industries. In these segments, the effects of the minimum wage on labour market outcomes should be substantial. In this regard, Myanmar's experience of minimum wage setting has the semblance

of “self-targeting, lower monitoring, low leakage, ‘right’ worker incentive and labour market–focused characteristics” (Cunningham 2007, xi), often emphasised by labour experts to achieve national goals of poverty reduction and social justice through minimum wage policies. Third, it is not possible to analyse time series labour market data at the macro level because Myanmar’s labour force surveys are not consistent. Even if that data becomes available in coming years, it would still be necessary to use disaggregated data because important aspects of the distributional effects of minimum wages can only be analysed in a structured comparison. Nonetheless, this study is expected to inform the direction of further labour market research in Myanmar, particularly in developing economic models for predicting employment outcomes and dis-employment effects of different policies.

#### ***4.5.6 Impact on wages***

The study found that 49 percent of respondents in food-processing factories and 57 percent in garment factories earned less than the official minimum wage prior to enforcement. Within a year of the enforcement of the minimum wage, not only their daily wage but also their basic monthly salary had increased to above the minimum wage level, reported by 96.0 percent of surveyed garment workers and 90.5 percent of surveyed food-processing workers.<sup>12</sup>

Figure 4.7 shows that after the minimum wage, all employment allowances increased, albeit at different rates. Service fee is the category with the highest percentage increase (42 percent), followed by overtime benefit (38 percent), skill bonus (32 percent) and productivity bonus (28 percent). By contrast, there was a slight increase in attendance bonus (6 percent). These findings have implications for industrial firms’ strategy of boosting workers’ productivity to increase their profits. In fact, many enterprises in Myanmar have faced the challenge of meeting daily production targets. In-depth interviews with garment employers and workers in Myanmar show that firms increased their production targets by an average of 30 percent. For instance, at Bago garment factory I, the production target used to be 60–70 pieces for 20–25 people before the minimum wage, but increased to 70–80 pieces for 19–20 people after the minimum wage. Some supervisors fear that the minimum wage will have a greater impact on operators who are less skilled, putting more pressure on supervisors to reach production targets.

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<sup>12</sup> Basic salary means the total monthly wage, excluding overtime, attendance, production, skill, transport and meal allowances. With a minimum daily wage of MMK3,600 and assuming 26 working days a month (Sundays are mandatory holidays in Myanmar), food processing and garment factory workers minimum monthly salary is MMK93,600.

Figure 4.7: Breakdown of average worker monthly wages before and after minimum wage (MMK thousand)

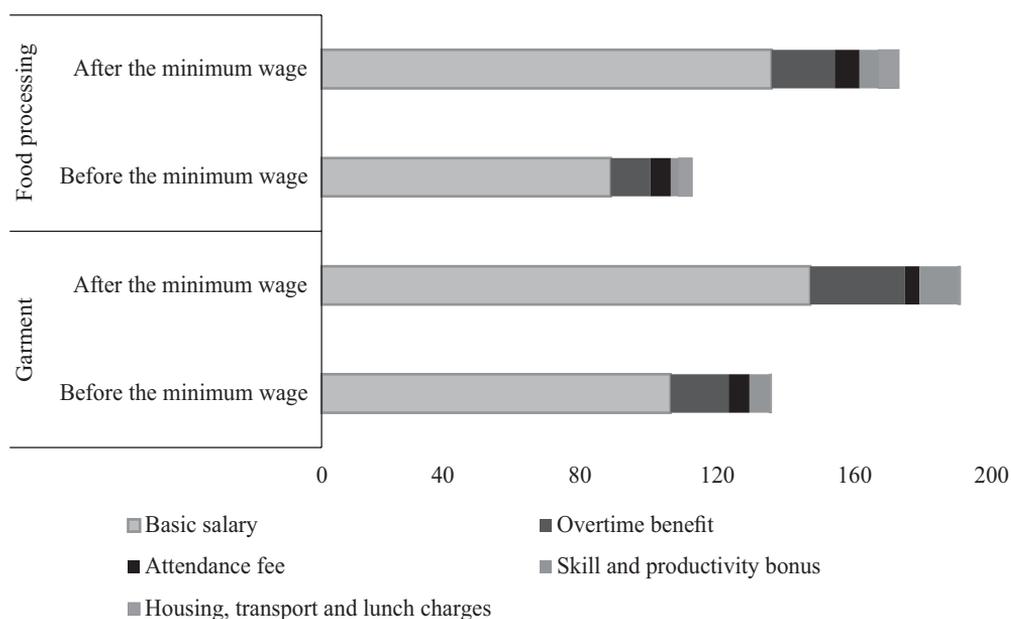


Table 4.2 describes changes in basic salary or minimum wage by workers' age, gender and education. Before the minimum wage enforcement, a food-processing worker, on average, earned less than a garment worker. The basic salary was significantly lower among workers under 20 years old, standing at MMK88,953 per month (USD80). When disaggregated by level of education, the data shows that workers with no formal education (read and write group) were the most vulnerable, with a monthly income of MMK68,125 (USD61). This wage was more than 30 percent less than that of workers with a higher level of education (primary and above). After the minimum wage enforcement, basic salaries of all employment groups were higher than the minimum wage. The t-test results to compare differences in means of basic salaries before and after the minimum wage show that all the differences are significant, at 1 percent. This result confirms the ripple effect of the minimum wage in that all workers benefitted from the policy. Specifically, the basic salary of food-processing workers, on average, increased by 38 percent, whereas that of garment workers increased by 31 percent. Workers with low levels of education (read and write) benefitted the most from the minimum wage enforcement, with a 67 percent increase in wages. Therefore, the minimum wage policy is target efficient for low educated workers.

Table 4.2: Difference in average basic salary before and after the minimum wage

	Basic salary before the MW (BBS)	Basic salary after the MW (ABS)	Increase (%)	Pr ( BBS  < ABS )
<i>Sector</i>				
Food processing	97,485	134,560	38	0.00
Garment	111,131	145,339	31	0.00
<i>Age</i>				
<20	<b>88,953</b>	121,025	36	0.00
20–24	101,793	133,992	32	0.00
25–29	101,318	139,606	38	0.00
30–34	113,620	149,625	32	0.00
35–39	123,102	166,025	35	0.00
40–44	126,667	183,500	45	0.00
45+	125,111	148,139	18	0.00
<i>Gender</i>				
Female	106,774	138,040	29	0.00
Male	102,194	147,598	44	0.00
<i>Education</i>				
Read and write	<b>68,125</b>	113,750	67	0.00
Primary	102,923	135,077	31	0.00
Secondary	106,374	137,898	30	0.00
High school	106,194	143,620	35	0.00
Higher education	107,413	145,309	35	0.00
<i>Observations</i>	378			

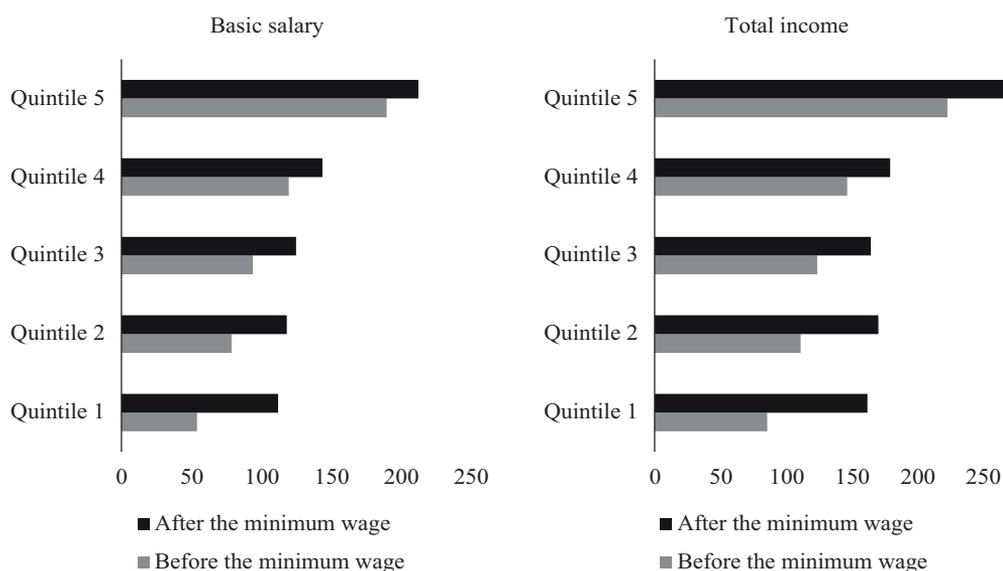
Note: Numbers in bold are the wages that were below the minimum wage of MMK108,000. The sample size of 378 only includes observations that did not change their position after the minimum wage to control for the correlation between wage growth and career enhancement.

From a gender perspective, female workers earned more than male workers before the minimum wage. However, after the minimum wage enforcement, with a 44 percent increase in basic salary, male workers' earnings surpassed that of female workers whose wages increased on average by 29 percent. Regarding redistribution effects between experienced and inexperienced employees, employees in the 40 to 44 age group benefited the most from the minimum wage, with a 45 percent increase in their basic salary, making them the highest earners. This effect also widened the existing pay gap between

this group and youth who are low earners. Indeed, according to the survey data, while workers under 20 years old had worked in the same position for an average of 2.2 years, older workers (30 to 44 years old) had accumulated 5.4 to 5.8 years of experience. This finding also reflects wage division between workers by experience.

In terms of wage distribution, there was an interesting effect on wage distribution across different income quintiles. Employers have to pay the minimum wage to low-paid workers, but of their own volition they also tended to increase the wages of workers who already earned more than the minimum wage. After the minimum wage was enforced, both the basic pay and total salary of the lowest quintile increased significantly. All other quintile groups experienced a relatively modest increase in basic pay and total salary, while the highest group, most probably the group with higher skill sets, did not experience much change in their total salary.

Figure 4.8: Income change across quintiles after the minimum wage (MMK thousand)



In fact, the total salaries of the three middle quintiles are now very close to each other, suggesting that employers may be using fewer incentives to differentiate skills based on labour productivity. Although employers are expected to adjust wage distribution more responsively to labour productivity in the long run, the changes in wage distribution have caused some unsettling disgruntlement among workers, particularly those with higher skills. If the employers maintain this pattern of wage distribution, it could undermine the

labour productivity objectives of the minimum wage policy – of achieving sustainable and long-term labour market reforms in Myanmar.

Before the minimum wage enforcement in 2015, there was public concern that an increase in wages could raise the price of consumer goods, which in turn would harm workers' standard of living. We use a consumer price index (CPI) to give an accurate analysis of the implementation of the minimum wage and whether the new wage is reflective of the economic situation. For the purpose of this paper, we use the CPI from the Central Statistics Office of the Ministry of Planning and Finance, specifically 116.53 from the first quarter (April–June) of financial year 2015/16 and 130.01 from the second quarter (July–September) of financial year 2016/17. The real wage is calculated as follows:

$$\text{Real Wage} = (\text{Old Wage} \times \text{New CPI}) / \text{Old CPI}$$

Figure 4.9 shows the distribution of the nominal wage before and after the implementation of the minimum wage in 2015, as well as the real wage before data was collected. The graph provides information across five income quintiles, including the comparison between the nominal wage before and the nominal wage after in the first quintile (89 percent) and the second quintile (53 percent). At first glance, the differences seem great when examining the gap between the two nominal wages, until the real wage is considered. The graph also indicates how the differences between the two nominal wages start to decrease further up the quintiles. For example, the difference between the nominal wage before and after in the fifth quintile is only 22 percent.

Figure 4.9: Real wage and nominal basic salary distribution across quintiles (MMK thousand)



However, the real wage line on the graph in Figure 4.9 gives a better representation of the difference between the nominal wage after and the real wage before. For the first quintile there is a significant change between the nominal wage after and the real wage before (70 percent), which starts to decrease up the quintiles. For example, the difference for the second quintile is 37 percent and for the third quintile 19 percent. This indicates that the difference is only greater in the first quintile for the lower earning workers. Further up the quintiles, the difference starts to narrow. For example, the difference between the real wage before and the nominal wage after in the fifth quintile is only 9 percent. This means that workers in the upper quintiles do not experience a great change in their wages after the minimum wage, which could potentially lead to dissatisfaction and lack of motivation. Therefore, the graph represents the differences that exist between nominal wages when the minimum wage is set, and real wages.

#### ***4.5.7 Impact on working day and overtime***

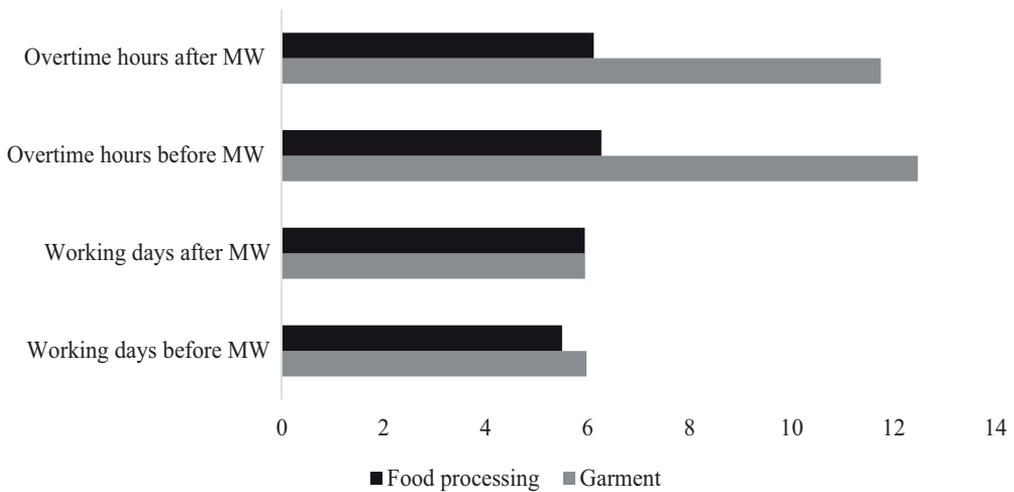
After the minimum wage has been set, employers usually attempt to manage the work times of the workforce, particularly overtime schedules, to control labour costs. The study found that there was a slight increase in the number of working days in the food-processing sector, while overtime hours in the garment sector decreased by 7 percent.

The majority of firms in the garment sector are export-oriented cut-make-pack factories whose international orders are time-bound; garment factories therefore do not have much room to manage overtime schedules. On the other hand, food-processing factories mostly serve local markets where there is flexibility to manage demand or to charge consumers a higher premium without incurring additional labour costs. Although the number of overtime hours decreased in garment factories (Figure 4.10), the average total overtime income increased significantly after the minimum wage was set. Previously, the average overtime rate was fixed at a much lower rate of MMK460 per hour and rose to MMK900 per hour after changes in the minimum wage.<sup>13</sup> In fact, garment workers received nearly double income from working overtime, which off-set the reduction in overall overtime hours.

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<sup>13</sup> Under the Factory Inspection Law, a companion law to the Minimum Wage Law, the overtime rate is fixed at twice the basic rate. Employers pointed out that Myanmar's overtime rates are much higher than the ASEAN average or other South Asian rates, complicating minimum wage setting.

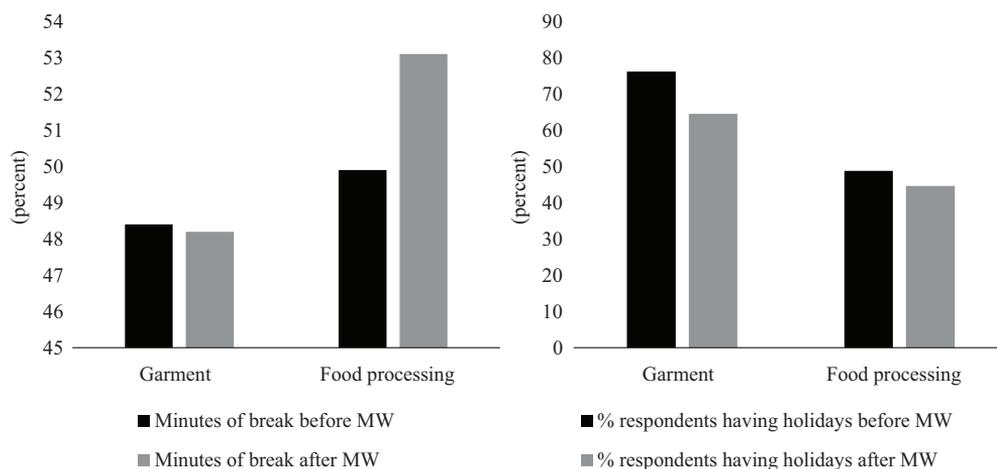
Figure 4.10: Average overtime and working hours before and after minimum wage



#### 4.5.8 Impact on holiday and breaktime

Workers' breaktime as well as holiday-overtime is another management issue for employers, with changes to both in 2015. Twenty-four percent of garment factory respondents and 36 percent of food-processing factory respondents reported having to work during holidays, meaning Sundays and public holidays, before the minimum wage. After the minimum wage, 51 percent of garment factory respondents and 55 percent of food-processing factory respondents said that they had to work on holidays. However, there was also a slight change in the amount of freetime or breaktime per day in both sectors after the minimum wage. The majority of factories allowed workers around 48 minutes free time or breaktime a day before the minimum wage. After the minimum wage, the total average breaktime slightly decreased for both sectors. Also, some garment and food-processing workers reported that their daily production targets increased after the minimum wage. Compared to overtime scheduling, breaktime and holiday-work does not seem to have changed that much since the minimum wage.

Figure 4.11: Impact on the holidays and breaks before and after minimum wage

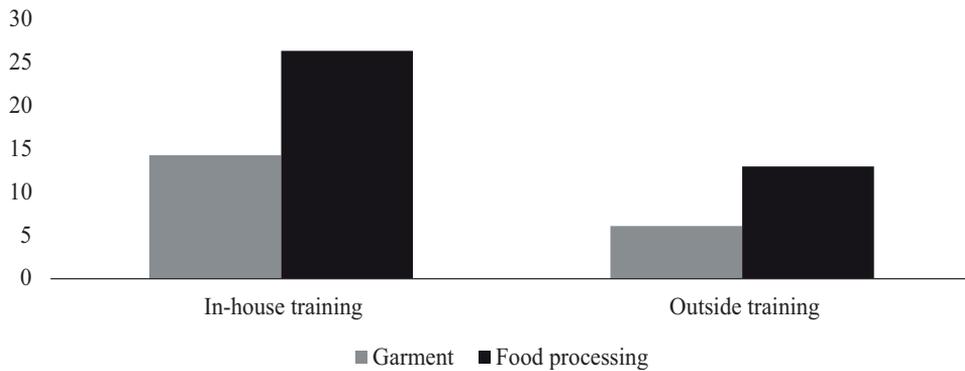


#### 4.5.9 Impact on training

As discussed earlier under SME perspectives, the provision of training for workers is minimal in the factories surveyed in Hlaing Tharyar Industrial Zone. As such, a comparably large proportion of the workers surveyed received in-house training rather than outside training.<sup>14</sup> Specifically, 14 percent of garment workers and 26 percent of food-processing workers reported having attended in-house training after the minimum wage. By contrast, only 6 percent of the respondents from garment factories and 13 percent of those from food factories reported having received outside training.

<sup>14</sup> Apart from work-related skills such as sewing and cutting, in-house training includes basic safety drills and routine first-aid training. Occupational health and safety requirements in fact encouraged factories to provide more in-house training to avoid injuries and sickness. However, the factories are responding slowly to the notice.

Figure 4.12: Capacity building training after the minimum wage (percent)



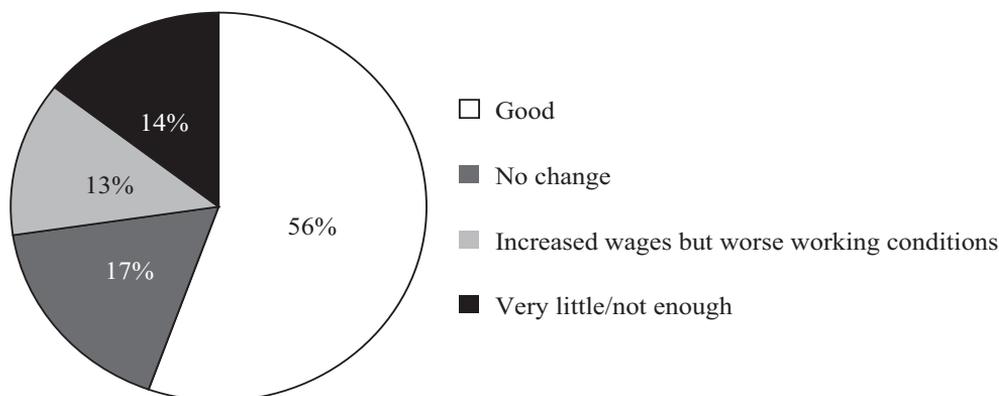
#### 4.5.10 Respondents' perceptions of the minimum wage

Fifty-six percent of the respondents reported that their salary increased and they were happy when the minimum wage law came into force. A respondent from one garment factory commented, "Our salary increased and life was better because of the minimum wage". Thirty-two percent of the respondents complained that they would like to be paid more because MMK3,600 is still not enough to meet their needs. Thirteen percent of the respondents reported that their salary increased but their working conditions – amount of overtime, breake-time allowance, daily production – are more challenging. Seventeen percent of the respondents claimed that there was no change or impact on their take-home monthly salary after the minimum wage because their salary was already more than or equal to the minimum wage.

The minimum wage forced employers to guarantee that all workers are paid above the minimum wage, which resulted in a wage increase for low-paid unskilled labour at the expense of higher wages for skilled labour, which remained the same. One respondent from a food-processing factory complained, "It is unfair that new workers and old workers have the same salary. After the minimum wage, the salary for new workers increased, but the salary for old workers remains the same."

A National Minimum Wage Committee member from the Confederation of Trade Unions of Myanmar comments on the minimum wage, "In the past, workers got about MMK100,000 for 11 working hours. Now they earn approximately MMK108,000 for 8 hours. If a worker wants to learn or improve his or her computer skills, he or she can learn after work." However, such reduced work time did not translate into more training and learning opportunities for the workers as there were no such services available in the industrial zones.

Figure 4.13: Respondents' perceptions of the impact of minimum wages



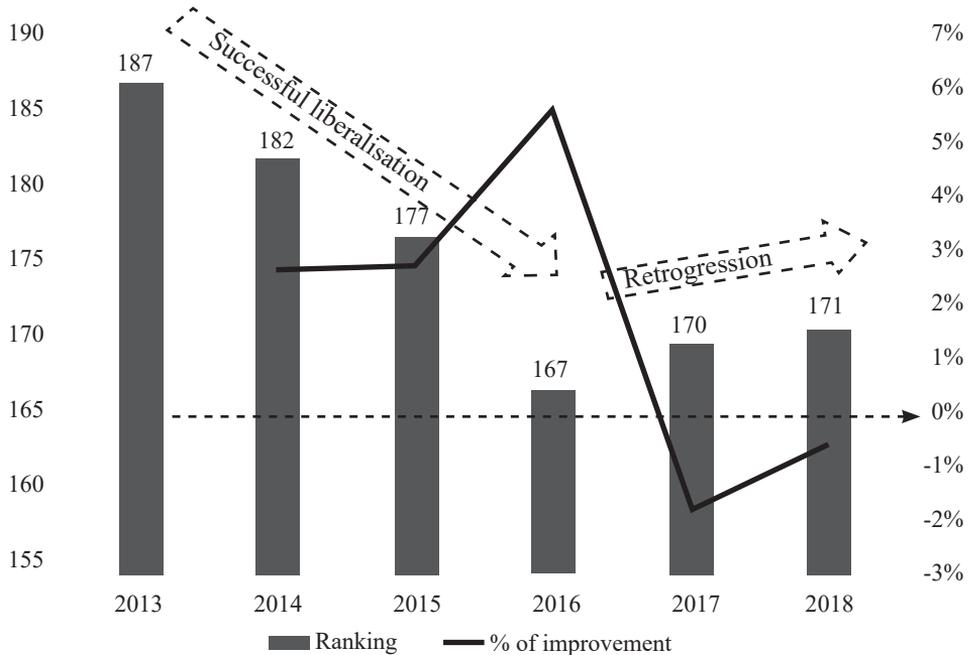
All in all, a large number of respondents gave positive feedback on the minimum wage. Many workers expect the economy to improve and the government to provide additional supportive measures to improve public services for workers as well as create an enabling environment for employers.

#### 4.6 The state of SMEs in Myanmar

When the minimum wage was enacted in 2015, many private sector leaders complained that the government must address the challenges and barriers facing SME development so that they could comply with the minimum wage effectively. The government responded favourably to these demands as it started to implement liberalisation measures to reduce over-regulation on the businesses. The commitment of the government is evident in the persistent improvement of the country's ranking in the World Bank's Ease of Doing Business indicators. When Myanmar decided to collaborate with the World Bank in 2013, the preliminary assessment gave Myanmar an unfavourable rating for its dysfunctional SME ecosystem, ranking the country among the world's poorest business environments. Since then, the government has established the Committee on Private Sector Development chaired by a presidential office minister, as well as several delivery units led by deputy ministers to tackle specific barriers impeding SME development in various sectors. From 2014 to 2016, Myanmar achieved rapid improvements across many indicators, moving the country 16 places up the ranking from 183 to 167 within three years (Figure 4.14). The achievement was recognised by the World Bank Group bestowing "the Star Reformer Award" to the

government of Myanmar in 2017.<sup>15</sup> These commitments were credible enough to convince the private sector to cooperate with the labour unions as well as the government in a tripartite dialogue to set the minimum wage in 2015, despite the many challenges facing SMEs.

Figure 4.14: Myanmar's ease of doing business ranking



Source: World Bank Ease of Doing Business Indicators 2018

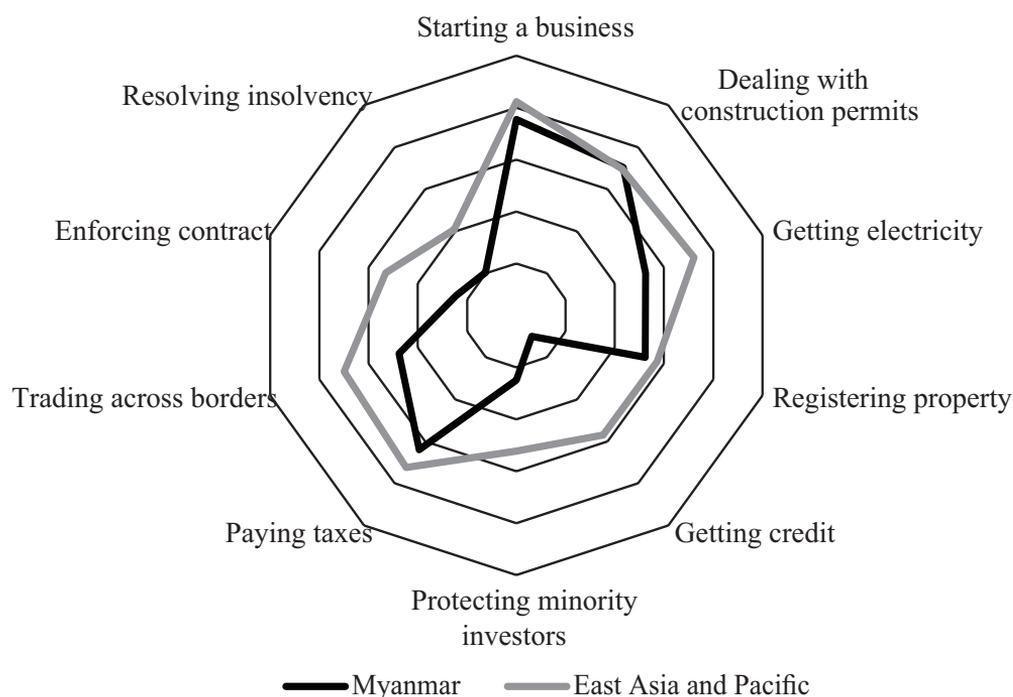
However, deregulation efforts and business environment improvements have slowed, with Myanmar's rankings sliding in the last two years. The retrogression of the ranking reflects sluggish efforts to build the forward-looking institutions needed to develop judiciary and legal protection for businesses. This suggests the need for structural adjustments to improve the business environment. Under these circumstances, SMEs still face the same structural barriers they faced two years ago (Figure 4.15).

As shown, Myanmar enterprises face four main obstacles: access to finance, poorly trained workers, access to land and reliable electricity supply. All four constraints are more severe in Myanmar than in comparator economies such as Cambodia, Laos and Vietnam. Nonetheless, upgrading the workforce is a potential solution for the government to support enterprises

<sup>15</sup> The award was received on behalf of the government by Director General Aung Naing Oo of the Myanmar Investment Commission during the Investment Competitiveness Forum held by the World Bank in Vienna in October 2017 (DICA 2017).

to perform better. In fact, Myanmar fares poorly against almost all countries in the Asia-Pacific, with just under 6 percent of firms offering formal training to their workforce compared to almost 22 percent in Cambodia and Vietnam and almost 80 percent in China (Annex Figure A1). Myanmar has significant space for improvement in this area. As a result, at 54 percent, the proportion of skilled workers in Myanmar's workforce is also the lowest, compared to Laos (98 percent), Cambodia (80 percent) and Vietnam (74 percent) (Annex Figure A3). The availability of skilled workers is important for garment sectors to attract foreign investments as well as cut-make-pack contracts. Whereas it will take time to resolve infrastructure challenges such as electricity supply and logistics services, providing formal training and incentivising skill development would be a practical and effective policy to pursue. Firms can address this constraint directly by setting a budget for formal and informal training to upgrade the skills of their workers. The government can support the provision of training, whether in firms or in industrial zones, through subsidies. Although the government can choose to address access to finance for SMEs, progress is dependent on how fast the country's banking and microfinance sectors can reform and grow.

Figure 4.15: Barriers for businesses in Myanmar



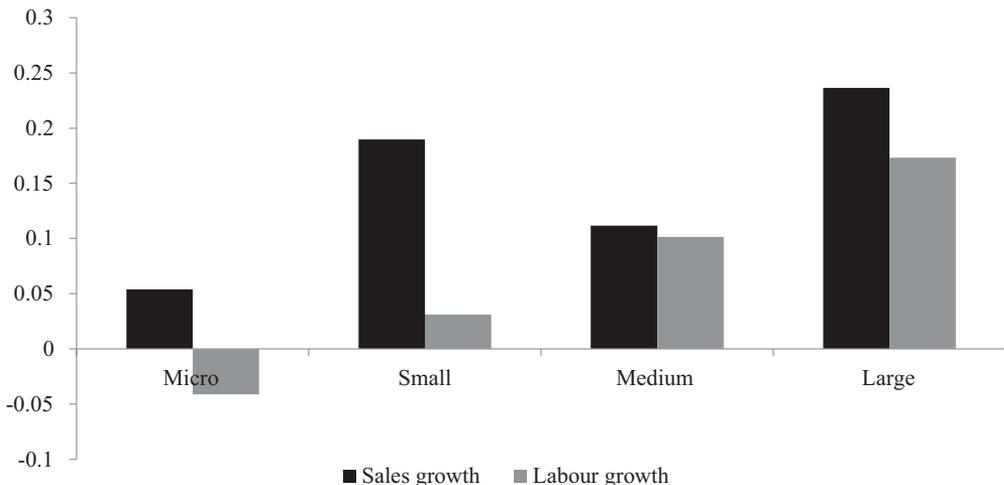
Source: World Bank Ease of Doing Business Indicators 2018

The World Bank (2017) establishes the state of enterprises in Myanmar and points out that resolving labour productivity is a priority. This is also a feasible policy option because firms now have substantial revenue flows as a result of Myanmar's improved reputation following its adoption of the minimum wage. The following analysis draws on the World Bank Enterprise Survey 2016–17 dataset. The findings strengthen the rigour and enrich the analysis and findings of the worker survey.

#### 4.6.1 *The effects of minimum wage on firms*

The employment effect of minimum wage enforcement is greater in large firms than in small firms. Data from the World Bank Enterprise Survey 2016–17 suggests that the minimum wage could have dis-employment effects on micro firms, as indicated by a 4 percent decline in their workforce over two years. The fact that firms with fewer than 15 employees are exempt from the national minimum wage could have an adjustment effect in that some firms tried to downsize to become a micro firm. In contrast, the number of employees in large firms increased on average by 17 percent. Large firms also performed better, with sales growth of almost 24 percent over the years. Both sales growth and labour growth were positive in small and medium-sized firms. The results suggest that employment and income effects from minimum wage enforcement in SMEs and large firms offset the dis-employment effect in micro firms.

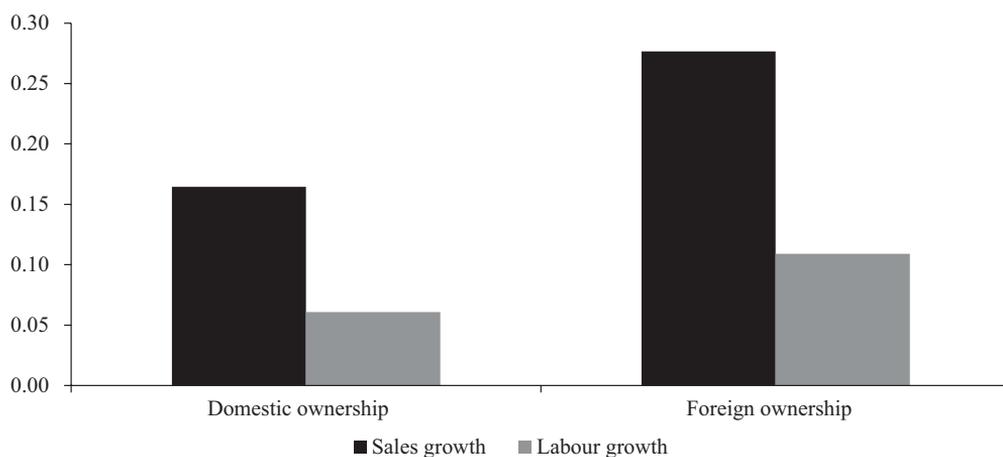
Figure 4.16: Sales growth and labour growth by firm size



Source: World Bank Enterprise Survey 2016–17

Foreign-owned firms experienced higher growth than domestically owned firms. Specifically, sales growth in foreign-owned firms was 28 percent, almost double that of domestically owned firms. The same trend is true for labour growth, standing at 11 percent in foreign-owned firms and 6 percent in domestically owned firms. This suggests the positive impact of the minimum wage setting process and minimum wage enforcement in creating a business-friendly environment, which in turn attracts more foreign investors into the country.

Figure 4.17: Sales growth and labour growth by firm ownership



Source: World Bank Enterprise Survey 2016–17

Apart from the setting of the minimum wage in September 2015, SMEs have not been affected by any major policy initiatives. This paper therefore uses the World Bank Enterprise Survey 2016–17 to observe the effects of the minimum wage on all SMEs in Myanmar. At first glance, the survey dataset shows that Myanmar’s manufacturing sector is performing better than in previous years. Employment growth and sales growth are highest in the retail sector followed by manufacturing. The manufacturing sector seems to have higher labour productivity than the retail sector because it has achieved similar sales growth with less labour. This finding supports the view that investing in training can be beneficial to firms. Another finding suggests that electricity shortages are not significantly associated with sales performance, although electricity was cited as one of the major obstacles facing enterprises. This suggests that firms have resolved the problem of infrastructure services; therefore, sales performance is not being affected by electricity blackouts and water shortages.

With this finding in mind, we perform regression analysis on the relationship between firms' sales, employment, innovation and access to finance. The regression results show that employment growth is positively correlated with sales growth, though the causal relationship of the two variables is not clear. Given huge constraints on financing and access to finance, we can postulate that sales growth must have contributed to firms' decisions to recruit more workers. On the other hand, the analysis also shows that sales growth is negatively correlated with lack of credit. Clearly, access to finance is a major cause of SMEs' low performance in Myanmar. There is no significant relationship between sales growth and employment growth and a lack of training; however, we can only assume that the relationship may become significant if firms take a serious approach to training their workforce. In addition, the regression analysis shows that a lack of innovation is negatively correlated with sales growth, though the significance of this relationship is not strong.

The evidence suggests that many firms in Myanmar, particularly manufacturing and retail firms, experienced significant sales growth in 2016 and 2017. In only two years, the minimum wage policy has proved a powerful instrument to shape the SME environment in Myanmar. Because the government did not introduce any other significant policy instruments in the period of interest, we can conclude that the impact of the minimum wage has been positive. As many of the manufacturing firms are export-oriented, the effects of the minimum wage come from Myanmar's improved reputation. With "made in Myanmar" as a positive brand image, Myanmar suppliers are receiving increasingly more orders from sourcing companies. However, this surge of orders may not be sustained if the cost of labour continues to rise without any improvement in labour productivity. It is therefore of utmost importance that the government facilitates training, provides incentives and other support measures to help firms and workers jointly engage in initiatives promoting labour productivity.

The government can play a major role in supporting firms to increase their training budget by providing an enabling environment for such efforts. Pursuing this path is a good option for Myanmar given that very few firms (1.4 percent) consider labour regulations a major constraint (Annex Figure A2). Also, the fact that industrial relations are collaborative rather than confrontational means that firms, the government and the workforce can collaborate effectively in skill training initiatives. The new Myanmar government responded to the training challenge by increasing the budget for technical and vocational education training (TVET) in 2016. Although TVET as an educational strategy to address the shortage of skilled labour may narrow the gap between Myanmar and the rest of the region, a more effective intervention is to encourage firms

to provide on-the-job formal training. At the same time, the government can prioritise growing sectors such as the garment industry by offering industry-specific incentives to promote training opportunities.

#### 4.7 Conclusion

Enacting the minimum wage has been a very important step to meet the basic needs of workers and their families in Myanmar. The vast majority of low-paid unskilled workers' salaries increased to some extent because of minimum wage legislation. However, they cannot fully enjoy it because of a rise in living costs due to inflation. Both positive and negative impacts of the minimum wage are observed.

- A minimum wage far below living costs has a negative impact on the quality of life which, in turn, determines labour productivity. Policymakers should therefore pay close attention to changing living costs in the country when they review the minimum wage every two years. To that end, before reviewing and adjusting the minimum wage, the Cost of Living Survey should be conducted systematically in every state and region.
- Enterprises have to pay higher wages to workers in compliance with minimum wage law. As a result, the cost of doing business in Myanmar has risen, directly affecting firms' profits. Therefore, it is highly recommended that the government support enterprises by providing low-interest loans, reforming policies that burden firms' efficiency, and providing more effective healthcare services for employees.
- Some factories fail to comply with the law and take advantage of low-skilled workers by paying them less than the minimum wage. It is therefore recommended that government officers, especially the Factories and General Labour Laws Inspection Department, conduct regular inspections to ensure compliance with the law and take necessary action.
- Training is necessary to improve productivity. Enterprises must provide more capacity building to improve employee efficiency. Allowing workers to attend training provided by NGOs could be a cost-effective option.

In sum, there is evidence that the introduction of a minimum wage in Myanmar has had positive impacts on many SMEs, particularly their sales growth. The evidence also suggests that the minimum wage has encouraged employment growth, possibly because booming businesses have recruited more workers. On both counts, the effects of the minimum wage are positive. However, it is not sufficient for the government of Myanmar to maintain a

good minimum wage system to protect workers' rights while many otherwise capable SMEs are frustrated by numerous barriers hampering their business initiatives and performance. It is of utmost importance that the government continues its liberalisation efforts to remove excessive regulation, thereby enabling SMEs to scale up and sustain their competitiveness. Equally importantly, the upcoming social dialogue must seriously address the need for expanding training programs in order to boost labour force productivity; otherwise, rising wages without rising productivity will eventually hurt firms and workers alike.

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## Annex

Figure A1: Percentage of firms offering formal training

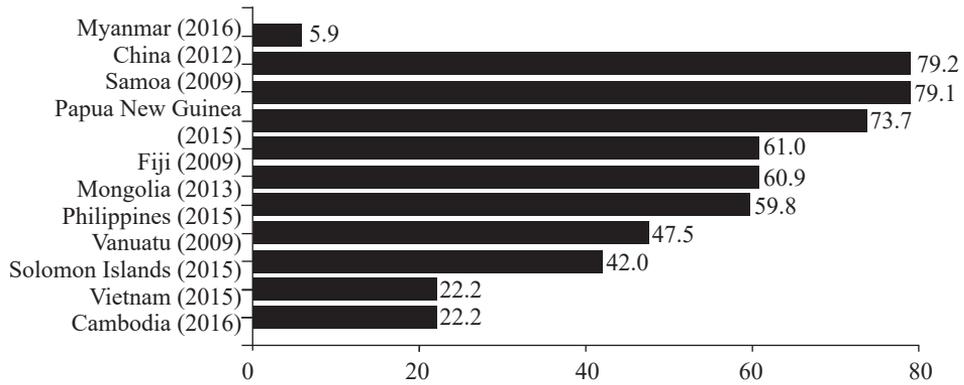


Figure A2: Percentage of firms identifying labour regulations as a major constraint

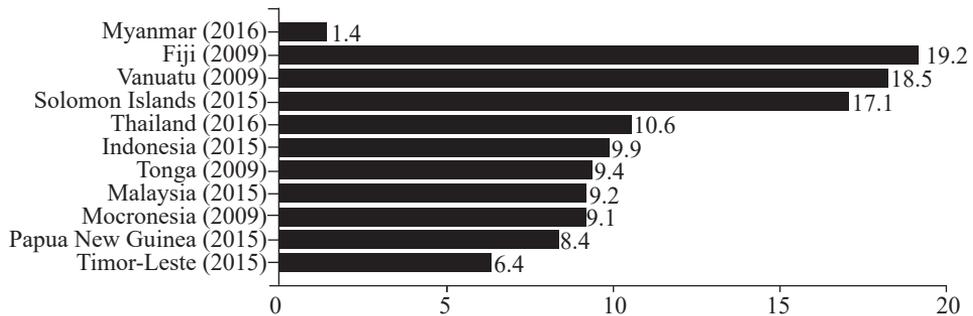


Figure A3: Percentage of skilled workers

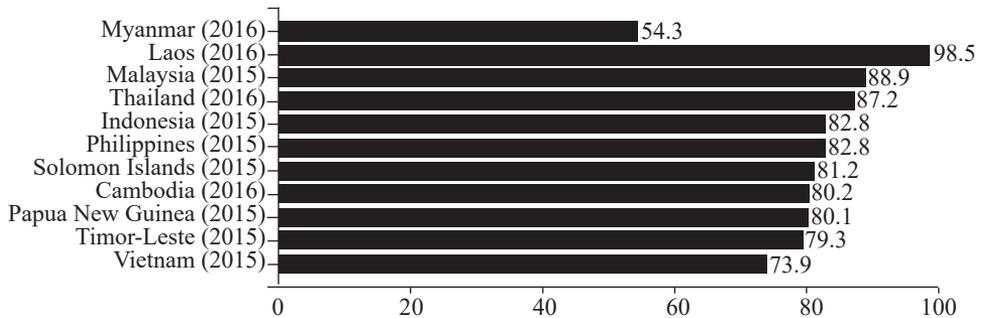


Figure A4: Sales and labour growth by region

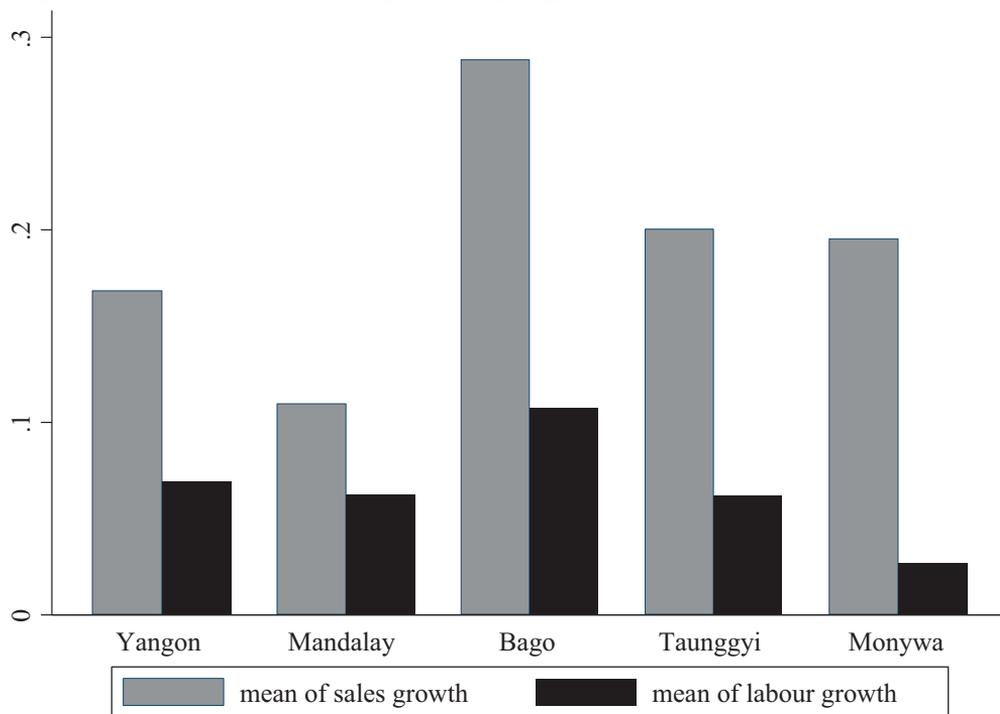


Figure A5: Sales and labour growth in firms with and without female leadership

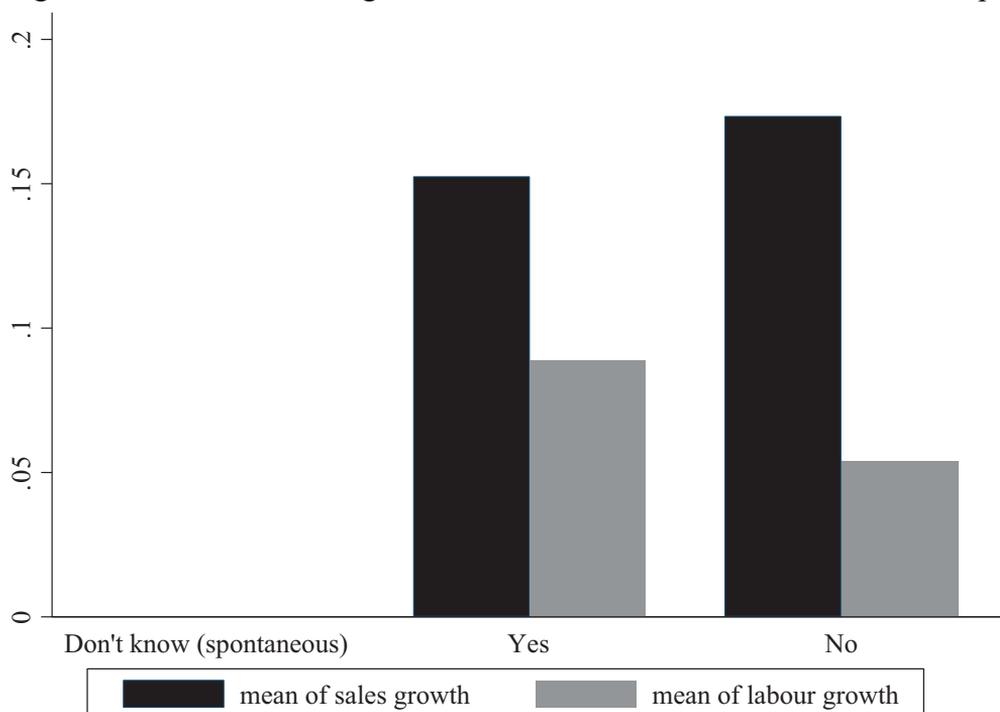


Figure A6: Performance of firms



Source: World Bank Enterprise Survey 2016–17

